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PREPARED FOR:  
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# The Township of Puslinch Draft Asset Management Plan – Phase 2 2019



UEM



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# 1.0 Executive Summary

## 1.1 Regulation 588/17

The Municipal Finance Officers' Association of Ontario best summarized the reasons for implementing asset management including the regulatory basis for asset management in Ontario is from the MFOA Strategic Management Policy Toolkit.

'The regulation is a progression of the Municipal Infrastructure Strategy launched in 2012 and the Infrastructure for jobs and Prosperity Act of 2015. The regulation builds upon the Municipal Infrastructure Strategy and "Building Together" guide for Municipal Asset Management Plans launched in 2012 and the Infrastructure for Jobs and Prosperity Act of 2015., to strengthen the role of municipal asset management within municipal planning and budgeting. For example, asset management plans must now be considered in the development of annual budgets. The vehicle for this new form of municipal governance is a policy. In the regulatory content of Ontario, it is considered a strategic asset management policy, as it requires municipalities to describe processes as well as accountabilities.'

Ontario adopted Ontario Regulation 588/17 made under the Jobs and Prosperity Act, 2015 that set out the parameters for Strategic Asset Management Policies and Asset Management Plans.

The Strategic Asset Management Policy is to be approved by Council by July 1, 2019. A copy of the Strategic Asset Management Policy is included in Appendix 20.4 of this report.

## 1.2 The Asset Registry

The asset registry includes description, location, size, material type, and condition of assets. The asset registry also includes financial components unit cost, remediation cost and a total replacement cost for all asset components. The asset groups included are identified in the following chart:

Regulation 588/17 Asset Group	Asset Registry Asset Group
Core Municipal Infrastructure	Bridges
	Culverts
	Asphalt Roads 1 Lift
	Asphalt Roads 2 Lift
	Asphalt Roads Surface Treated
	Gravel Roads
	Storm Water Management Ponds
	Storm Sewers
	Buildings and Facilities

Regulation 588/17 Asset Group	Asset Registry Asset Group
Municipal Assets	Fire Equipment
	Fire Reservoir
	Parks and Recreation
	Sidewalks
	Regulatory Sign
Municipal Assets	Street Light
	Fire licensed vehicles
	Fire vehicle tires
	Work Unlicensed vehicles
	Work licensed vehicles
	Parks & Building Department Unlicensed vehicles
Green Infrastructure	Street Trees

ES - 1 Puslinch Asset Classes

### 1.3 Service and Levels

Puslinch provides all of the legally mandated services, as well as other services desired by residents. The development of a “service-centric” asset management process entails understanding and answering the following questions for all services:

- What are the services that Puslinch is providing?
- What are the services that customers expect?
- What assets is Puslinch providing for each service?

### 1.4 Factors Affecting Levels of Service

Several factors affect the level of service delivery for particular asset types. The following are some of the factors:

- **Community Expectations:** This factor represents one of the major drivers in setting levels of service. Information is needed about the community’s expected level of service and willingness to pay for this service. A balance then needs to be determined between that expected level of service and its associated costs.
- **Legislative requirements:** Legislative standards and regulations affect the way assets are managed. These requirements stipulate the minimum levels of service. Therefore, relevant requirements must be taken into consideration in setting levels of service.
- **Policies and objectives:** Existing policies and objectives should be considered when developing levels of service, with care taken to remain aligned with an organization’s strategic planning documents.

**Resource availability and financial constraints:** These constraints play a large role in an organization's ability to provide sustainable levels of service. Therefore, resource constraints play a significant part in determining affordable levels of service.

## **1.5 The Process of Developing a Level of Service Analysis**

The process for developing and adopting level of service measures may be defined as follows:

**LOS:** Compliance with all legislated requirements, Protect and uphold public safety, community wellbeing and the environment; and, reliably meet the informed expectations of stakeholders and the public

**Level of Service Analysis can involve:**

1. Developing Levels of Service
  - Customer vs. Technical LOS
  - Current vs. Expected LOS
  - Use of performance measures
2. Consultation, Communication, and Approval
  - Receiving input on the proposed LOS analysis
  - Communicating the LOS analysis to stakeholders
  - Seeking Council approval of LOS analysis
3. Ongoing Review, Updates, and Improvements
  - Updating the LOS analysis, as needed

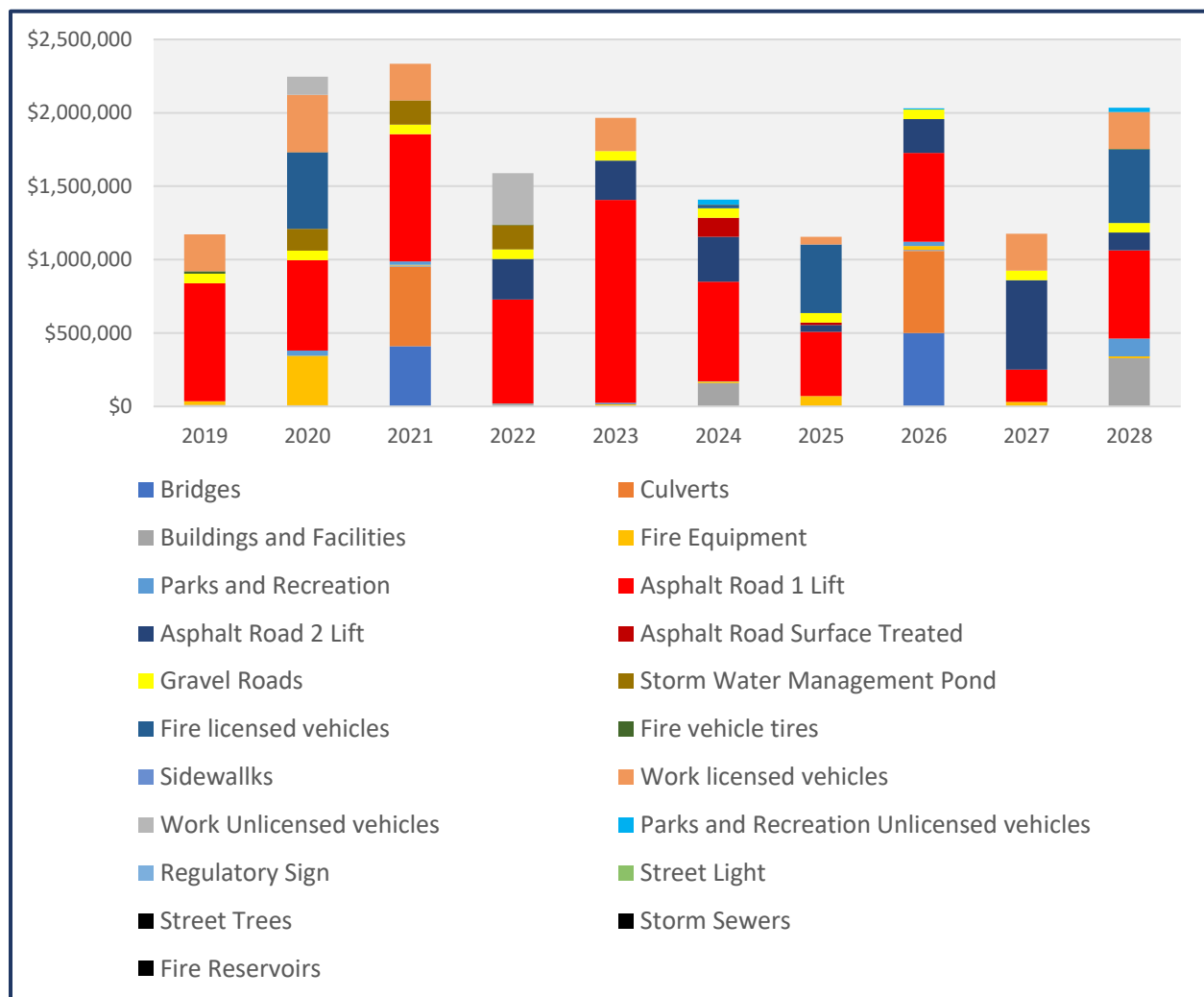
## **1.6 Developing Levels of Service**

To be effective in developing levels of service, input should be gathered from and communicated to all interested parties. The services being provided, and the community expectations must be documented.

Based upon discussions with Staff and input from Council a series of Level of Service documents were developed and may be found in Section 5 of the Asset Management plan as follows.

## **1.7 Capital Plan**

Based upon the data registry including all physical assets, condition of such, age, rehabilitation costs as well as Levels of Service, a 10-year capital plan was developed to model both Static (linear deterioration cure) and dynamic inputs (staff intervention) to project capital expenditures for the Township of Puslinch. The following bar chart illustrates the 10-year capital plan.



ES - 2 10 Year Capital Plan

## 1.8 Financial Plan

Several financial strategy options were developed that identified annual projected funding over the 2019-2028 forecast period. Each option was examined with a recommendation towards a financial strategy that would see an annual increase in the Townships capital levy that impacts the taxes of a typical single-family dwelling by 3% until a sustainable level of funding is achieved.

The use of long-term debt is also necessary to undertake the capital plan in years where available capital financing, including funds within capital asset related reserves, are insufficient to finance the capital plan.

Financial policies that govern the level of debt, the capital related reserves, and asset replacement funding are also discussed with policies recommended for the implementation of the financial strategy in Section 18.3.



## 1.9 Public Engagement

O. Reg 588/17 outlines the following requirements with respect to Asset Management Public Engagement:

- A Strategic Asset Management Policy (SAMP) must be developed and adopted by July 1, 2019 and reviewed and updated at least every 5 years. The SAMP outlines a requirement to include a commitment to provide opportunities for municipal residents and other interested parties to provide input into AM planning.
- Municipalities are required to post their SAMP and asset management plan on the Township's website, if one exists, and make copies of these documents available to the public if requested.

In reference to Puslinch, the public was invited to provide input during the development stages of asset management planning. In this manner, the public had the opportunity to shape the direction of asset management processes by having the opportunity to comment on the Asset Management Policy and on Levels of Service Policies as well as impacts on the Capital Budgets at the Public Meeting.

The Public was made aware of the public meeting by notices on the Puslinch website. The public was encouraged to provide comments on asset management topics in general. The presentation was posted at the public counter of the Puslinch municipal office. A copy of the presentation may be found in Appendix 20.5 of the Report. The Public Open Meeting was held on February 5, 2019, in the Council Chambers Township of Puslinch. Sign-in-sheets indicate that \_\_\_\_ individuals attended. Verbal comments were as follows:

Issues and concerns from the comment sheets and website postings were as follows:

Prior to the Public Meeting and prior to approval of the Asset Management Policy and Plan, the Policy and Plan were made available for public review at the Municipal Office, on the Township's website at [www.puslinch.ca](http://www.puslinch.ca) or by contacting the Township at 519-763-1226 ext.222.

## 2.0 Introduction

### 2.1 Township of Puslinch Overview

Puslinch is a Township in south-central Ontario, Canada, in Wellington County, surrounding the south end of Guelph. The main industries of the Township are agriculture, transportation, manufacturing and aggregate extraction.

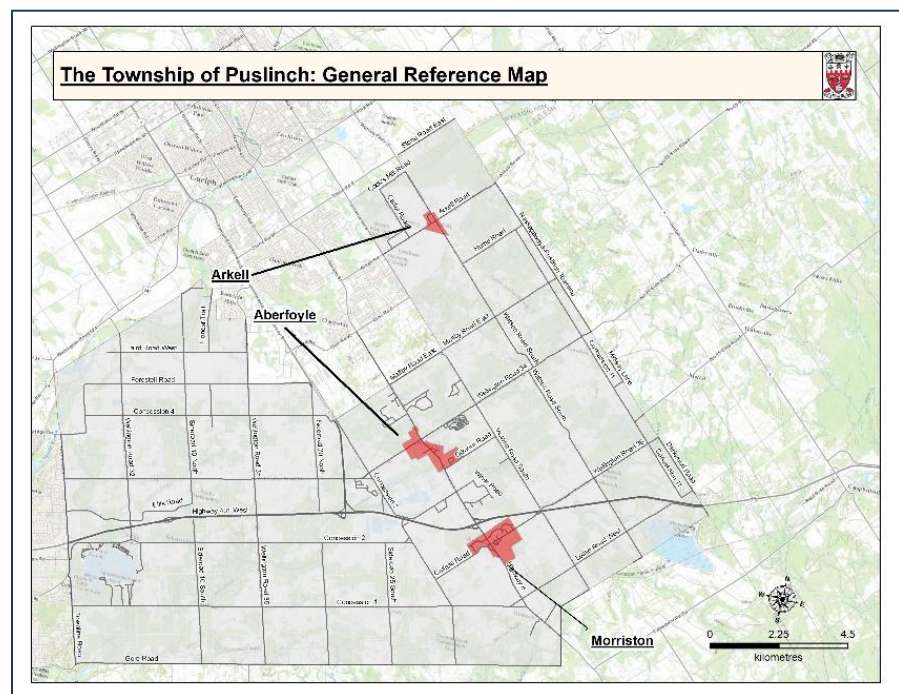
The Township has its own Strategic Plan, with the current version dated 2015 to 2020. Its mission statement is as follows: "Progressing together to provide reliable and sustainable services to our residents, businesses and visitors. We will protect our resources while respectfully building upon our heritage as a safe, fun and prosperous rural community.

The Township of Puslinch's main hamlets include Aberfoyle, Arkell, Badenoch, Little Lake and Morriston.

### 2.2 Township of Puslinch: General Information

The following figure shows a map of the Township of Puslinch showing main roads and Township Centres.

Table 8 of the County of Wellington Official Plan indicates that the Township of Puslinch had a population of 7,815 in 2016 and is expected to grow to 9,565 in 2036. Employment in 2016 was 4,020 with projected employment to rise to 5,160 by 2036.



2.0 - 1 Township Map

## **2.3 The Goal of Asset Management and Key Elements**

The International Infrastructure Management Manual, Version 4, 2011, defines the goal of asset management as “meeting a required level of service, in the most cost-effective manner, through the management of assets for present and future customers”. The key elements of asset management are:

- Providing a defined level of service and monitoring performance;
- Managing the impact of growth through demand management and infrastructure investment;
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet defined level of service;
- Identifying, assessing and appropriately controlling risks; and
- Having a long-term financial plan that identifies required expenditures and how the plan will be funded.

These elements of asset management are enabled through the use of capable staff, effective tools and systems, and a commitment to continuous improvement. A formal approach to the management of infrastructure assets is essential in order to provide services in the most cost-effective manner and to demonstrate this to Council, citizens, and other stakeholders.

## **2.4 The Need for Asset Management**

Without appropriate information, it is difficult for municipal staff and elected officials to make decisions regarding asset replacement and rehabilitation. Being properly informed is the first step in ensuring that public money is spent in the most efficient and effective manner possible. An asset management plan is the medium for providing this information. The first step in creating an asset management plan is compiling an asset registry. Such a registry is a comprehensive list of all organization’s assets, including their age, replacement value, and condition. Key benefits of compiling such a registry is as follows:

- Prolonging asset life and aiding in making informed decisions regarding rehabilitation, repair, and replacement;
- Meeting community demand with a focus on system sustainability;
- Setting rates based on sound operational and financial planning;
- Budgeting focused on activities critical to sustained performance;
- Meeting service expectations and regulatory requirements;
- Improving response to emergencies; and
- Improving the security and safety assets

## **2.5 Defining Sustainability**

The Brundtland Commission of the United Nations on March 20, 1987, stated: “sustainable development is development that meets the needs of the present without compromising the

ability of future generations to meet their own needs”. The objective of asset management is to meet a required level of service, in the most cost-effective manner, through the management of assets for the present and future population of the Township. Lifecycle asset management encompasses all practices associated with considering management strategies as part of the asset lifecycle. The objective of sustainable asset management is to look at lowest long-term cost when making decisions.

## **2.6 Provincial Requirements for Asset Management Plans**

The Province of Ontario, through the Ministry of Infrastructure, released in June 2011 a long-term infrastructure plan called Ontario Building Together. The plan sets out a strategic framework that guides future investments in ways that support economic growth and respond to changing needs. A key element of this framework is ensuring good stewardship through proper asset management. Subsequent to the release of Building Together, The Province of Ontario issued Ontario Regulation 588/17 in late 2017.

## **2.7 Strategic Asset Management Policies**

Ontario Regulation 588/17 requires that every Municipality develop a Strategic Asset Management Policy that includes municipal goals and policies that are supported by the Municipalities asset management plan. Such policies influence long-term financial plans that provide for continuous improvement and adoption of appropriate practices that provide for the sustainable management of assets.

Policies must provide for infrastructure planning that recognizes issues such as:

1. Vulnerability due to climate change
2. Management of vulnerabilities
3. Anticipated costs due to vulnerabilities
4. Mitigating approaches to climate change
5. Disaster Planning
6. Contingency funding

In addition, policies must recognize and provide for processes that ensure AM policies align with Ontario’s land use planning framework as well as the Official Plan of the County of Wellington and provide for Financial Plans that recognize capitalization thresholds, proximity owned municipal assets and financial policies impacting the replacement of assets.

## **2.8 Asset Management Plans**

Ontario Regulation 588/17 requires that every Municipality prepare an AMP that provides current levels of service for each asset category. Energy usage and operating efficiency must be estimated for core municipal infrastructure assets such as:

- i. Storm water management

- ii. Roads
- iii. Bridges and/or culverts

Asset Management Plans typically will also include Asset Hierarchies, an overview of the State of Infrastructure for the Township of Puslinch and a detailed 10-year capital needs forecast, which identifies and prioritizes specific assets for inclusion in the Capital Budget.

## 2.9 Information Technology Systems Strategy

The Information Technology Systems Strategy is designed to align information systems with the Townships' asset management decision-making requirements. The Information Systems Strategy provides a summary of existing software systems related to asset management and identifies opportunities for consolidation or replacement of existing systems to meet the goals of the Asset Management Strategy.

## 2.10 Project Deliverables

The project scope involved developing the following deliverables:

1. Strategic Asset Management Policies
2. Asset Management Plans
3. Information Technology Plans

## 2.11 Data and Information Provided

The following information was provided by the Township of Puslinch and used in the completion of this project:

<u>Delivered Items</u>	
<b><u>Condition Assessments, Inspections, Policy and Insurance</u></b>	
2013 Asset Management Plan	2017 Bridge and Culvert Inspection
2016 Pavement Condition Index Report	2017 Storm Water Management Pond Inspection Report
2008 Road and Bridge Inventory Report	2008 Asset Valuation Report
2014 Building Inspection Report	Playground Equipment Inspection
Development Charges By-Laws	Insurance Schedules
Equipment Replacement Schedule	2019 Capital Budget and Forecast
<b><u>Master Plans</u></b>	

<u>Delivered Items</u>	
Community-Based Strategic Plan 2015	Community Improvement Plan 2016
Puslinch Master Fire Plan	Puslinch Space Needs Analysis
Recreation and Parks Master Plan	Parks Master Plan – Puslinch Community Centre
<b><u>Financial Policies</u></b>	
Investment Policy	Working Reserves
2017 Fleet Management Policy	
Commodity Price Hedging Policy	Procurement Policy
Financial Administration and Budget Management	Financial Policies/Contribution to Reserves
Lease Financing Agreement Policy	Sale and Other Disposition of Land Policy
Tangible Capital Asset Policy	
<b><u>Reserve Balances Documents</u></b>	
Balances in Discretionary and Restricted Reserves	
<b><u>Debt Documents</u></b>	
Amortization Schedule	
<b><u>Tax Levy</u></b>	
2017 Final Tax Levy	2018 Final Tax Levy
<b><u>Tangible Capital Listing</u></b>	
Asset Acquisition List - 2013	Asset Acquisition List - 2014
Asset Acquisition List - 2015	Asset Acquisition List - 2016
Asset Acquisition List - 2017	Fixed Asset List 2017
<b><u>Unit Costs</u></b>	
2017 Unit Costs	2018 Unit Costs
<b><u>Service Level</u></b>	
2010 Fire Establishing By-law	Minimum Maintenance Standards for Municipal Highways

<u>Delivered Items</u>	
<b><u>Resource Documents</u></b>	
Asset Management Training Workshop Documents	Municipal Finance Officers' Association
Policy and Strategy Templates	Policy and Strategy Templates
GIS Files	
Roads	Bridges
Land Parcels	Address Points
Urban Centre's	Traffic Lights
<b><u>Traffic Count Data</u></b>	
Roszell Road	Hume Road
Watson Road	4982 Concession 4
Laird Road	Summary Document
<b><u>Asset Delivery</u></b>	
Sidewalk Listing	Sidewalk Inspections
Puslinch Computer Listing	Fire Equipment Listing
Street Name Sign Listing	
<b><u>Tender Documents/ Unit Costs</u></b>	
Optimist Community Centre First Built	Gravel Unit Costs
Streetlight Poles Rented/Own Document	Various Tender Documents for various assets

2.0 - 2 Delivered Documents

## 2.12 Project Methodology

UEM has worked closely with staff from the Township of Puslinch on this project. Workshops were held to expand on the benefits and potential components within an asset management strategy. The UEM Team's objective was to define an initial high-level asset management strategy and more detailed vision for asset management and asset reporting in Puslinch. The workshops aimed at providing information to staff on the best practices in asset management and to develop a common understanding of what the Township is aiming to achieve. The

workshop environment also allowed the UEM Team to discuss current business practices to determine the current definition of Asset Management and develop an asset hierarchy.

Once the Asset Management Framework and Strategy were developed, UEM staff executed the strategy using Puslinch's asset data, developing initial outputs.

As part of the project, a review of current information technology systems was undertaken and an evaluation of potential improvements that would facilitate the evolution of asset management in Puslinch with recommendations as presented in Section 18 and 19 of this report.

### **2.13 Reference Documents for Asset Management**

The following documents were initialized in preparing both the strategic Asset Management Policies and Asset Management Plans for the Township of Puslinch.

1. International Asset Management Manual
2. How to develop an Asset Management policy, strategy and Governance framework - FCM – Federation of Canadian Municipalities
3. Strategic Asset Management Policy Toolkit – MFOA - Municipal Finance Officers Association of Ontario
4. Asset Management Framework – MFOA
5. Development Charges Act (DCA)
6. County of Wellington Official Plan Last Updated June 1, 2018

These documents and Regulations recognize that Municipalities deliver many of the services that are critical to Ontarians and these services rely on well-planned, well-maintained infrastructure. The Province views asset management as a prerequisite for productive discussions about funding for municipal infrastructure.

### **2.14 Objectives**

The administration of the Township is segmented into the following Departments: Public Works, Building and Planning, Parks and Recreation, Fire and Rescue, CAO/Clerk and Finance.

The Asset Management Policies and Plans were developed in consultation with all departments at the Township with the following objectives:

- Guide the Township in the creation of Strategic Asset Management Policies and Plans conforming to Provincial guidelines and Ontario Regulation 588/17 as well as Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Highways.
- Document a vision for asset management and define the actions and resources that will enable improved asset management by the Township;
- Understand the long-term cost to sustain the assets owned by the Township to deliver the current and forecasted future needs to replace and maintain these assets;



- Review the Townships existing information systems required to support the Township's asset management plan and define the actions and resources that will enable improved use of technology by the Township; and Facilitate involvement with staff, Council and most importantly the Public in approval of service levels and the impact of service level changes to the Township budget.

## 2.15 Strategic Plan

As previously indicated the Township undertook the development of a Community Based Strategic Plan 2015-2020.

Township Strategic Goals and associated objectives were developed that were to be integrated into an Implementation Plan. Relevant to the AMP were Goals and Objectives identified in the following chart:

Strategic Plan			
Strategic Goal	Objective	Sub Objectives	Action
Strategic Goal IV	Maintain Financial Strengths and Define Service Levels	Long-Term Financial Planning	<p>Incorporate service level decisions into 10-year Capital Plan</p> <p>(i) Develop a long-term funding strategy for capital program</p> <p>(ii) Update Pavement Condition Index for Township Roads</p> <p>(iii) Update Asset Management Plan through identification and inspection of the Township's Storm Water Management Facilities</p> <p>(iv) Review and update the Township's Reserve and Reserve Fund Policy which considers the establishment of a Tax Stabilization Reserve</p> <p>(v) Develop a Debt Policy</p> <p>(vi) Complete a comprehensive update to the Township's Asset Management Plan</p> <p>(vii) Review and update the Development Charges By-law</p>

		Fire Master Plan Service Levels and Recommendations	Incorporate and implement the outcomes of the decisions made on the Fire Master Plan recommendations into the Township's service delivery standards and budget – 2016 – 2024.
		Recreation and Parks Master Plan Service Levels and Recommendations	Incorporate and implement the outcomes of the decisions made on the Recreation and Parks Master Plan and the ORCP Ad-hoc Committee into the Township's service delivery standards and budget – 2016 – 2024.
		Service Delivery review – Other Departments	i.) Identify other areas for review ie. Public Works, Governance. ii.) Report to Council with an action plan to define and outline the departmental service delivery items. iii.) Report to Council with a proposed schedule for review of other departments. iv.) Incorporate and implement the outcomes of the decisions made into the Township's service delivery standards – 2018-2024.

2.0 - 3 Strategic Plan

## 2.16 Upper Tier Influences

The following documents were reviewed to determine influences of the County of Wellington upon Puslinch.

1. Wellington County Economic Development Strategic Plan
2. County of Wellington Official Plan
3. Places to Grow – Growth Plan 2017

## 3.0 Climate Change

Physical assets (such as buildings and transportation systems) operate in a dynamic environment where they are exposed to variability in environmental conditions. An important input to asset management is an adequate understanding of this variability. This typically includes the estimation of environmental conditions that can be expected over the life of an asset or a system of assets (e.g. a road system). In order to offset the negative aspects of such viability, environmental criteria should be used as inputs into the following;

- the design and construction of an asset
- the planning of operations to gain an understanding of maintenance requirements for the life of the asset.

Environmental criteria provides a statistical view of the changing conditions within which the asset must operate such as changes in air temperature as an input in the design of a road. An analysis of the most extreme environmental conditions that an asset is designed to withstand is a critical design input.

However, for determining extremes, the extent of information available on environmental conditions is almost always significantly less than the design period of an asset. Essentially, knowledge of past conditions is no longer valid for making projections about the future. Since changes in climate are not traditionally incorporated into asset management decision-making, new techniques must be established to offset the effects of climate change.

The risks associated with the uncertainty of the environment have generally been accommodated through appropriate safety margins. The incorporation of climate change into asset design has so far been limited. However, a risk assessment approach can be used which considers four major conceptual factors in assessing climate change impact and adaptation. These are exposure to climate stressors, vulnerability, resilience, and adaptation.

**Climate Change Exposure** refers to the degree to which a system is exposed to extreme climate variations and the nature of those variations.

**Vulnerability** refers to the potential for loss due to exposure to a climate stressor, such as the degree to which a system is susceptible, and unable to cope and considers the structural strength, integrity and function of assets or asset systems in terms of the potential for damage or functional disruption as a result of climate stressors. It's important to recognize that asset risk is a function of exposure and vulnerability.

**Resilience** is used to refer to the capacity of a system to absorb disturbance without losing essential function, such as the ability of a system to continue to operate as a result of built-in redundancy. For example, the adequate operation of a road system despite the loss of a single road or bridge or the relative ease that a single asset can be repaired or replaced.

**Adaptation** or 'adaptive capacity' is the ability of the asset to adjust to climate change, including climate variability and extremes. This works to moderate potential damages or to cope with consequences of changing climates including taking advantage of respective opportunities to extend the asset lifecycle.

Adaptive strategies fall into three categories:

1. protect
2. accommodate
3. retreat

An example of a protection strategy is wetland restoration. An accommodation strategy is preparing for an event such as periodic flooding by having operational plans in place to minimize disruptions. Retreat involves no attempt to protect the asset, e.g. a facility or structure may be abandoned under certain conditions.

An important concept in the risk assessment approach is that of thresholds. In the context of asset management, such thresholds are points within a decision-making process at which specific actions are taken. Thresholds are indicators when the condition of an infrastructure component falls below a certain standard or may be economic when replacement costs are less than repair costs.

Such an indicator as risk combines an assessment of present-day vulnerabilities pertaining to specific climate factors including projections as to how they might change under climate change scenarios. However, risk also takes into account the severity of a given impact, the amount of infrastructure affected and the ability to adapt to climate change.

Certain authorities have developed a methodology for determining thresholds by using a two-stage process. The first stage includes examining the necessity for taking action. No action is deemed necessary if it is determined that a given impact is unlikely to occur within the design life of the asset or if current standards would adequately address climate impact. The second stage applies when action is required immediately or in the near future comparing the cost of doing nothing, retrofitting the infrastructure or designing new infrastructure.

Along with the concept of adaptive strategies is the concept of interventions. Interventions are triggered when a certain threshold is reached and consists of a 'set of responses', which are a particular measure, an example being the application of a hard surface on a gravel road. Adaptation previously took into account future changes including climate change, physical changes to an asset, and deterioration of an existing asset. While such adaptations are designed for making assumptions about future change, the magnitude of future change is unknown.

An approach to adaptation takes into account the uncertainty of future change and enables decisions to be made that are based on actual rates of change. The primary future changes that will affect the implementation of and preparation of an adaptation plan are:

- Climate change - This presents the greatest challenge in terms of future uncertainty.
- Socio-economic change.
- Deterioration of the existing assets.
- The physical environment in which assets are located.
- Public attitudes toward modifying service levels.

The types of adaptation envisaged within the Puslinch asset management plan to cope with the uncertainty of future change includes the following:

- Changes to the timing of new interventions.
- Ability to change between options.
- Adaptation of engineering responses.
- Land use planning that provides flexibility in the selection of options.
- Adaptation to new infrastructure, for example, the construction of a new road.

The timing of a decision to implement an intervention is based on:

- The rate of change of the indicator (which is unlikely to be linear).
- The threshold value when an intervention is required.
- An estimate of how the indicator will continue to change, in order to estimate the date when it reaches the threshold value.
- The lead time for planning and constructing the intervention.

The procedure outlined above will take place over a number of years.

In regard to Puslinch, it is accepted that climate change is having an impact on assets. However, the rate of change is such that climate change will not have a significant financial impact on the assets of Puslinch over the next ten-year period. The deterioration rate of the physical condition of assets is not significant at the present time. Reference should be made to recommendations which highlight the need to include climate change as a consideration in undertaking future updates of asset condition such as a Roads Needs Study.

## 4.0 Level of Service Policies

Determining municipal level of service policies requires first developing a baseline for acceptable and affordable levels of service. This is done by first examining present-day service levels, community needs, regulatory or legal obligations and the cost of service delivery. Once present-day service levels have been examined, this baseline can be compared against level of service expectations.

Initially, current levels of service should be documented as well as the annual cost to each service delivery. Any higher-level service, even at a cost of delivery, in all likelihood will require an increase in budget. However, such an increase in budget may be justified if a service level change is required to achieve compliance with regulation codes or standards.

Levels of Service (LOS) Analysis is a component of asset management planning that is significant and has a great deal of impact. The core purpose of a Municipality is to provide services to residents and other stakeholders. Assets help to provide those services and most of the resources devoted to asset management planning are spent on infrastructure. Physical assets are simply a portion of what is required to deliver the various levels of service as determined by the Township. The Township needs to ensure that the infrastructure performs to meet the level of service goals at an affordable and sustainable cost. An objective of LOS analysis is to find a balance between the expected level of service and the cost of providing that level of service.

A LOS analysis includes:

- Service identification with the identification of assets involved in providing the services and the stakeholder's impact;
- Determination of levels of service, based on community expectations;
- Comparison of existing levels of service to expected strategic/technical levels of service;
- Use of performance measures to assist in comparing existing service levels to expected levels; and
- An assessment of the lifecycle cost implications of moving from existing levels of service to expected (desired) levels of service over a forecast period.

In addition, the following should be identified in the Level of Service Policies.

- The options for the proposed levels of service and the risks associated with those options to the long-term sustainability of the township.
- How the proposed levels of service differ from the current levels of service.
- Whether the proposed levels of service are achievable.
- The Township's ability to afford the proposed levels of service.

#### **4.1 Identifying Services**

Identifying and determining services are beneficial for several reasons. For asset management planning, identifying services is an important step in developing the LOS analysis. Once the Township has identified the services it is providing and what services it wishes to provide, then the level of service to be provided can be determined. Service reviews can be undertaken by both formal and informal means and involve a number of stakeholders including staff and Council.

#### **4.2 Service Reviews**

Given that the asset management planning process is in place to determine how assets will provide services to residents and other stakeholders, the identification of services is a critical "first step" to initiate the Level of Service analysis. Municipalities provide all of the legally mandated services, as well as other services desired by the residents. The development of a

“service-centric” asset management process entails understanding and answering the following questions for all services:

- What are the services that Puslinch is providing?
- What are the services that customers expect?
- What assets is Puslinch provide for each service?

#### 4.3 Factors Affecting Levels of Service

Several factors affect the level of service delivery for particular asset types. An organization’s policy objectives, community expectations, legislative requirements, and resource constraints are some of the factors that generally influence the level of services. The following details are some of the factors:

- **Community Expectations:** This factor represents one of the major drivers in setting levels of service. Information is needed about the community’s expected level of service and willingness to pay for this service. A balance then needs to be determined between that expected level of service and its associated costs.
- **Legislative requirements:** Legislative standards and regulations affect the way assets are managed. These requirements stipulate the minimum levels of service. Therefore, relevant requirements must be taken into consideration in setting levels of service.
- **Policies and objectives:** Existing policies and objectives should be considered when developing levels of service, with care taken to remain aligned with an organization’s strategic planning documents.
- **Resource availability and financial constraints:** These constraints play a large role in an organization’s ability to provide sustainable levels of service. Therefore, resource constraints play a significant part in determining affordable levels of service.

#### 4.4 Current vs Expected Levels of Service

The concept of comparing current vs. expected Level of Service is very important to the overall Level of Service analysis process. Current levels of service are essentially the service levels that are being provided by Puslinch at the present time. They can be defined through qualitative descriptions, lifecycle cost related projects, and/or performance measurements. The current year’s budget reflects the cost of providing current levels of service. However, the current years’ budget may or may not include adequate funding to maintain current levels of service over time. Information on current levels of service enables an understanding of the difference between the service levels currently being provided and the service levels expected.

Levels of service are differentiated between:

- **Community Expectations:** Based on what the customer and community expect to receive;
- **Customer Levels of Services:** Measuring community expectations against attributes such as reliability, quality, safety, efficiency, and capacity. Outlines what the customers will receive from a level of service standpoint; and

- **Technical Levels of Service:** How Puslinch will provide the levels of service, often using operational or technical measures.

#### **4.5 The Process of Developing a Level of Service Analysis**

The process for developing and adopting level of service measures may be defined as follows:

**LOS analysis can involve:**

1. Developing Levels of Service
  - Customer vs. Technical Level of Service
  - Current vs. Expected Level of Service
  - Use of performance measures
2. Consultation, Communication, and Approval
  - Receiving input on the proposed LOS analysis
  - Communicating the LOS analysis to stakeholders
  - Seeking Council approval of Level of Service analysis
3. Ongoing Review, Updates, and Improvements
  - Updating the Level of Service Analysis, as needed

#### **4.6 Defining Customer Expectations**

The process of defining customer expectations involve any or all the following:

- Staff input;
- Use of industry/local knowledge;
- Existing reports that refer to customer expectations;
- Council input; and/or
- Seeking public input.

Involving Council and/or public in the process of defining customer expectations provides a direct connection between the community and their expectations that may not be identified through other sources. Other sources can involve assumptions and estimations of customer expectations. Such direct public impact can be determined by way of public meetings and submission of comments from the public.

#### **4.7 Developing Levels of Service**

To be effective in developing levels of service, input should be gathered from and communicated to all interested parties. The services being provided, and the community



expectations should be documented based upon input from applicable departments and their staff. Level of service policies must be created and approved by Council.

#### **4.8 Consultation, Communication, and Approval**

The LOS analysis was complete in “draft form”. Consultation, communication, and/or approval a processes that needed to occur to finalize the analysis were formulated with consultation with Puslinch staff. From a consultation point of view a public meeting was scheduled to review the draft LOS analysis and provide feedback. These stakeholders included other staff members, Council, and the public. The approval of the LOS analysis may be simply the discussion and approval at a Council meeting. A decision on when to approve the LOS analysis, either as part of an overall asset management plan or independently of an asset management plan, will also have to be made.

#### **4.9 Ongoing Review, Updates and, Improvements**

The establishment of a Level of Service analysis is not a one-time occurrence. Rather, it is a constant and evolving process with ongoing consideration to customer expectations, legislative or technological requirements/changes, corporate strategic mission and objectives, and financial opportunities/constraints. The frequency of these reviews should be established and followed by staff as part of the Strategic Asset Management Policy.

It is important to note that although seeking public input is important, this input must be compared with financial implications.

Establishing LOS targets is often an iterative process. The process starts with public (community) expectations of service levels and then measuring these expectations against constraints such as financial considerations, resources, and affordability. Only after these constraints have been considered will it be determined whether public expectations can in fact be approved as expected LOS for the Township’s asset management process.

#### **4.10 Developing Community Expectations**

The process of developing community expectations for levels of service policies in Puslinch included Council and the public in the process. In addition, existing reports, processes, and meetings were used to inform the process with more detailed information already known regarding community expectations.

The ultimate users of the services will have diverse needs and expectations. This underscores the need to understand the customers and connect their diverse needs to the level of service being provided. As part of this process, the community expectations of the various customer groups will need to be consolidated for use in the LOS analysis.

#### **4.11 Comparing Current LOS to Expected LOS**

- An identification of existing LOS;
- A determination of expected (or desired) LOS; and
- An assessment of the implication of moving from existing LOS to expected (desired) LOS over a forecast period.

If current LOS equates to what service level is currently provided, expected LOS outlines the overall objective or target LOS to be reached at some point in time. The amount of time it will take to reach expected LOS depends on the assumptions Puslinch makes within the asset management planning process. For example, a municipality could decide to meet expected LOS in a particular area in 10 years. When that scenario is assessed with the Lifecycle Management Strategy and the Financing Strategy and concluded to be too expensive too quickly, the LOS analysis can be updated to include another scenario to reach expected LOS in 15 or 20 years. Alternate scenarios can also represent different levels of service.

## **5.0 Level of Service Policies**

Based on the discussion in Section 4, Service Level Policies were developed for all asset classes in the Township of Puslinch.

## 5.1 Bridges and Culverts

Regulation 588/17 Asset Group: **Core Municipal Assets**

Major Asset Class: **Bridges and Culverts**

### **Township Current Level of Service Policy:**

Township bridges and culverts are inspected by a Professional Engineer every two years.

### **Lifecycle/Deterioration Rate:**

Expected Life 50 Years for all Bridge and Culvert Structures.

### **Consequence of Failure items impacted by failure to achieve**

Health and Safety  
Financial  
Legal/Regulatory Compliance  
Environmental

### **UEM Proposed Level of Service Policy:**

To inspect according to the Ontario structure inspection manual and Ontario Regulation 104/97. This inspection shall occur every two years and shall adjust the BCI based on the recommendations of the qualified engineer. The inspection report shall include all repairs that exceed the capital threshold in the capital budget to the schedule recommended by the qualified engineer.

The asset registry must be updated at least once per year to reflect whether the asset was inspected or not. For those not inspected, the BCI will be maintained based upon the requirements of the Ontario Regulation 104/97.

### **Budget Implications**

Bridge and Culvert Inspection Reports  
\$15,000 every 2 years.

### **Source Documents**

Ontario Structure Inspection Manual.

O. Reg. 104/97: Standards for Bridges.

## 5.2 Gravel Roads

Regulation 588/17 Asset Group: **Core Municipal Assets**

Major Asset Class: **Gravel Roads**

### Township Current Level of Service Policy:

All Township owned gravel roads are regularly maintained in the form of grading and gravel addition. The Township does not have a policy for when a gravel road should be surface treated including asphalt and or reconstruction.

The Township completes dust control annually. Further applications of dust control are completed as required.

### UEM Proposed Level of Service Policy:

The Service level for gravel roads is the Minimum Maintenance Standard for Gravel Roads. Repair will include grading and if required an application of additional granular material. Other alternatives should be considered such as surface treatment including asphalt and/or reconstruction if all of the following criteria are met:

- Full regrading is completed more than 6 times during each of two consecutive non-winter periods. The non-winter period is from May 1st to November 1st; and
- an inspection of the gravel base has been completed by a qualified engineer and confirms that the road base can support a hard top surface, without additional construction required; and
- the average daily traffic volume exceeds 400 vehicles; and
- the Township has approved funding for the project.

### Lifecycle/ Deterioration Rate

5 PCI points point adjustment per grading.

### Consequence of Failure items impacted by failure to achieve service level:

Health and Safety  
Financial

### Budget Implications

Inspection of Gravel Base \$6000 per average from intersection to intersection as required.

Gravel Road Surface Treatment Cost \$52,000/km based upon tender document 18-136 provided by City of Guelph. Pricing excludes costs associated with reconstruction of base and drainage works.

### Source Documents

O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways

Gravel Road Management, Wyoming Technology Transfer Center Sept 2010

Economics of Upgrading an Aggregate Road, Minnesota Department of Transportation Sept 2005. *Note:* Ontario Service Document not available.

### 5.3 Hard Surface Roads

Regulation 588/17 Asset Group: **Core Municipal Assets**

Major Asset Class: **Hard Surface Roads**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The 2013 Asset Management Plan and 2016 Pavement Condition Index (PCI) Report indicated that the Township will strive to maintain all hardtop and non-paved roads in a good to fair condition. For hard surface roads, this will approximately correspond to a PCI value of 65 or greater. The 2013 Asset Management Plan recommended completing a full PCI update every 5 years.	Based upon a deterioration rate of 2 points per year the condition decreases from 100 to 60 over 20 years.
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
<p>Class 3 roads be rehabilitated or reconstructed at a PCI of 65</p> <p>Class 4 roads be rehabilitated or reconstructed at a PCI of 60</p> <p>Class 5 roads be rehabilitated or reconstructed at a PCI of 60</p> <p>The pavement condition index should be renewed in 2021 and should be renewed every 5 years thereafter. A traffic volume study should be undertaken every 5 years beginning in 2020.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).</p>	<p>Health and Safety</p> <p>Financial</p>
	<b>Budget Implications</b>
	<p>Traffic Volume Study, \$25,000 every 5 years.</p> <p>Pavement Condition Index Report, \$24,500 every 5 years.</p>
	<b>Source Documents</b>
	<p>2016 Pavement Condition Index Study.</p> <p>2011-2017 Traffic Volume Data.</p>

## 5.4 Storm Water Management Ponds

Regulation 588/17 Asset Group: **Core Municipal Assets**

Major Asset Class: **Storm Water Management Ponds**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The Township completes visual, non-documented inspections of storm water management ponds as part of routine road inspections.	50 years for pond components and 20 years for hicken bottom.
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
Inspection of storm water management ponds should occur on average four times per year during the first two years of operation and then at least annually.  The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).	Environmental Legal/Regulatory Compliance
	<b>Budget Implications</b>
	The estimated annual cost of storm water management pond inspections is \$5000.
	<b>Source Documents</b>
	Section: 6:3:1 Storm Water Management Planning and Design Manual – Ontario.

## 5.5 Storm Water Management Systems

Regulation 588/17 Asset Group: **Core Municipal Assets**

Major Asset Class: **Storm Water Management Systems**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The Township does not annually inspect the storm water management systems or clean the storm water management systems as required to minimize the movement of silts through the outlets. The Township externally contracts the cleaning out of catch basins every two years as required.	50 year expected life.
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
In reference to catch basin cleaning, as a general rule should be done annually but the frequency should be adjusted based upon the volume of material removed. Inspection of storm water management systems should occur on average four times per year during the first two years of operation and then at least annually.  The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).	Environmental Legal/Regulatory Compliance
	<b>Budget Implications</b>
	The estimated annual cost of storm water management systems inspections is \$5000.
	<b>Source Documents</b>
	Section 4:2:3 Storm Water Management Planning and Design Manual – Ontario)  Section 6:2:3 Storm Water Management and Planning Design Manual – Ontario

## 5.6 Street Trees

Regulation 588/17 Asset Group: **Green Infrastructure**

Major Asset Class: **Street Trees**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The Township completes required maintenance of trees but there is no schedule for inspection.	50 Years Expected Life.
	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
	Environmental
<b>UEM Proposed Level of Service Policy:</b>	<b>Budget Implications</b>
<p>This service level policy includes all trees that have been assumed by the Township through a development agreement. Subsequent to planting a tree the agency or company planting trees shall be responsible with all maintenance including pruning and replacement if necessary. After acceptance by the Township, the tree shall be inspected after 10 years and shall be inspected every 5 years thereafter to determine any required maintenance.</p> <p>The Township will hire an arborist or potentially the services of the University of Guelph to visually inspect only the trees planted in the subdivisions within the Township.</p> <p>It is recognized that there are numerous trees on public lands and road rights of way that may impact the safety of the public and maintenance activities. The Township overtime should document the location of such Trees their condition and required maintenance.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).</p>	<p>Tree Inspections \$6,000 on the year of inspection.</p>
	<b>Source Documents</b>
	UEM Professional Recommendation.



## 5.7 Buildings and Facilities

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Buildings and Facilities**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/</b>
The Township's last Building Condition Assessment (BCA) report was completed in 2014. The BCA report recommended completion of an Arc Flash Study for all electrical equipment in the Township's facilities. The Township has not completed an Arc Flash Study at this time. The BCA report recommended that as part of a regular operations and maintenance program that all equipment and wire terminations be investigated via infrared scanning every 3 to 5 years. The Township has not completed infrared scanning of all equipment and wire terminations at this time.	50 Years Expected Life.
	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
	Financial
<b>UEM Proposed Level of Service Policy:</b>	<b>Budget Implications</b>
Buildings and Facilities owned by the Township of Puslinch should be inspected by a qualified structural engineer on a routine basis however not more than 5 years apart to determine necessary improvements, repairs or replacements. In addition to the qualified structural engineer an additional qualified engineer shall be retained to address electrical, HVAC and mechanical components. The cost of any needed improvements shall be integrated into the capital plan by way of updates to the asset registry.  In addition to the inspections by such qualified engineer's a qualified company or individual shall undertake an Arc-Flash study every 5 years and infrared scanning of all electrical equipment to determine the adequacy of such equipment.  The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).	Building Condition Assessment \$25,000.  Infra-Red Scanning \$3,000.  Arc Flash Study \$7,500.
	<b>Source Documents</b>
	2014 Building Condition Report.  Ontario Electrical Safety Code (OESC).

## 5.8 Fire Equipment

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Fire Equipment**

### Township Current Level of Service Policy:

The Township completes annual documented inspections of fire equipment in accordance with the related NFPA standards.

### Lifecycle/ Deterioration Rate

Varies depending on type of equipment.

### UEM Proposed Level of Service Policy:

The service level policy for Fire Equipment shall be in accordance with the related NFPA standards: 1911, 1962, 1932, 1855, 1858, 1852, 1851 and 1971.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

### Consequence of Failure items impacted by failure to achieve service level:

Health and Safety  
Internal Demand/Operational  
Financial

### Budget Implications

No significant budget implications.

### Source Documents

National Fire Protection Association Standards.

## 5.9 Fire Reservoirs

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Fire Reservoirs**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The Township completes annual documented inspections of fire reservoirs in accordance with Ontario Fire Code 213/07 and NFPA Standard 25 for the inspection and maintenance of all municipally owned fire reservoirs.	50 Years Expected Life.
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
<p>The Fire Department shall on an annual basis inspect all fire reservoirs owned by the Township in accordance with the Ontario Fire Code 213/07 and NFPA Standard 25 to ensure that such fire reservoirs can be easily accessible and that any components above the roof of the reservoir are in good condition. Such reservoirs shall not be obstructed by vegetation of any form such as plants, bushes and trees.</p> <p>The Fire Department shall inspect the reservoirs every 5 years to ensure the integrity of the reservoir.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).</p>	Internal Demand/Operational Financial
	<b>Budget Implications</b>
	No significant budget implications.
	<b>Source Documents</b>
	UEM Professional Recommendation.

## 5.10 Fleet – Works, Parks, Building and Fire Department Vehicles

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Fleet**

<p><b>Township Current Level of Service Policy:</b></p> <p>All Commercial Motor Vehicles owned by the Township require an Annual Inspection Certificate as required by the Ministry of Transportation (MTO).</p> <p><b>Fire and Rescue Services Fleet:</b></p> <ul style="list-style-type: none"><li>• Visual non-documented 360-degree inspection prior to the fleet leaving the Fire Station or Works Department.</li><li>• Weekly documented MTO Schedule 1 Inspection completed for commercial motor vehicles.</li><li>• Fire and Rescue Services fleet require annual testing of pumps and aerial devices (i.e. ladders) in accordance with NFPA Standard 1911.</li><li>• Non-destructive testing of aerial devices (i.e. ladders) is required every 5 years in accordance with NFPA Standard 1911.</li></ul>	<p><b>Lifecycle</b></p> <p>Varies from 7-25 years by vehicle</p> <p><b>Consequence of Failure items impacted by failure to achieve service</b></p> <p>Internal Demand/Operational Financial</p> <p><b>Budget Implications</b></p> <p>No significant budget implications.</p> <p><b>Source Documents</b></p> <p>Fleet Management Policy: Puslinch</p>
<p><b>UEM Proposed Level of Service Policy:</b></p> <p>Fleet shall be maintained in conformance with licensing practices of the Province of Ontario including the Ministry of Transportation and shall include a daily visual inspection of any licensed vehicle before the vehicle leaves the fleet storage facility of the Township. Inspection of fire and rescue services vehicles shall also be based on relevant NFPA standards.</p> <p>Further to the proposed service level policy described above. It is recommended by UEM that the Township retain their current service level policy.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).</p>	

## 5.11 Parks and Recreation

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Parks and Recreation**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
<p>The Township completes visual, non-documented weekly inspections of Parks while performing maintenance activities.</p> <p>The Township completes monthly documented playground inspections.</p>	<p>Varies from 15-40 years depending on asset type.</p>
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
<p>All parks and recreation facilities including but not restricted to baseball diamonds, baseball diamond lights, soccer fields, tennis courts and trails available for public use shall be inspected as frost leaves the ground in late winter or early spring to ensure the safety of such Parks and Recreation assets. Included are both internal and external fencing, hard surfaces, bleachers and any other ancillary assets located within parks and recreation areas. Upon identification of any surface deficiencies that may endanger the public repairs shall be undertaken prior to such infrastructure being deemed available for public use.</p> <p>Subsequent inspections should occur monthly until parks and recreation assets are closed prior to the winter season.</p> <p>For assets, an example being "Trails" that may be open for public use throughout the winter inspections shall occur following winter storms to ensure the safety of the public.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the asset is inspected or not (those not inspected will be updated based on lifecycle standards).</p>	<p>Financial</p>
	<b>Budget Implications</b>
	<p>No significant budget implications.</p>
	<b>Source Documents</b>
	<p>UEM Professional Recommendation.</p>

## 5.12 Regulatory Signs/Warning Signs

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Regulatory Signs/Warning Signs**

### Township Current Level of Service Policy:

The Township externally contracts the completion of retro reflectivity inspections of regulatory/warning signs annually.

### Lifecycle/ Deterioration Rate

15 years expected life for sign and post.

### UEM Proposed Level of Service Policy:

The Township shall retain a qualified company/individual that shall test the retro reflectivity of each sign once per calendar year with each inspection taking place no more than 16 months from the previous inspection. In conformance with the retro reflectivity specified in the Ontario Traffic Manual and when not meeting such requirements the Township shall replace the sign. Further, the Township shall conform with the requirement for class 3,4 and 5 highways as per the Ontario Regulation 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS.

The standard for the frequency of inspecting regulatory signs or warning signs to verify that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12 (1); O. Reg. 366/18, s. 13.

Class of Highway	Time
1	7 days
2	14 days
3	21 days
4	30 days
5	30 days

If a regulatory sign or warning sign is illegible, improperly oriented, obscured or missing, the standard is to repair or replace the sign within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 23/10, s. 8; O. Reg. 366/18, s. 13.

### Consequence of Failure items impacted by failure to achieve service level:

Health and Safety  
Internal  
Demand/Operational  
Financial  
Legal/Regulatory  
Compliance

### Budget Implications

No significant budget implications.

### Source Documents

Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways

### 5.13 Sidewalks

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Sidewalks**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The Township completes annual documented sidewalk inspections.	20 year expected life.
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
<p>In accordance with Ontario. Regulation. 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS, the standard for the frequency of inspecting sidewalks is once per year with each inspection occurring no more than 16 months from the previous inspection. Any discontinuity that exceeds 2cm shall be treated or repaired within 14 days of the inspection.</p> <p>Under winter conditions sidewalks must be inspected within 48 hours of the end of snow accumulation to ensure that there is less than 8cm of snow accumulated on the sidewalk and to reduce to the level of 8cm within the same 48-hour period. The same time period of 48 hours shall apply when ice forms on a sidewalk and shall require either removal or a treatment such as sand, salt or a combination of both to the sidewalk within the same 48-hour period.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).</p>	Financial
	<b>Budget Implications</b>
	Sidewalk Winter Maintenance \$20,000 annually using staff or contracted clearing.
	<b>Source Documents</b>
	<p>Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways.</p> <p>Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways.</p>

## 5.14 Streetlights and Poles

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Streetlights and Poles**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
The Township completes visual, non-documented yearly inspections to note any light deficiencies.	30 year expected life for poles and 20 years for fixtures.
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
<p>All luminaires shall be inspected once per calendar year with each inspection taking place not more than 16 months from the last inspection. The standard of repair should be as outlined in Section 10 of Ontario Regulation 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS. The same standard of inspection shall apply to luminaire arms and poles and supporting luminaires that are owned by the Township.</p> <p>The technology with streetlighting is evolutionary at the present time in Puslinch. The Township is in the process of modifying their streetlighting to LED fixtures while maintaining existing fixtures and poles. After the completion of the conversion to LED fixtures, the policy should be to replace fixtures in a cyclical manner every 20 years. Poles should be inspected by staff every 5 years to determine the need to replace based on a pole life of 30 years.</p> <p>The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).</p>	<p>Health and Safety</p>
	<b>Budget Implications</b>
	No significant budget implications. Part of current annual budget.
	<b>Source Documents</b>
	<p>Section 10, Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways.</p> <p>Section 10, Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways.</p>



### 5.15 Sewage Assets

Regulation 588/17 Asset Group: **Municipal Assets** Major Asset Class: **Sewage Collection Systems, Sewage Pumping Stations, Sewage Treatment Plants**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
	<b>Budget Implications</b>
	<b>Source Documents</b>

## 5.16 Water Assets

Regulation 588/17 Asset Group: **Municipal Assets**

Major Asset Class: **Water Treatment Plants. Water Pumping Stations, Water Storage Facilities, Raw Water Supply, Water Distribution Mains**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
	<b>Budget Implications</b>
	<b>Source Documents</b>

## 5.17 Parklands

Regulation 588/17 Asset Group: **Green Infrastructure**

Major Asset Class: **Parklands**

<b>Township Current Level of Service Policy:</b>	<b>Lifecycle/ Deterioration Rate</b>
<b>UEM Proposed Level of Service Policy:</b>	<b>Consequence of Failure items impacted by failure to achieve service level:</b>
	<b>Budget Implications</b>
	<b>Source Documents</b>

## 6.0 The Asset Registry

Through multiple meetings with staff of Puslinch, UEM developed an Asset Registry. The Township was able to provide knowledge of the physical components of many assets in asset registry by providing reports and documentation. The asset registry includes description, location, size, material type, and conditions of all known assets. As the project evolved, UEM completed the financial components of the asset registry. The asset registry financial components consist of unit cost, remediation cost and a total replacement cost for all asset components.

Regulation 588/17 Asset Group	Asset Registry Asset Group
Core Municipal Infrastructure	Bridges
	Culverts
	Asphalt Roads 1 Lift
	Asphalt Roads 2 Lift
	Asphalt Roads Surface Treated
	Storm Water Management Ponds
	Storm Sewers
	Gravel Roads
Municipal Assets	Buildings and Facilities
	Fire Equipment
	Fire Reservoirs
	Parks and Recreation
	Sidewalks
	Regulatory Signs
	Street Lights
	Fire Licensed Vehicles
	Fire Vehicle Tires
	Work Unlicensed Vehicles
	Work Licensed Vehicles
	Parks and Recreation Unlicensed vehicles
	Building Department licensed vehicles
Green Infrastructure	Street Trees

6.0 - 1 Asset Class Hierarchy

This asset registry was developed through the incorporation of all departments input data. Because of the all-inclusive design of the asset registry the Township of Puslinch may assume that the data in this report is the most current. This Registry should be best regarded as the “One Version of Truth” of all asset components. Further, updating is highly recommended to

begin first from this asset registry and amendments should occur through qualified QA/QC process of the existing assets. The copy of the asset registry may be found in Appendix 20.6.

## 6.1 Types of Asset Attributes

This asset registry has been developed with certain asset attributes that allow for clear identification, quantification, description, and evaluation of each asset in the registry. UEM has collected attribute types that will allow the Township to do certain levels of reporting. These attribute types are at a higher level and can be best understood through a review of the table that follows. “Yes” and “No” columns indicate if the Asset Registry has the Parameter included in its architecture.

Parameter	Yes	No	Description of use
Asset Identifiers, Location, and Descriptors	✓		To identify, describe and locate the asset. Will also define asset in terms of position in an asset hierarchy.
Detailed Technical Data	✓		To individualize and quantify each asset from similar assets.
Valuation Data	✓		Data that allows the organization to assess costs of the assets (both historical and current) and record/track amortization.
Maintenance Data		✓	Data that identifies the work to be completed and work completed against an asset.
Condition Data	✓		Data used to assess asset risk and determine the actual remaining useful lives of assets.
Predictive Data		✓	Data used to allow future behaviour of assets to be predicted. These would include deterioration curves and treatment effect details.
Performance Data		✓	Data recording demand and capacity performance. Unplanned maintenance activity is recorded against asset including cause and costs. Planned maintenance procedures adopted for critical assets.
Risk Data	✓		Data used to analyze the risk of an asset’s failure and determine the risk to organizations if the asset were to fail.
Lifecycle data	✓		Data used to plan future costs associated with operations, maintenance, creation, renewal, disposal of assets. The cost of any strategy should also be determined.
Optimized Lifecycle Data		✓	Data used to optimize analysis of works considering the following factors: risk, maintenance, operations, life extension, age and condition of the asset, asset decay, treatment options, and cost.

## 6.2 Asset Attributes: Asset Identifiers, Location, and Descriptors

UEM has prepared the asset registry with the ability for each asset to be located through a strict asset hierarchy. This hierarchy ensures that there is no duplication of any asset and or carryover of such asset into different locations. This Hierarchy was devised first through qualifying each asset class in its appropriate regulation group. Secondly, each asset was loaded into asset classes. This was done by grouping assets with like characteristics or management structures.

## 6.3 Detailed Technical Data

The level of detail for each asset class has been individually assessed through meetings with department heads of Puslinch.

## 6.4 Condition Data

UEM through consultation with staff has generated condition data for the majority of assets in the asset registry. For Majority of the asset classes in Puslinch Condition data classification was established through reports/data prepared by consultants.

The addition to these reports was through staff consultation to amend condition data when required. This is inclusive to all assets for which a report/dataset was not provided and or concern was raised from staff or UEM regarding the quality of data provided. The methodology for condition data is summarized in the following table:

Asset Class	Condition Rating Methodology
Storm Sewers	Consultation with staff
Fire Reservoir	Consultation with staff
Parks and Recreation	UEM visual condition assessment
Fire Licensed Vehicles	Consultation with staff
Fire Vehicle Tires	Consultation with staff
Works, Building Department and Parks and Recreation Vehicles	Consultation with staff
	Consultation with staff
Street Trees	Consultation with staff

*6.0 - 3 Asset Condition Data Rating Methodology*

## 6.5 Assets with No Condition Data

For some assets no condition data was formulated. Thus, for this asset management plan each asset without a condition rating would be assumed to deteriorate at a linear rate from its point of acquisition. For these assets only, the data attributes Acquisition date and life expectancy were used to classify their condition. In other words, these condition ratings would be a function of their remaining serviceable life.

## 6.6 Condition Data: Standardization

To standardize all condition data UEM employed a 1-5 rating scale. This scale would ensure that assets could be incorporated into the same data model and analyzed with assets being over or under-prioritized. A sample of this standardization process has been showcased in the following table:

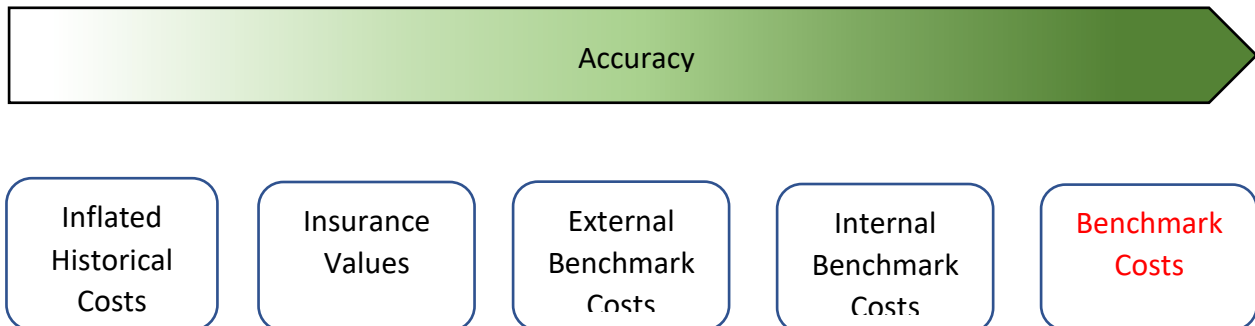
Asset Class	Condition Rating Type	Condition Rating	Condition Index	Condition Index Methodology
Bridge & Culverts	BCI	70	3	Good: BCI Range 70 -100 Fair: BCI Range 60 -70 Poor: BCI Less than 60
Roads	PCI	99	5	UEM standardized condition for Roads where a PCI of 100 converts to 5 for "Excellent", 90 converts to a 4 for "Good", 80 converts to a 3 for "Fair", 70 converts to a 2 for "Poor", and 60 or fewer converts to a 1 for "Critical"
Regulatory Signs	Condition Rating	5	5	Provided Datasets from the Township were already standardized - no intervention required.
Vehicles	Vehicle Kilometers	55000	3	UEM adhered to the Townships Current Fleet Management Policy when standardizing each vehicle in the fleet. Each vehicle type has their own metric for determining condition. Further clarification of methods, procedures can be identified more clearly in the Asset Registry.
Fire Equipment	Condition Rating	5	5	Provided Datasets from the Township were already standardized - no intervention required.

Asset Class	Condition Rating Type	Condition Rating	Condition Index	Condition Index Methodology
Park and Recreation	Visual Condition Rating	2	2	UEM through a visual inspection of park and recreation assets devised a condition rating based on the total assessment of each part of the park and recreation asset. In some cases, low condition ratings were given to asset due to the lack of adherence to regulations or codes.

6.0 - 4 Condition Rating Standardization

## 6.7 Valuation Data: Remediation Costs

UEM has employed Benchmark Cost to asset class remediation valuation where possible. This valuation methodology is consistent for all assets in the asset registry and may be considered for future use so long as costs are inflated at an appropriate rate.



6.0 - 5 Valuation Methodology

## 6.8 Valuation Data: Replacement Costs

UEM has employed Benchmark Cost to asset class replacement valuation where possible. The source of this valuation data is external or reproduction Costs. This valuation methodology is consistent for:

- Hard Surface Roads
- Gravel Roads
- Surface Treated Roads
- Sidewalks
- Regulatory Signs
- Bridges and Culverts
- Trees
- Fire Equipment
- Fire Reservoirs



Benchmark Costs were not applied to Storm Sewers, Storm Water Management Ponds and Buildings and Facilities. UEM relied upon historical costs, external research and internal consultation with staff of Puslinch to value these assets.

A summary of the specific methodology for remediation cost and/or replacement costs has been summarized in greater detail in the summary page for each asset class.

## 6.9 Data Confidence

To summarize the Asset Registry and its ability to effectively manage and deploy core financing reports such as PSAB 3150, FIR Reporting, GIS mapping, and capital plans UEM developed a scorecard for the data quality of each asset class. The score summarizes in bullet form the strengths of each asset class as well the weaknesses. The methodologies used to create a data confidence score are summarized in Figure 6.

The Data Confidence Score devised from the following three tables will help the Township identify which assets need more attention.




## 6.10 Data Confidence Trend


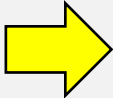

UEM devised a Data Confidence Trend for each asset class in the asset registry. The methodology for formulating Data Confidence is the balance between the positive and negative attributes of each asset classes data structure.





Example Factors	High Confidence	Moderate Confidence	Low Confidence
When was the date of data collection?	Data is up to date	There needs to be changes to the data since it's been collected	There are many changes required since it's been collected
What is the relative completeness of the Dataset?	The Data is fully complete and present for the data set	The Data is partially complete and present for the data set	The Data is not complete and present for the data set
What is the source of the data source?	Credited Consultant/Firm	Unconfirmed Sources	Personal Accounts, Undocumented Sources




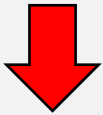
Example Factors	High Confidence	Moderate Confidence	Low Confidence
Is there Staff confirmation of the reliability of the data?	Full Confirmation across departments	Partial Confirmation to some Departments	No Confirmation from Departments

6.0 - 6 Condition Rating Standardization

Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
<b>Bridges</b>	<b>100%</b>	<b>75%</b>		<ul style="list-style-type: none"> <li>The Inventory data is extensive as it relates to bridge and culvert structures.</li> <li>In 2017 a Bridge and Culvert Inspection was completed which gave a detailed summary of the recommended capital expenditure of the Bridge and Culvert structures over 10 years.</li> <li>The Value of each crossing has been compiled from the Bridge and Culvert Inspection report.</li> </ul>
<b>Culvert</b>				
<b>Hard Surface Roads</b>	<b>75%</b>	<b>85%</b>		<ul style="list-style-type: none"> <li>The Inventory data is extensive and has been compiled from the 2016 Road Condition Assessment with further adjustments being completed through consultation with Staff.</li> <li>Township does not currently follow lifecycle event schedule set out by the condition data.</li> <li>The Valuation of each road segment has been formulated from consultation with staff.</li> </ul>
<b>Gravel Roads</b>	<b>25%</b>	<b>85%</b>		<ul style="list-style-type: none"> <li>The Inventory data has been completed through consultation with Staff.</li> <li>The Township currently does not have a formal policy for documenting gravel road condition.</li> <li>The Valuation of each road segment has been formulated from consultation with staff.</li> </ul>

Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
<b>Regulatory/ Warning Signs</b>	<b>100%</b>	<b>100%</b>		<ul style="list-style-type: none"> <li>The Inventory data has been delivered by staff in multiple data formats with extensive detail on the condition and location of each sign.</li> <li>The Valuation of each sign has been formulated with consultation from staff.</li> </ul>
<b>Sidewalks</b>	<b>100%</b>	<b>75%</b>		<ul style="list-style-type: none"> <li>Inspection data was not adequate in creating condition profiles for each sidewalk.</li> <li>The Inventory and condition data for sidewalks has been compiled through a visual assessment in summer of 2018 by UEM staff. Discontinuity in the sidewalk surface was not verified by UEM staff.</li> <li>Further, the valuation of each sidewalk has been formulated through professional recommendations from UEM staff.</li> </ul>
<b>Street Lights</b>	<b>25%</b>	<b>75%</b>		<ul style="list-style-type: none"> <li>The Inventory data for Streetlight fixtures is evolutionary as the Township upgrades to LEDs. The pole locations have been compiled from delivered datasets from the Township.</li> <li>Pole condition has been developed through random sample assessment by UEM staff.</li> <li>The valuation of each streetlight pole has been developed through recommendations by UEM staff.</li> </ul>

Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
Storm Sewer	25%	50%		<ul style="list-style-type: none"> <li>The Inventory and condition data for Storm Sewers have been acquired through consultation with Puslinch Staff.</li> <li>There is no condition for any storm sewer asset in the Township of Puslinch.</li> <li>The valuation of each Storm Sewer segment has been developed through recommendations by UEM staff.</li> </ul>
Buildings and Facilities	100%	85%		<ul style="list-style-type: none"> <li>The Inventory data has been compiled from the 2014 Buildings Inspection report.</li> <li>The valuation of each building component was sourced by UEM staff whereas repair/remediation activities have been sourced from the 2014 Buildings Inspection report.</li> </ul>
Fire Equipment	100%	100%		<ul style="list-style-type: none"> <li>The Inventory data is extensive and was delivered by Puslinch Staff.</li> <li>The Valuation of each asset was delivered by Puslinch staff.</li> </ul>
Fire Reservoir	85%	100%		<ul style="list-style-type: none"> <li>The Inventory data is extensive and was delivered by Puslinch Staff. The condition for each Fire Reservoir has been sourced from consultation with Puslinch staff.</li> <li>The valuation of each Fire Reservoir was developed through recommendations by UEM staff.</li> </ul>

Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
<b>Storm Water Management Ponds</b>	<b>95%</b>	<b>75%</b>		<ul style="list-style-type: none"> <li>The Inventory has been compiled from the 2017 Storm Water Management Inspections.</li> <li>The Valuation of each asset was delivered by Puslinch staff. The valuation of each Storm Water Management Pond has been developed through recommendations by UEM staff.</li> </ul>
<b>Parks and Recreation</b>	<b>95%</b>	<b>75%</b>		<ul style="list-style-type: none"> <li>The Inventory and condition data for Parks and Recreation was compiled through a visual assessment in summer of 2018 by UEM staff.</li> <li>The Valuation of each Park and Recreation asset was delivered by Puslinch staff and through UEM's recommendations.</li> </ul>
<b>All Fleet Assets</b>	<b>100%</b>	<b>100%</b>		<ul style="list-style-type: none"> <li>The Inventory data was compiled by Puslinch Staff and from the fleet management analysis report.</li> <li>The condition for each vehicle was compiled from the fleet management analysis report with help by Puslinch staff.</li> <li>The valuation of each vehicle was compiled from the fleet management analysis report.</li> </ul>
<b>Street Trees</b>	<b>50%</b>	<b>100%</b>		<ul style="list-style-type: none"> <li>Inventory data was delivered by Puslinch Staff. This inventory does not reflect all the known Street Tree assets in the Township of Puslinch.</li> <li>The condition of each asset is unknown. The valuation of each tree asset has been delivered by Puslinch Staff.</li> </ul>

6.0 - 7 Data Trend Summary Table: Puslinch Asset Classes

## 6.11 Asset Registry Data Quality Score



The Asset Registry has a very good data foundation but, in some areas, requires improvement. For that reason, the data quality score for the asset registry is a B. To improve the quality data score UEM recommends taking certain actions in the **Areas of Improvement** as follows.

### **Areas of Improvement:**

**Gravel Roads:** As per the proposed service level policy all gravel roads have been assumed to have a PCI of 90. This assumption is based strictly off staff understanding of the gravel surface from a maintenance perspective. Moving forward, grading activities should be stored in a tabular format and used as a basis of condition tracking. This recommendation is consistent with the recommendations section of this report.

**Sidewalks:** Sidewalk inspections should be more adequate, with more technical details to create a condition score that is akin to the proposed service level policy. Such technical details should include a report of any discontinuity in the sidewalk surface and a condition rating that ranges from 1-5.

**Street lights:** A full condition assessment of each pole should be conducted in order to adequately assess the possible capital needs in the future.

**Street Trees:** An identification of each Street Tree and input into the Asset Registry with species type, location and lifecycle attributes should be undertaken as a future activity.

**Storm Sewers:** Verification of location and full condition assessment of each storm sewer inlet and channel.

## 7.0 State of The Infrastructure

This section of the Asset Management Plan documents the current condition of assets using the best available information regarding physical condition, age, and financial data. Replacement values were assigned to each asset based on current unit pricing generated from research for each specific asset class. Information sources, assumptions and asset-specific information are discussed in subsequent sections, with an overview provided in the section below.

### 7.1 Total Asset Replacement Cost

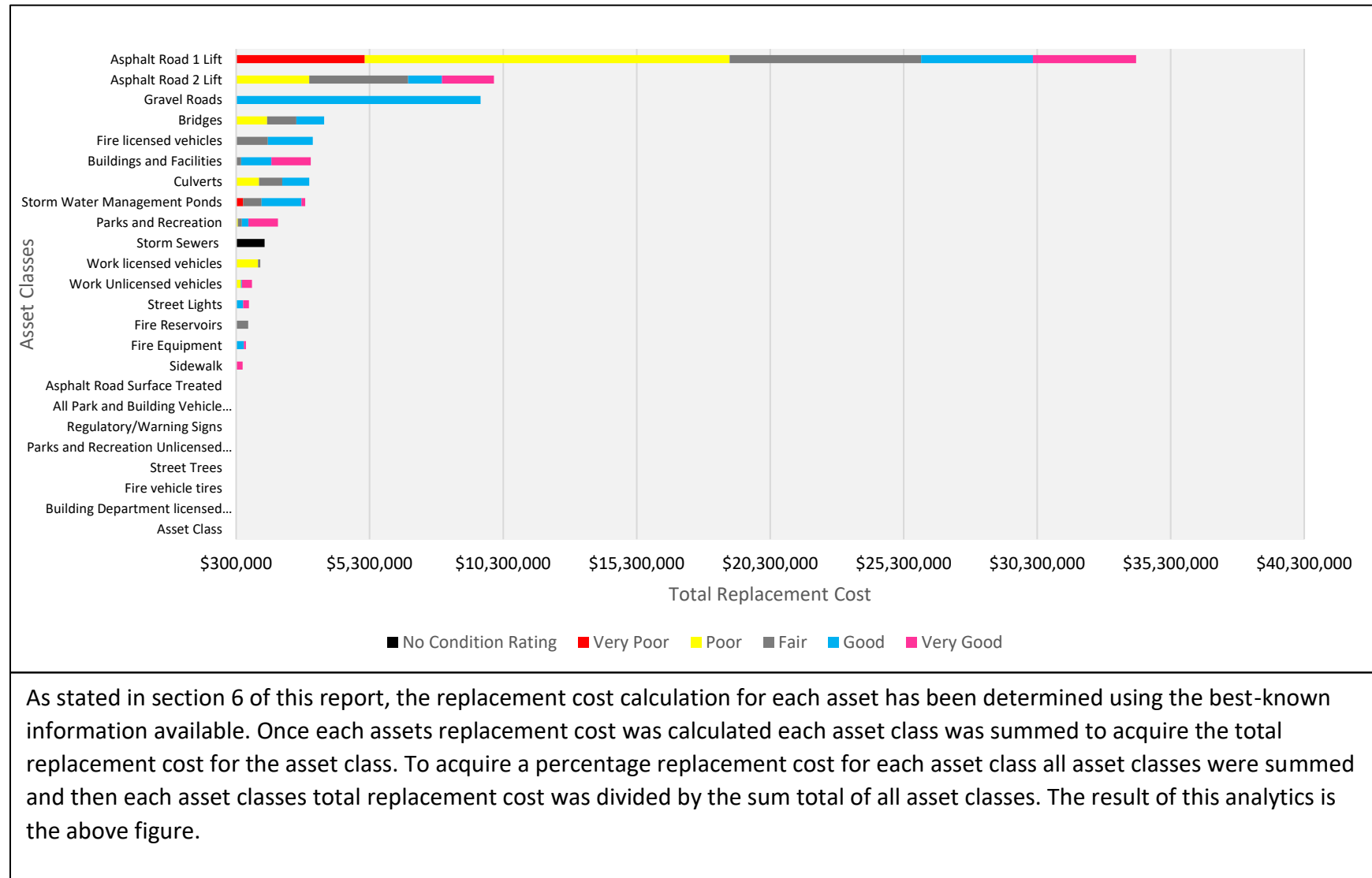
UEM through data provided by the Township has estimated that the total asset replacement cost for all assets owned by the township is \$78.9 million dollars as of 2018.

### 7.2 Lifecycle Management Methodology

To plan and project for future expenditures, an asset can either be scheduled to be replaced based on a condition assessment or assumed to reach a critical state of repair at a certain point in time. This point in time is calculated based off its construction year and expected life. The asset registry has incorporated both types of lifecycle management, which when analyzed with no recognition of the asset classes results in skewed results. For this reason, each asset class was analyzed independently to give a realistic picture of the lifecycle management strategy, potential capital expenditures, and risk.



### 7.3 Total Asset Replacement Cost by Asset Class



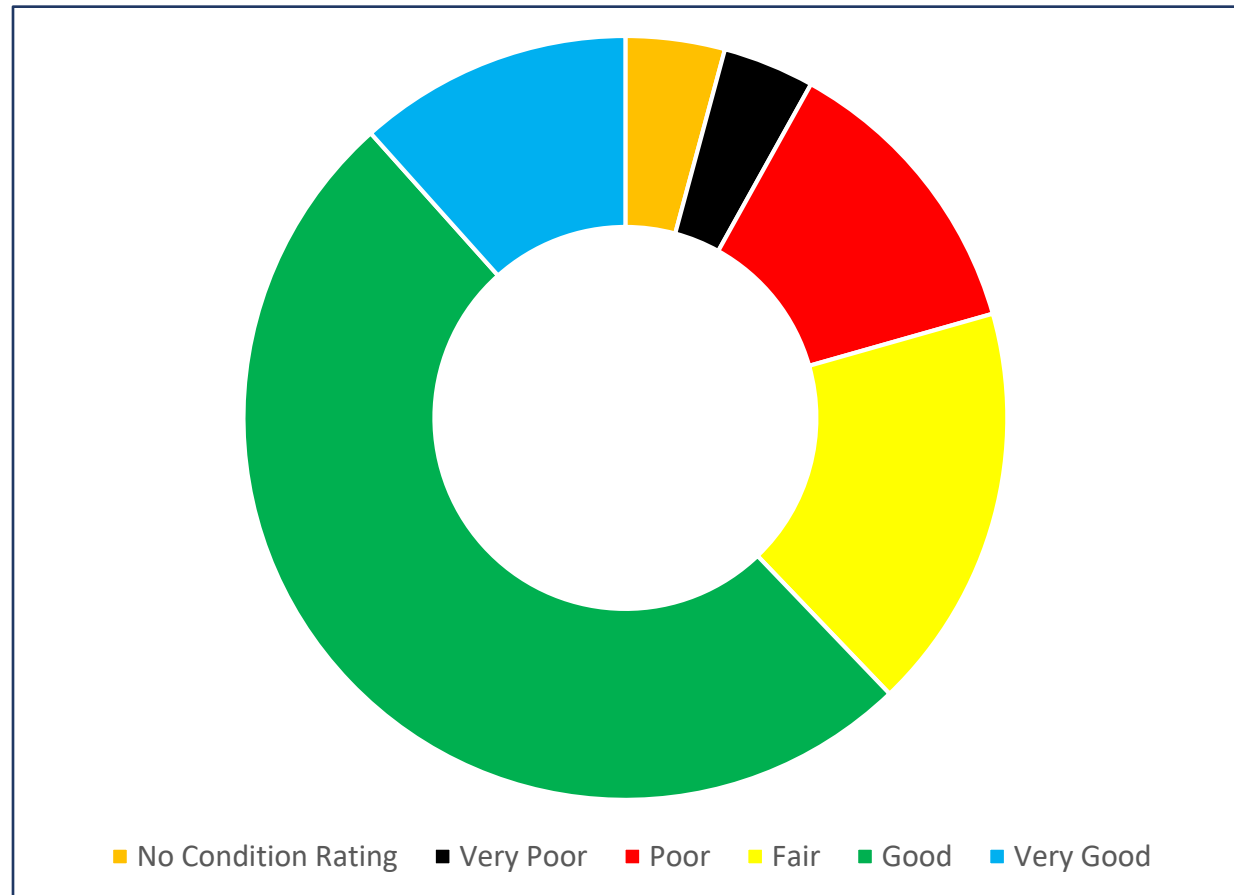
7.0 - 1 Total Asset Replacement Cost by Asset Class

## 7.4 Sum-Total: Puslinch Assets Classes Asset Rating Categories

The total asset replacement cost is illustrated in Figure 2. This pie graph showcases the financial impacts that each rating category may have on capital planning and budgeting.

UEM recognizes that assets are only scheduled for replacement/remediation when they reach a critical state based on lifecycle or on a condition assessment. A key component of this asset management plan is incorporating the lifecycle and expected replacements into the 10-year capital plan.

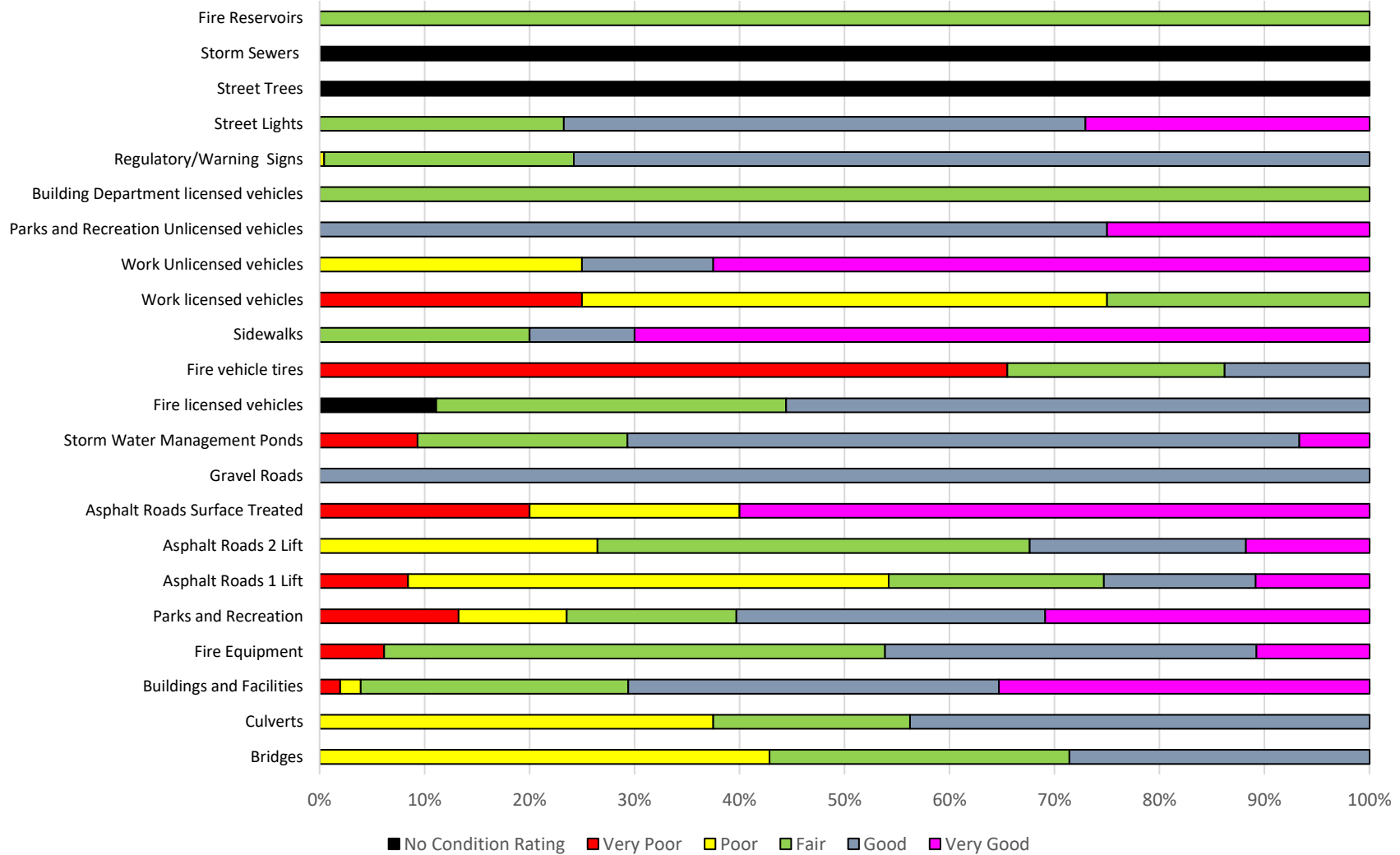
Figure 2 is intended to illustrate, at the highest level, the state of the infrastructure as it relates to the condition ratings of all asset classes.



7.0 - 2 Total Asset Replacement Cost by Rating Category

No Condition Rating	Very Poor	Poor	Fair	Good	Very Good	Total
\$1.4 Million	\$9.6 Million	\$20.3 Million	\$16.1 Million	\$20.5 Million	\$9.3 Million	\$78.9 Million

## Asset Condition Rating by Asset Class Grouping



7.0 - 4 Asset Rating Breakdown by Asset Class Grouping

## 7.6 Bridges

### Lifecycle Management Methodology:

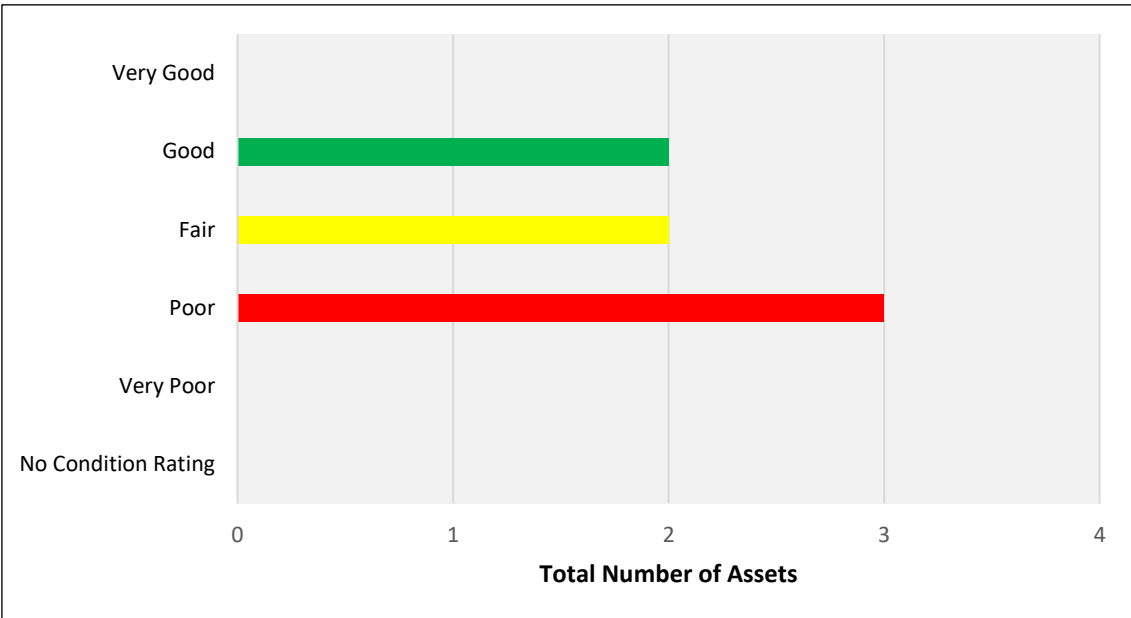
Bridge structures in Puslinch were inspected in 2017 by qualified engineers in order to describe their condition. Bridges based on their BCI on average in “fair” condition. Though the condition of some bridges are “Poor” the lifecycle management methodology (extracted from the Bridge and Culvert Inspection report) resulted in repairs for a few identified bridge structures. Thus, the BCI was not the leading factor when determining lifecycle activities for Bridges. However, the BCI does infer upon probable future expenditures should further deterioration occur on the structure.

### Replacement Cost Calculation:

Bridge Replacement cost has been sourced from the 2017 bridge and culvert inspection report. For all assets in this asset registry \$6,500 per square metre was used as a baseline replacement cost.

### Source Documentation:

2017 Bridge and Culvert Inspection Summary Report. *August 2017*



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$-	\$1,460,680.00	\$1,092,650.00	\$1,039,090.00	\$-	\$3,592,420.00

## 7.7 Culverts

### Lifecycle Management Methodology:

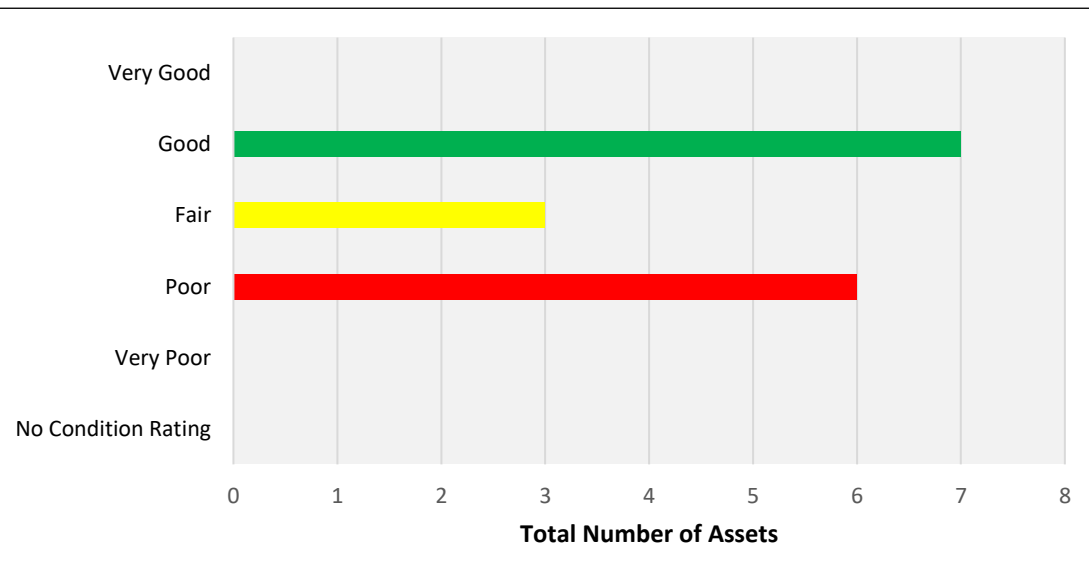
Culvert structures in Puslinch were inspected in 2017 by qualified engineers in order to describe their condition. Culverts based on their BCI are on average in “poor” condition. Though the condition of some Culverts are “Poor” the lifecycle management methodology (extracted from the Bridge and Culvert Inspection report) resulted in repairs for a few identified bridge structures. The BCI was not the leading factor when determining lifecycle activities for Culverts. However, the BCI does infer upon future expenditures should further deterioration occur on the structure.

### Replacement Cost Calculation:

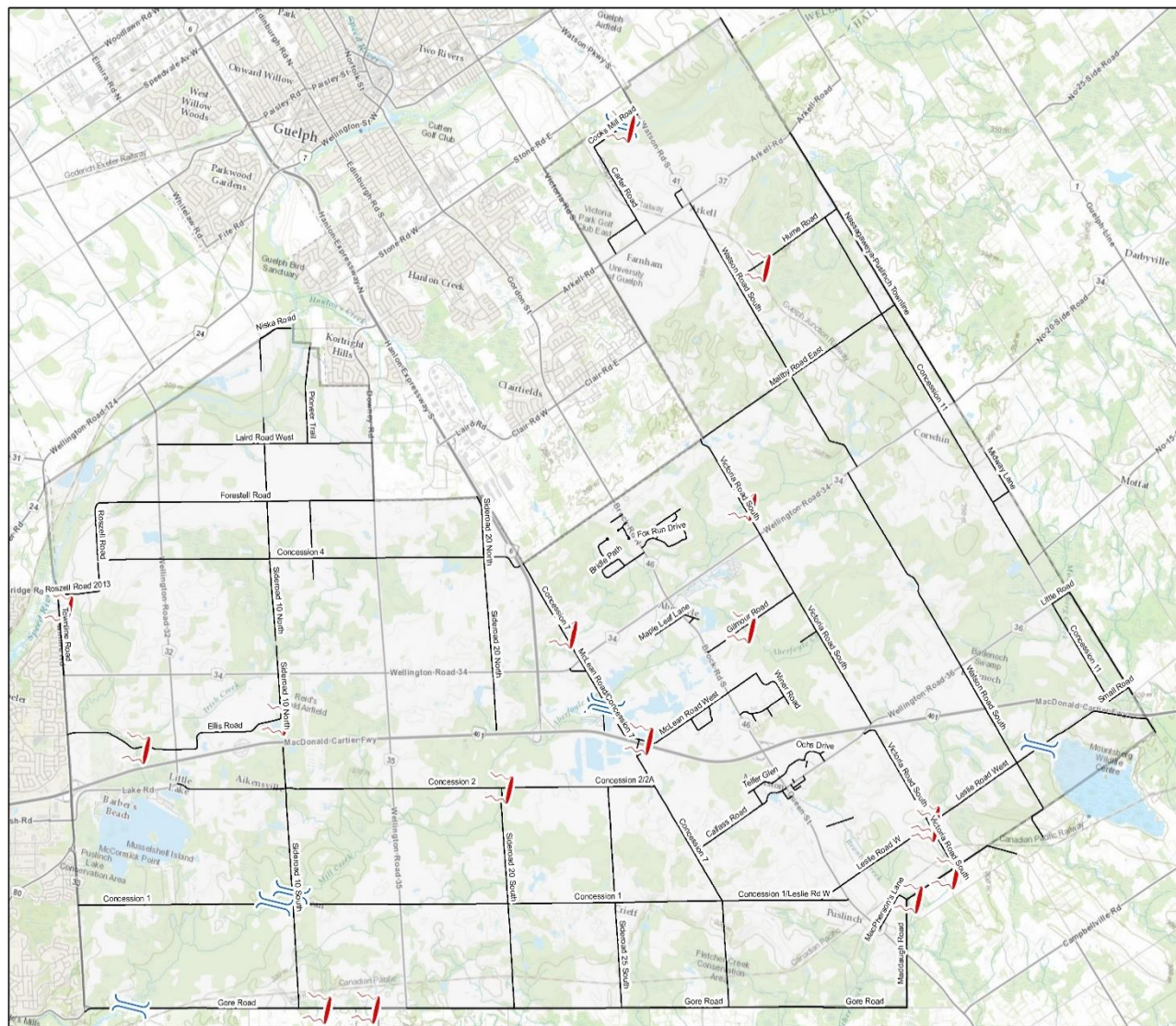
Culvert replacement costs have been sourced from the 2017 bridge and culvert inspection report. For all culvert assets in this asset registry \$4,500 per square metre was used as a baseline replacement cost.

### Source Documentation:

2017 Bridge and Culvert Inspection Summary Report. *August 2017*



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$930,150.00	\$597,195.00	\$1,358,617.50	\$-	\$147,681.00	\$3,033,643.50



## The Township of Puslinch

### Bridge and Culvert Locations

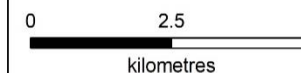
This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.



## Bridge



## Cuvert



## 7.8 Roads – 1 Lift, 2 Lift, Surface Treated and Gravel Roads

### Lifecycle Management Methodology:

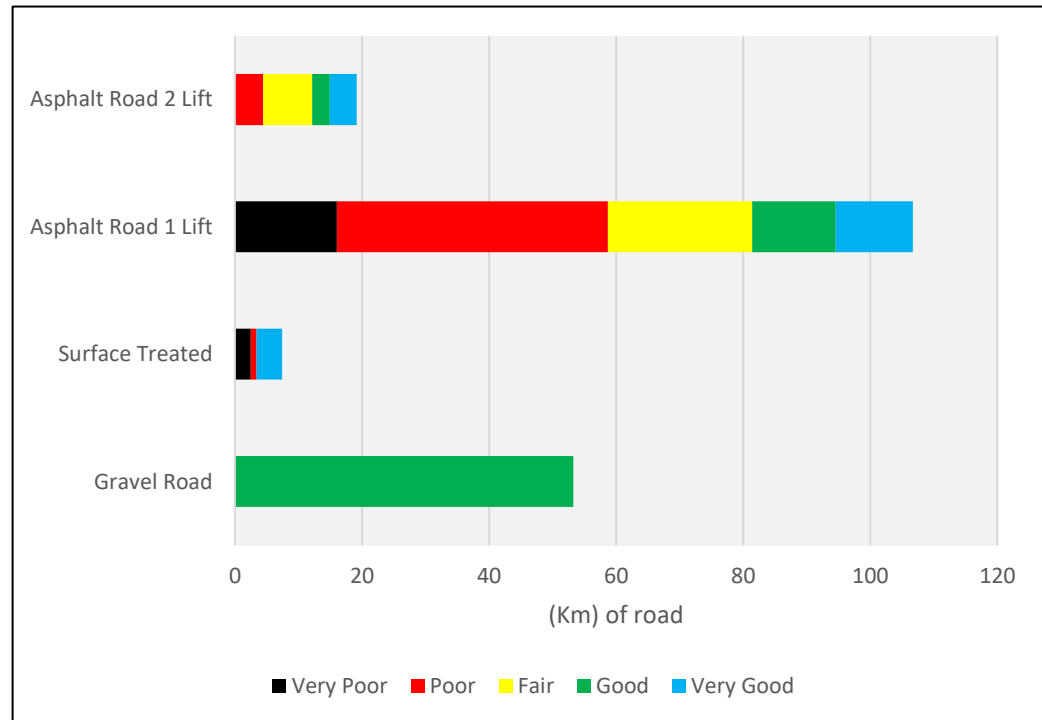
Road structures in Puslinch were inspected in 2016 by qualified engineers to describe their condition. The road network condition based on each road segment's PCI, is on average in "fair" Condition. The lifecycle management methodology for lifecycle activities is based on a threshold PCI index of 65 for class 3 roads, 60 for class 4 roads and 60 for class 5 roads.

### Replacement Cost Calculation:

Two Lift Hard Surface roads have been calculated to be replaced at a cost of \$461 per metre, One Lift at \$318 per metre, Surface Treated at \$56 per metre and gravel roads at \$177.5 per metre.

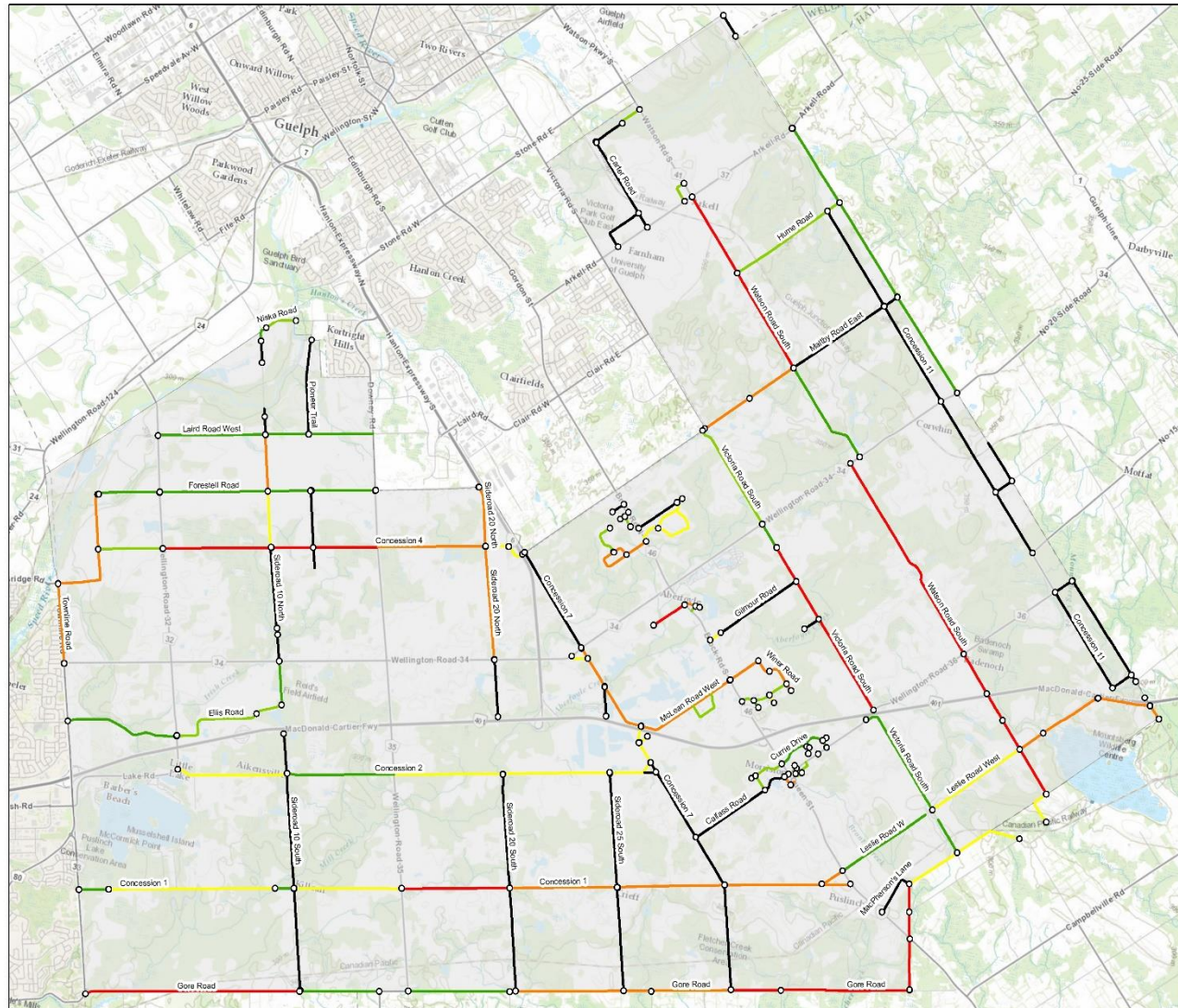
### Source Documentation

2016 Road Condition Assessment  
Tender Advertisement 2018 Road Rehabilitation and Culvert Upgrades Township of Puslinch Contract NO. PW18



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$5,117,972.43	\$16,702,106.81	\$10,921,095.22	\$15,035,730.50	\$6,177,479.14	\$53,604,382.04





## The Township of Puslinch

### Pavement Condition Index (2018)

This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.

The Pavement Condition Index is a condition rating methodology for tracking the degradation of a hard surfaced road overtime. A road segments PCI can range from 1-100 (100 being excellent condition 1 being failed surface).

It has been assumed for this Asset Management Plan that 1 Lift and 2 Lift Hard Surface Roads degrade at the same rate of 2 points per year.

Further, the remediation PCI for Class 3 Roads is 65 and Class 4/5 Roads 60.

Gravel Roads for this Asset Management Plan have been assumed to have a PCI of 90.

— Gravel Roads

— 62 - 67

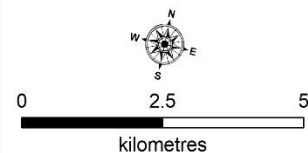
— 68 - 73

— 74 - 79

— 80 - 87

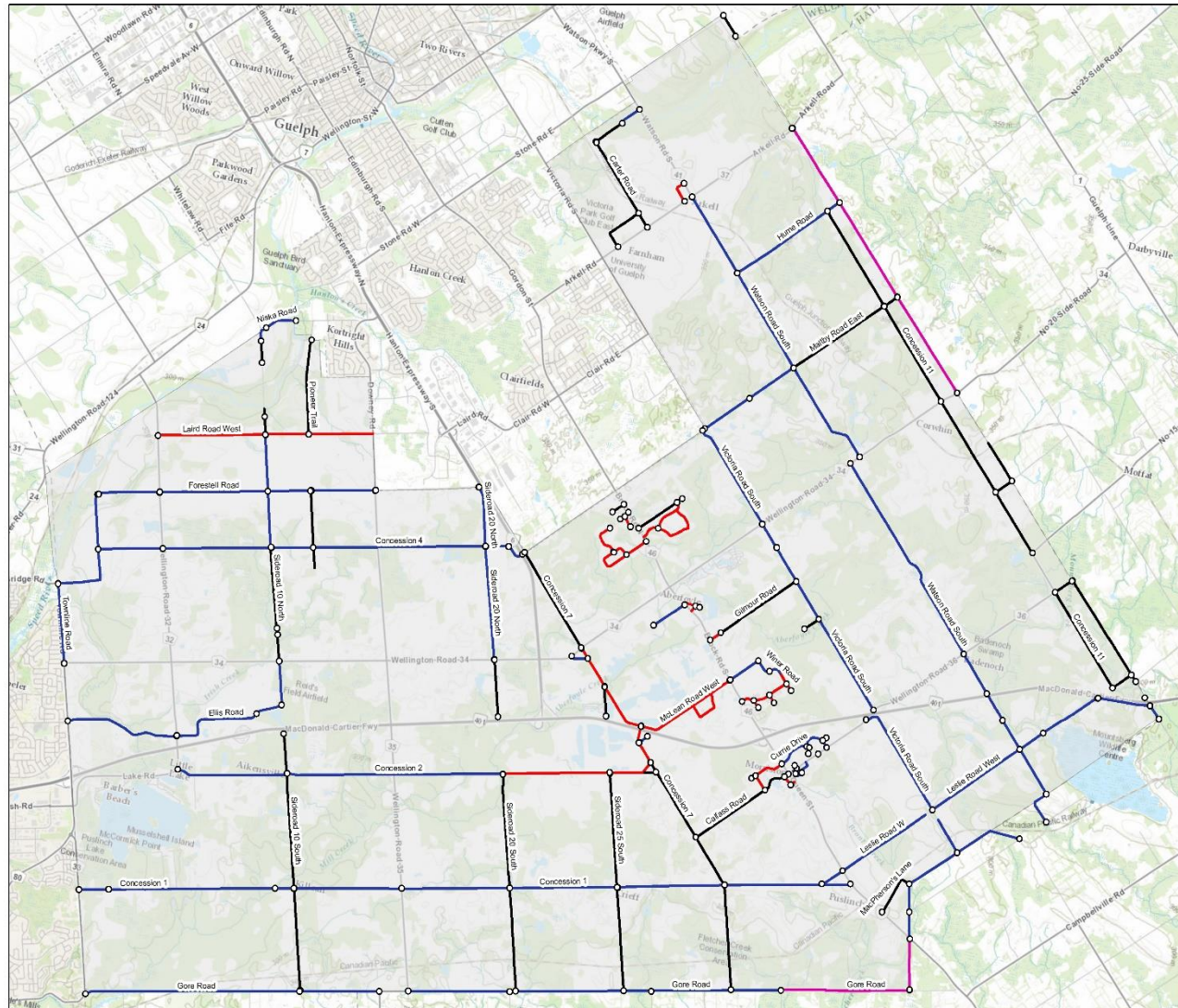
— 88 - 99

○ Road Segment Start - End



7.0 - 5 Pavement Condition Index



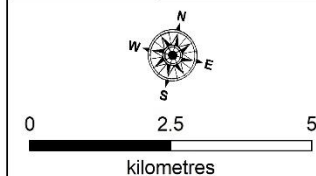


## The Township of Puslinch

### Road Surface Type

This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.

- 1 Lift
- 2 Lift
- Gravel Road
- Surface Treated
- Road Segment Start - End



7.0 - 6 Road Surface Type Map

## 7.9 Building and Facilities

### Lifecycle Management Methodology:

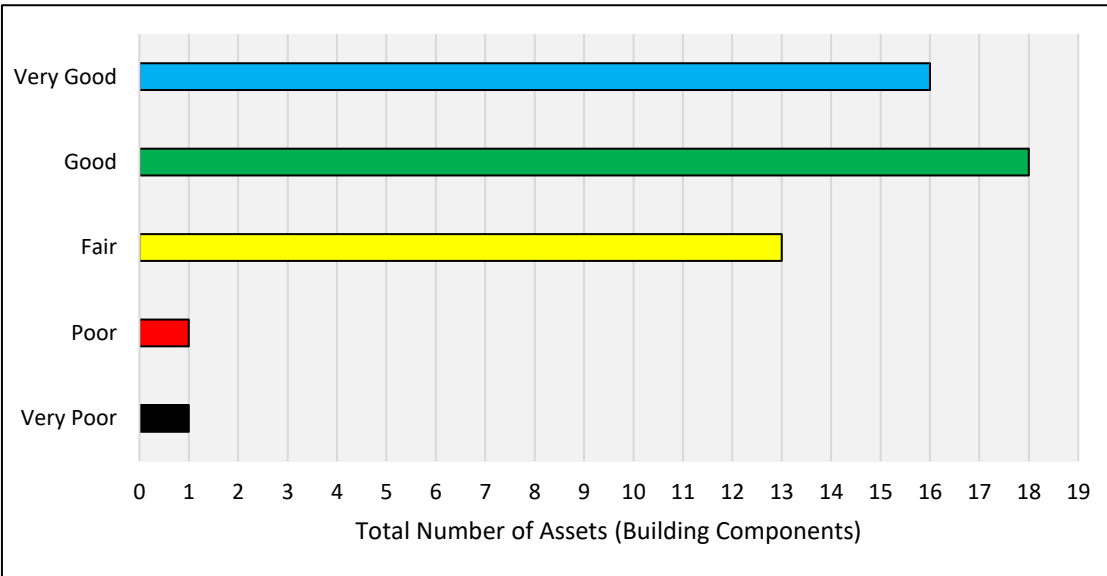
Building and Facilities were broken down into distinct components to create appropriate Lifecycle and Financial attributes. The components were as following: Structure, Roof, Walls & Windows, Interior Finishes, Mechanical, Electrical, Fire, Life-Safety, and Septic Tank. UEM identified these components and updated their condition according to available data provided from the 2014 Building Inspection Report. In the asset registry each component can be managed using a linear deterioration rate but the Townships current practice of following a remediation schedule is more appropriate and should continue.

### Replacement Cost Calculation

The replacement cost for each Building and Facilities component has been individually assessed based on the component type. The costing methodology has been extracted exclusively from RS Means Square Foot Cost Data.

### Source Documentation

Square Foot Costs with RS Means Data,



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$66,042.05	\$162,750.00	\$254,537.22	\$1,136,772.66	\$1,476,417.20	\$3,096,519.12

## 7.10 Parks & Recreation

### Lifecycle Management Methodology:

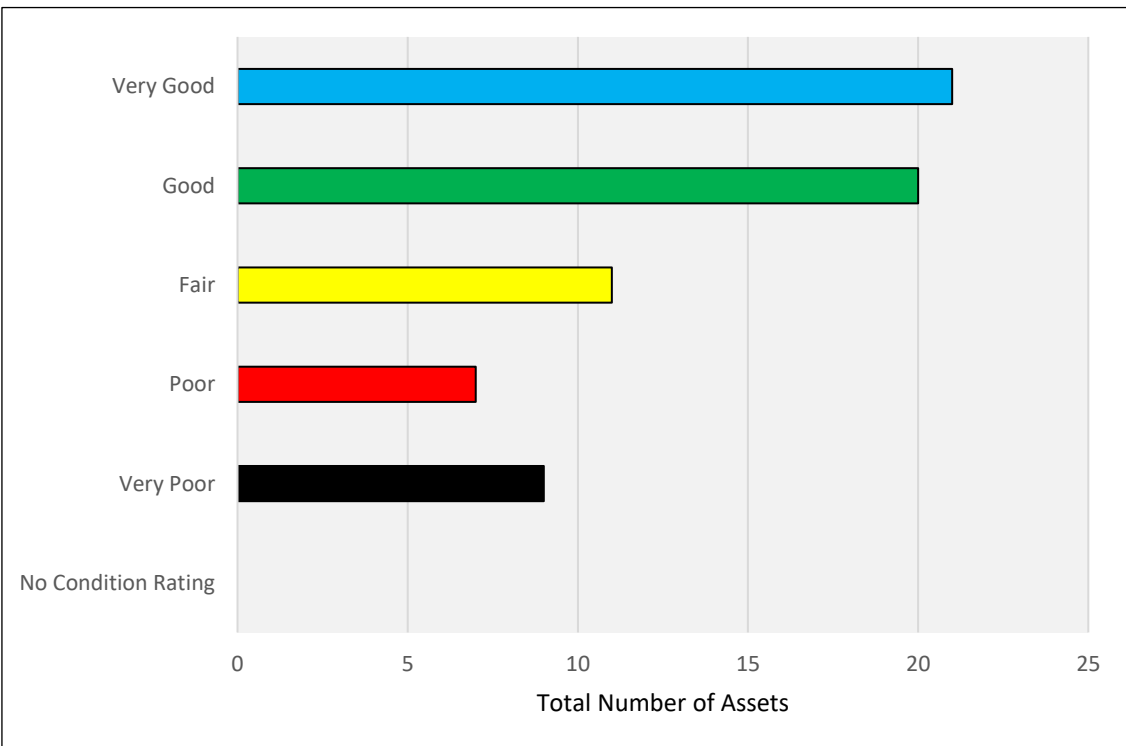
Parks & Recreation assets were individually assessed by UEM in the summer of 2018 through visual inspections. The assets were given a condition rating on a scale of 1-5 and as well an expected life based on the asset type. For all park and recreation assets a linear deterioration rate was assumed. Lifecycle (replacement and remediation) events are triggered by an asset reaching its end of expected life.

### Replacement Cost Calculation

The replacement cost for each park and recreation asset has been individually assessed based on the asset type. Through documents provided by the Township and internal/external research each asset was provided a replacement cost. Further detail in regard to the specific cost calculations for each asset can be reference in the asset registry.

### Source Documentation

Aberfoyle Ball Diamond Lighting Upgrades Contract.  
Various Tender Documents provided by Township.



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$ 228,053.00	\$ 136,273.00	\$ 154,875.00	\$ 243,506.50	\$ 1,098,711.00	\$ 1,861,418.50

## 7.11 Sidewalks

### Lifecycle Management Methodology:

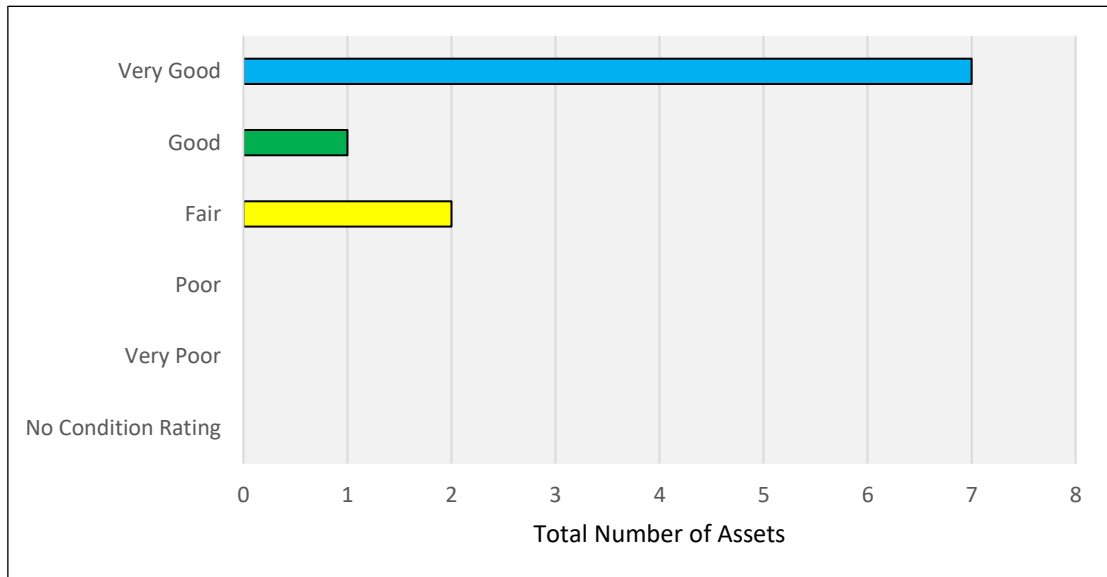
Sidewalk assets were individually assessed by UEM in the summer of 2018 through visual inspections. The assets were given a condition rating on a scale of 1-5 and as well an expected life based on the asset type. For all sidewalks a linear deterioration rate was assumed. Lifecycle (replacement and remediation) events are triggered by an asset reaching it's expected life or failure to adhere to O. Reg. 239/02: Minimum Maintenance Standard for Municipal Highways.

### Replacement Cost Calculation:

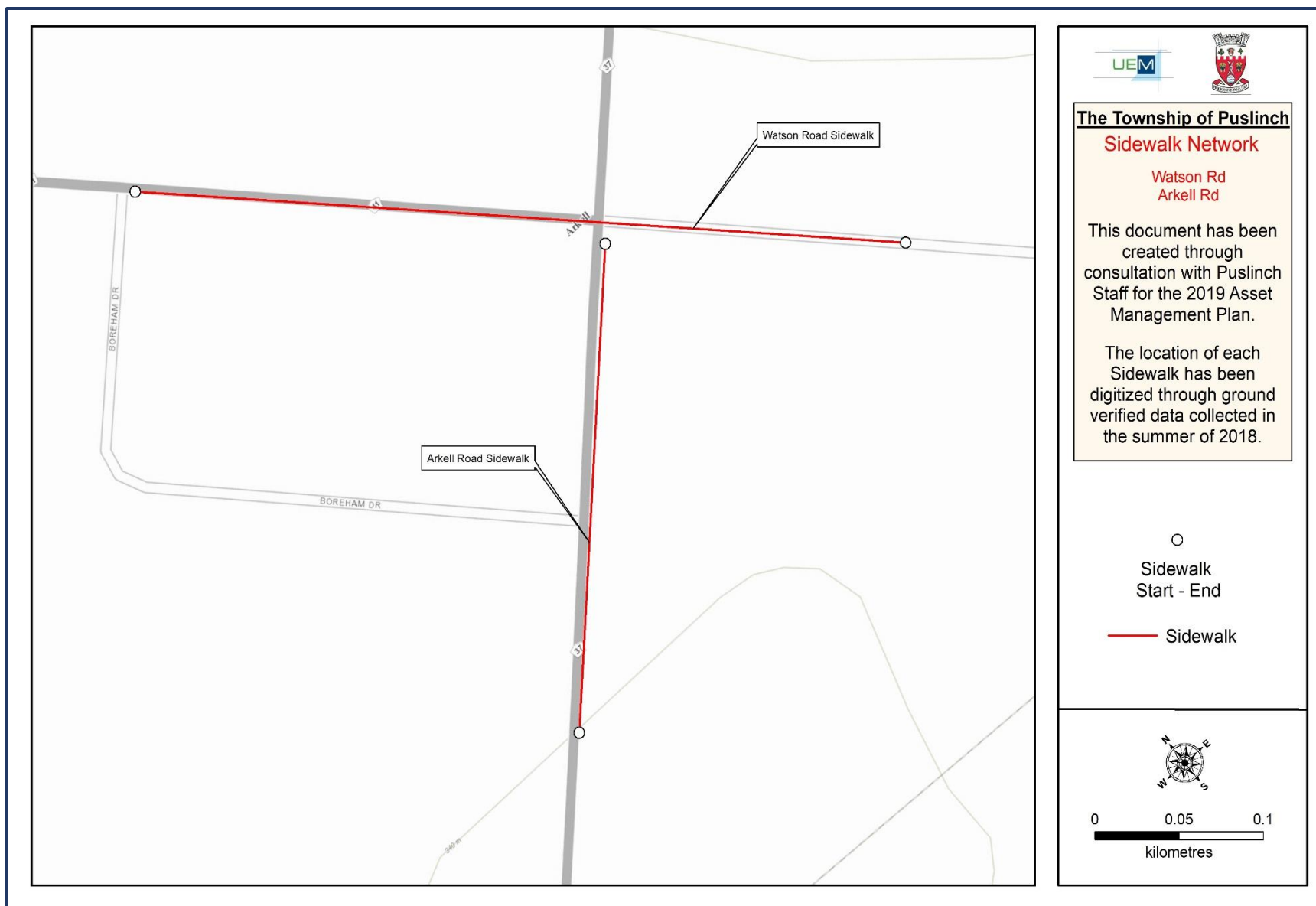
The replacement cost for sidewalks has been estimated at 143\$ per linear metre.

### Source Documentation

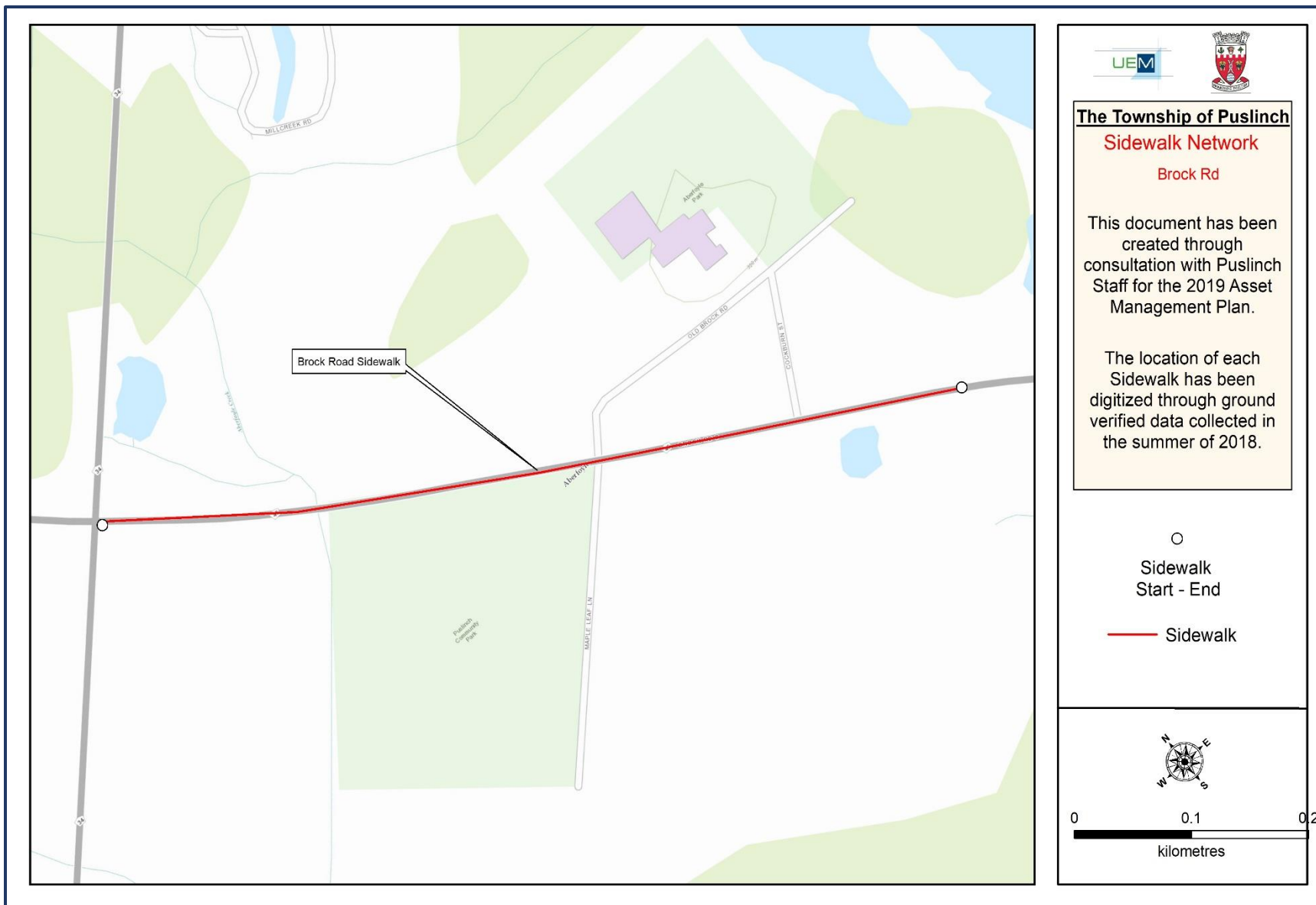
Professional Consultation with industry experts.



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
		\$48,620.00	\$131,131.00	\$365,508.00	\$545,259.00

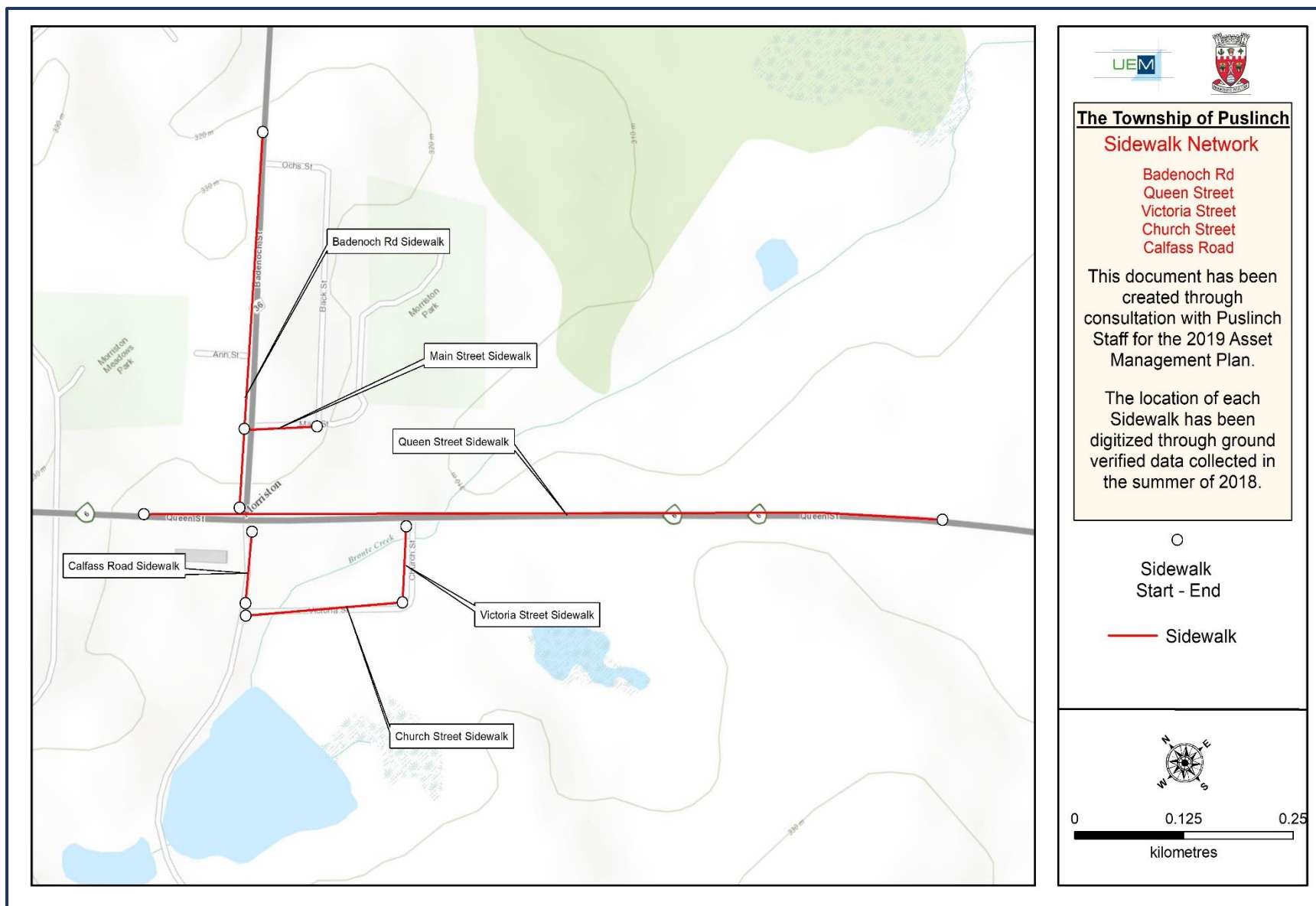


7.0 - 7 Watson Road, Arkell Road



7.0 - 8 Brock Road





7.0 - 9 Badenoch Road, Queen Street, Victoria Street, Church Street, Calf

## 7.12 Fire Reservoirs

### Lifecycle Management Methodology:

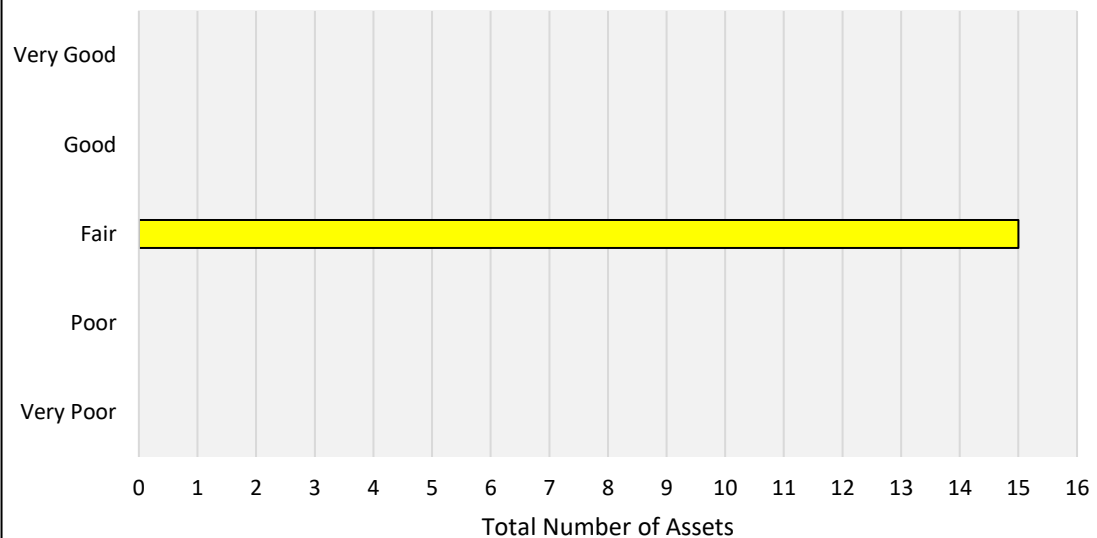
Fire Reservoirs were identified in the asset registry using the defined lifecycle attributes provided by UEM. Each Fire Reservoir was given a condition rating based on the proximity to its defined end of service life. The physical condition of the reservoir was not considered for condition assessment only the percentage of life remaining. The end of service life for Fire Reservoirs are assessed based on the condition data provided by individual inspections of each fire reservoir.

### Replacement Cost Calculation:

Each Fire Reservoir Asset has been loaded into the Asset Registry with a replacement cost of \$50,000. This figure has been derived through UEM internal consultation.

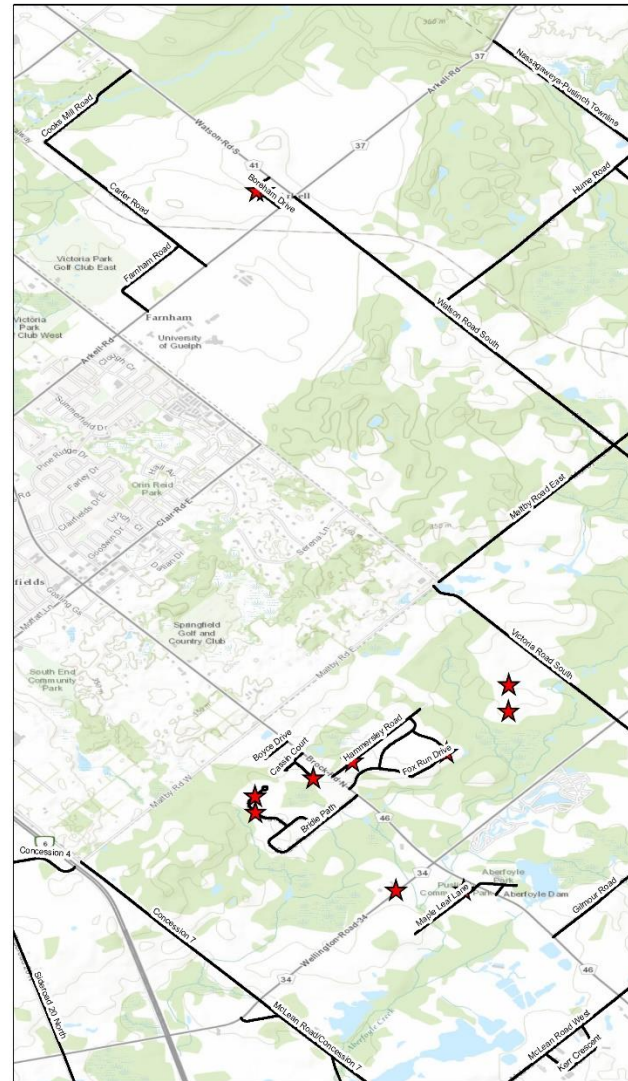
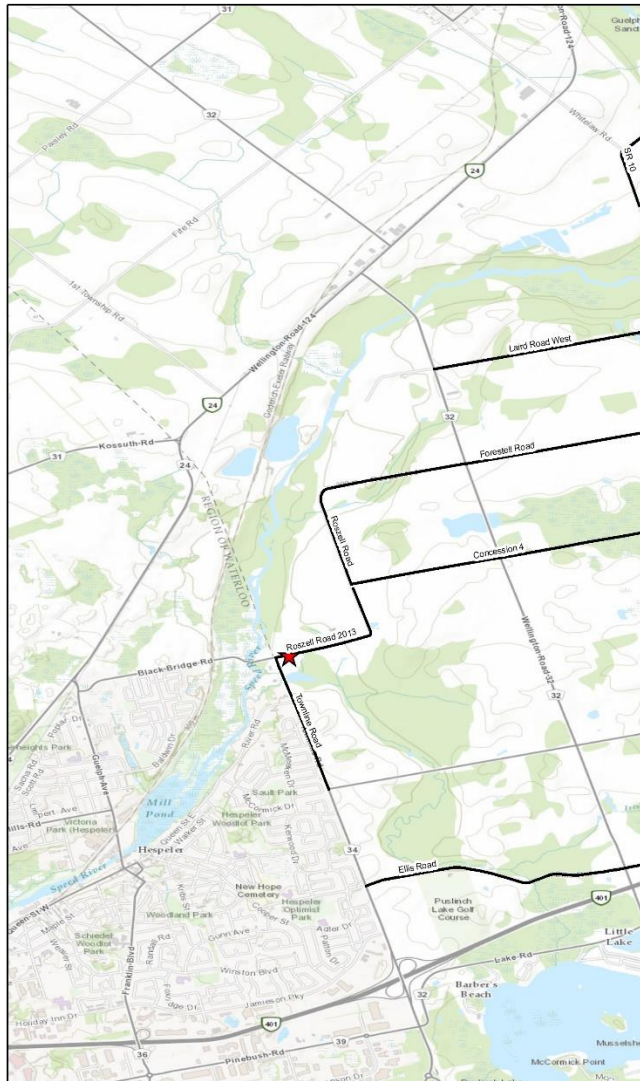
### Source Documentation

UEM Professional Recommendation



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
		\$ 750,000.00			\$ 750,000.00



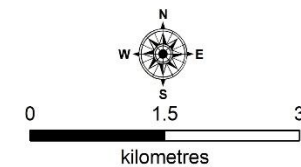


**The Township of Puslinch**  
**Fire Reservoir Locations**

This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.



Puslinch Fire Reservoirs



7.0 - 10 Fire Reservoir Locations

### 7.13 Fire Vehicle Assets - Fire Licensed Vehicles & Tires

#### Lifecycle Management Methodology:

Fire Vehicle Assets were identified in the asset registry using the defined lifecycle attributes provided in the 2017 Fleet Management Report. Each Fire Vehicle asset was given a condition rating based on the proximity to its defined end of service level. The physical condition of the vehicle was considered for condition classification when available, however, the majority of fire vehicle assets condition ratings were defined based off its proximity to its expected end of service life which were formed by the Township's accepted Fleet Management Policies.

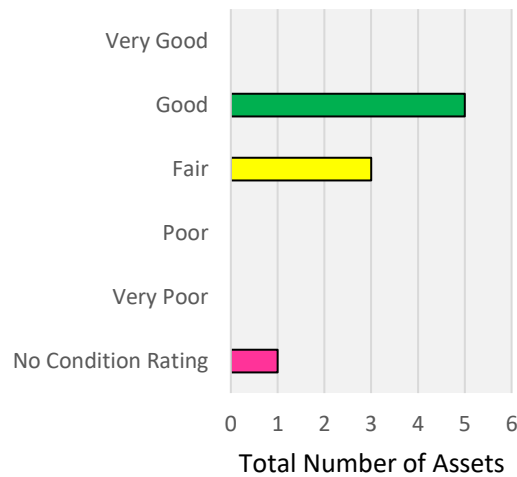
#### Replacement Cost Calculation:

Each Fire Vehicle asset has been individually valued based on the recommendations of 2017 Fleet Management Report and staff. For all vehicle assets in the asset registry the replacement cost should be loaded as a new vehicle replacement cost.

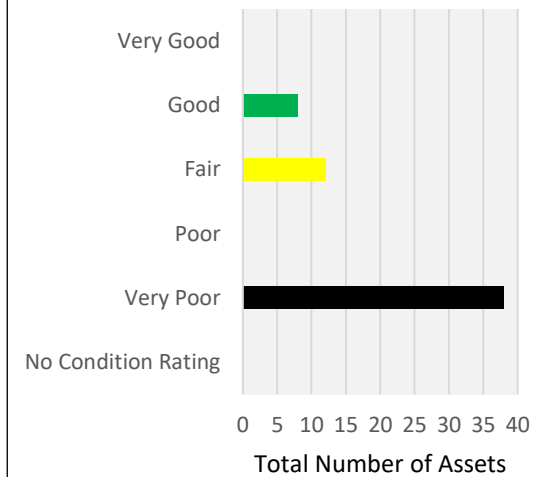
#### Source Documentation

Provided datasets by Township staff

#### Fire Licensed Vehicles



#### Fire Vehicles Tires



#### Total Replacement Cost

Very Poor	Poor	Fair	Good	Very Good	Total
\$22,604.00	\$-	\$1,497,066.00	\$1,687,426.00	\$-	\$3,207,096.00

## 7.14 Storm Water Management Ponds

### Lifecycle Management Methodology:

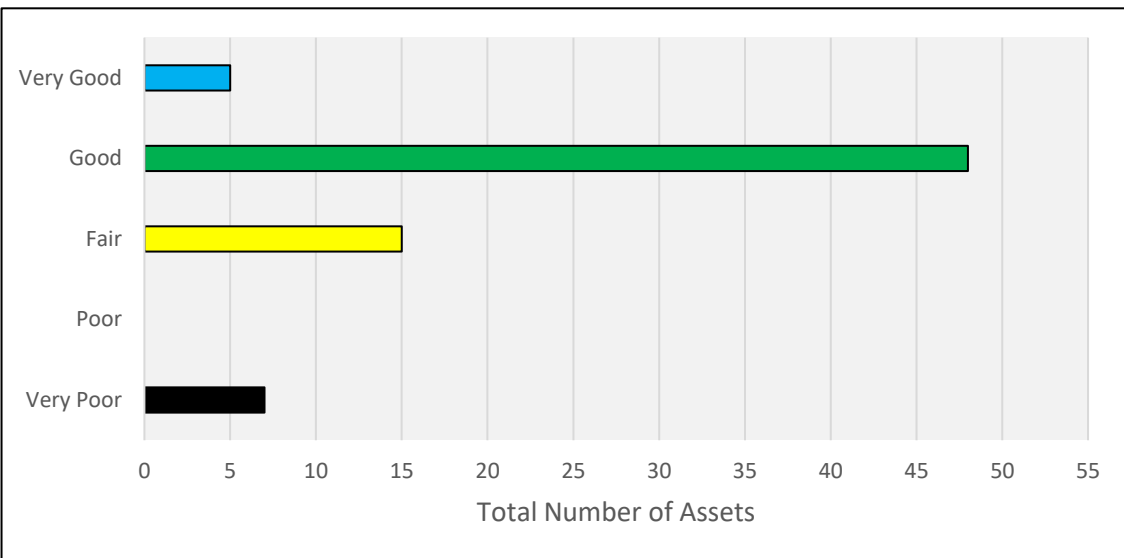
Storm Water Management Ponds were identified in the asset registry with a linear deterioration rate. However, in 2017 the Township acquired the services of a consultant to assess the state of repair of all storm water management ponds. This assessment provided a remediation schedule and comment on the general state of repair of each storm water management pond.

### Replacement Cost Calculation:

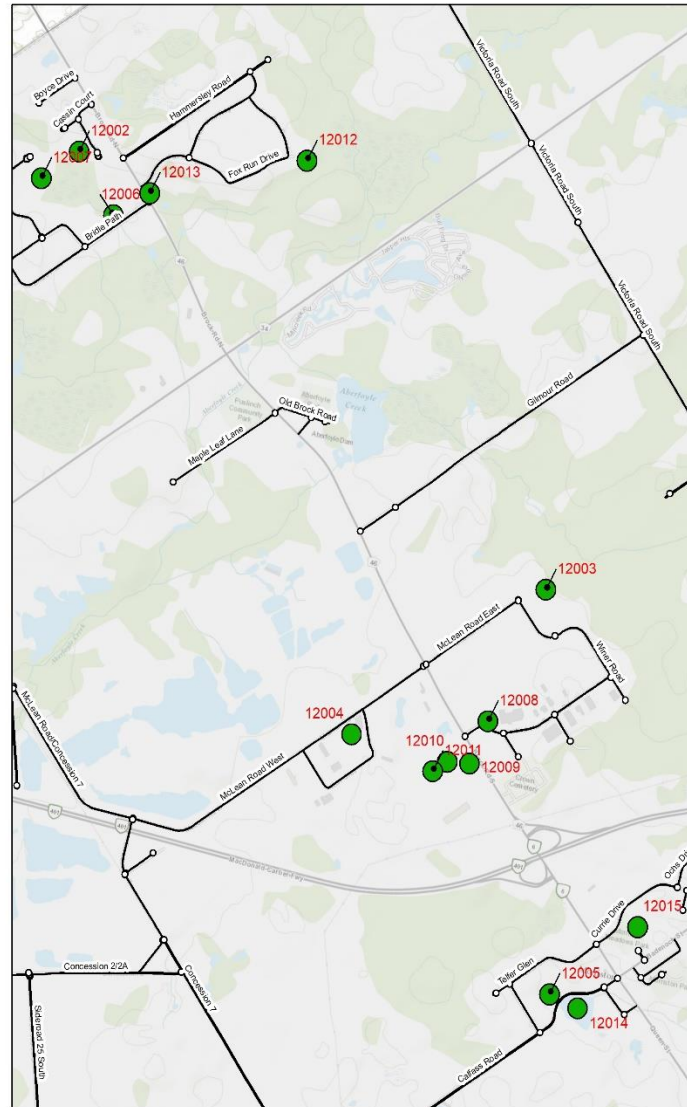
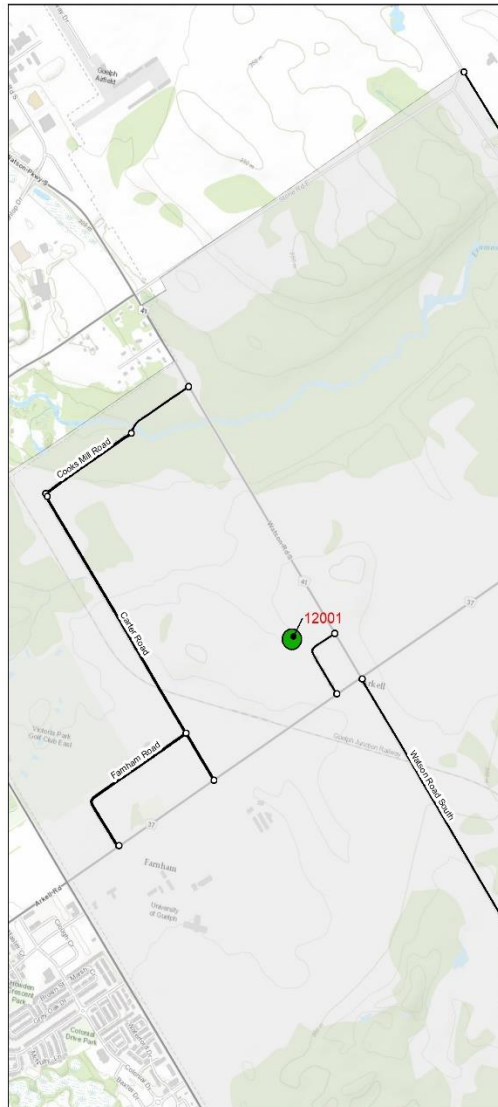
The replacement cost of each storm water management pond component has been individually calculated. The Tail wall has been calculated at \$2000, Headwall \$2000, Outlet Device \$2000, and the pond enclosure is the acquisition cost minus the tail wall, headwall and outlet device.



### Source Documentation

Provided datasets by Township staff.



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$565,487.68	\$-	\$687,860.60	\$1,490,273.45	\$146,453.92	\$2,890,075.65







### The Township of Puslinch


#### Storm Water Management Pond Locations

This document has been created through the consultation with Puslinch Staff for the 2019 Asset Management Plan.


Each Storm Water Management Pond location has been digitized using reference locations provided by the 2017 Storm Water Management Pond Inspection Report and through consultation with Puslinch




Storm Water Management Ponds



Road Segment Start - End



0

1.5

kilometres

7.0 - 11 Storm Water Management Pond Locations

## 7.15 Parks and Building Department and Equipment – Licensed & Unlicensed Vehicles

### Lifecycle Management Methodology:

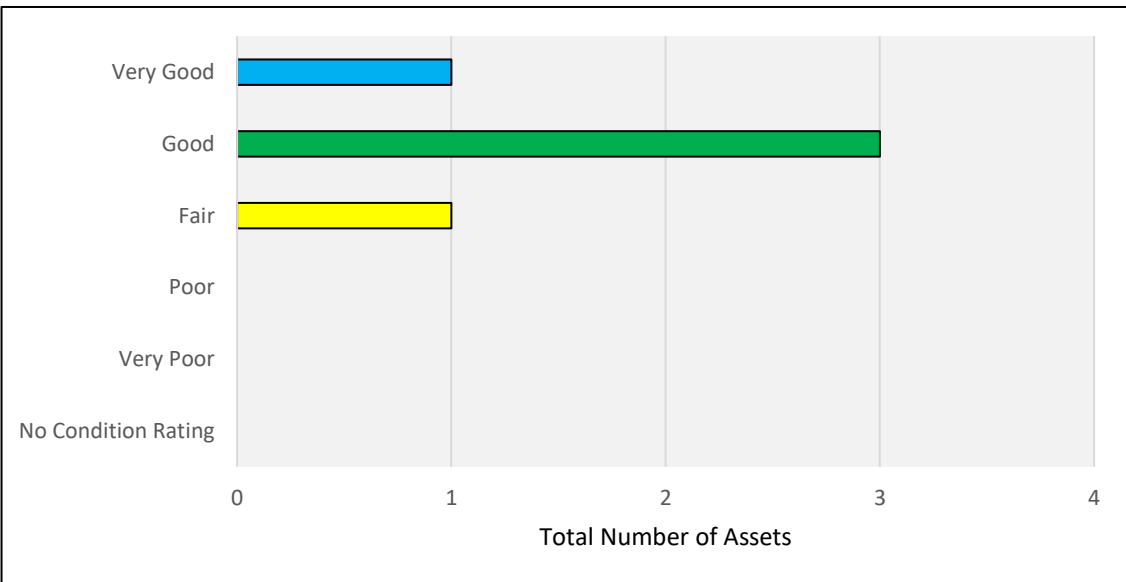
Parks and Building Department Assets were identified in the asset registry using the defined lifecycle attributes provided in the 2017 Fleet Management Report. The physical condition of the vehicle was considered for condition assessment if it was available in the form of vehicle kilometers or the proximity to its end of expected life based on Township Fleet Management Policies. The same lifecycle management methodology is consistent for all identified work vehicle equipment.

### Replacement Cost Calculation:

Each Parks and Building Department asset has been individually valued based on the recommendations in the 2017 fleet management report and staff. For all vehicle assets in the asset registry the replacement cost were loaded as a new vehicle replacement cost.

### Source Documentation

Provided datasets by Township staff



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$-	\$-	\$23,000.00	\$43,000.00	\$80,000.00	\$146,000.00



## 7.16 Works Department – Licensed & Unlicensed Vehicles

### Lifecycle Management Methodology:

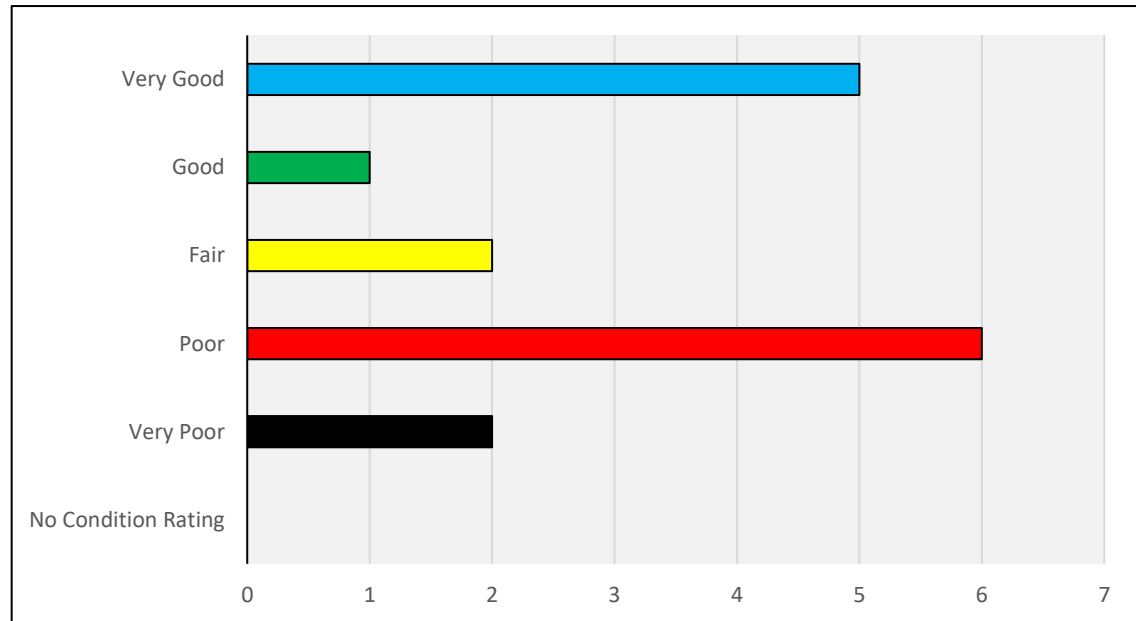
Work Vehicle Assets were identified in the asset registry using the defined lifecycle attributes provided in the 2017 Fleet Management Report. The physical condition of the vehicle was considered for condition assessment if it was available in the form of vehicle kilometers or the proximity to its end of expected life based on Township Fleet Management Policies. The same lifecycle management methodology is consistent for all identified work vehicle equipment.

### Replacement Cost Calculation:

Each Work Vehicle asset has been individually valued based on the recommendations in the 2017 fleet management report and staff. For all vehicle assets in the asset registry the replacement cost were loaded as a new vehicle replacement cost.

### Source Documentation

Provided datasets by Township staff



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$290,000.00	\$1,300,000.00	\$92,000.00	\$40,000.00	\$374,000.00	\$2,096,000.00

## 7.17 Storm Sewers

### Lifecycle Management Methodology:

Storm Sewer assets were identified in the asset registry using a linear deterioration rate for each individual asset component. There is no available condition data for storm sewers. For that reason, no condition data was entered into the asset registry

### Geographic Information System

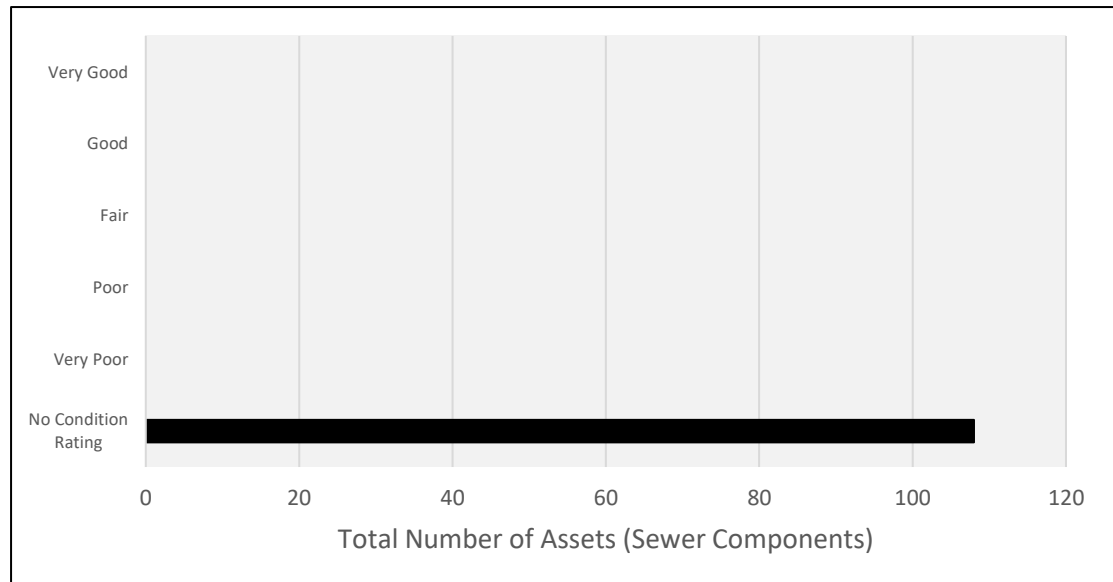
Each Storm Sewer Inlet, and Storm Sewer line has been generated through staff consultation. Field inspections of the spatial referencing has not been completed.

### Replacement Cost Calculation:

Replacement cost for the whole storm sewer system has been calculated based on unit costs of the Outlets at \$5,000 and catch basins at \$ 3,724. The whole storm sewer replacement cost is a function of the outlet catch basins and linear storm mains at a replacement cost of 63\$ per m. More detail into the technicalities can be sourced in the asset registry.

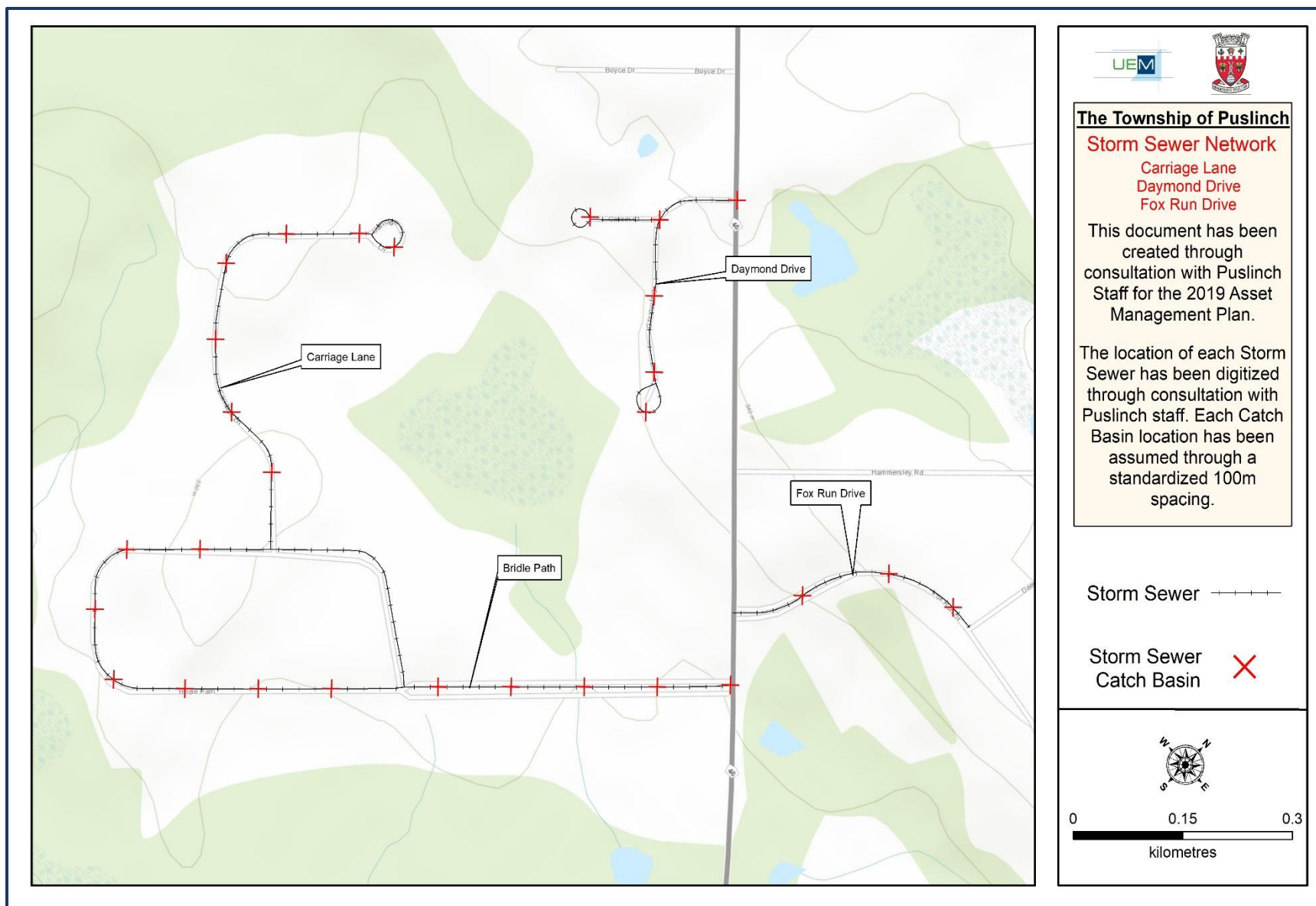
### Source Documentation

Town of Friday Harbor, Storm Water Management Plan 2005



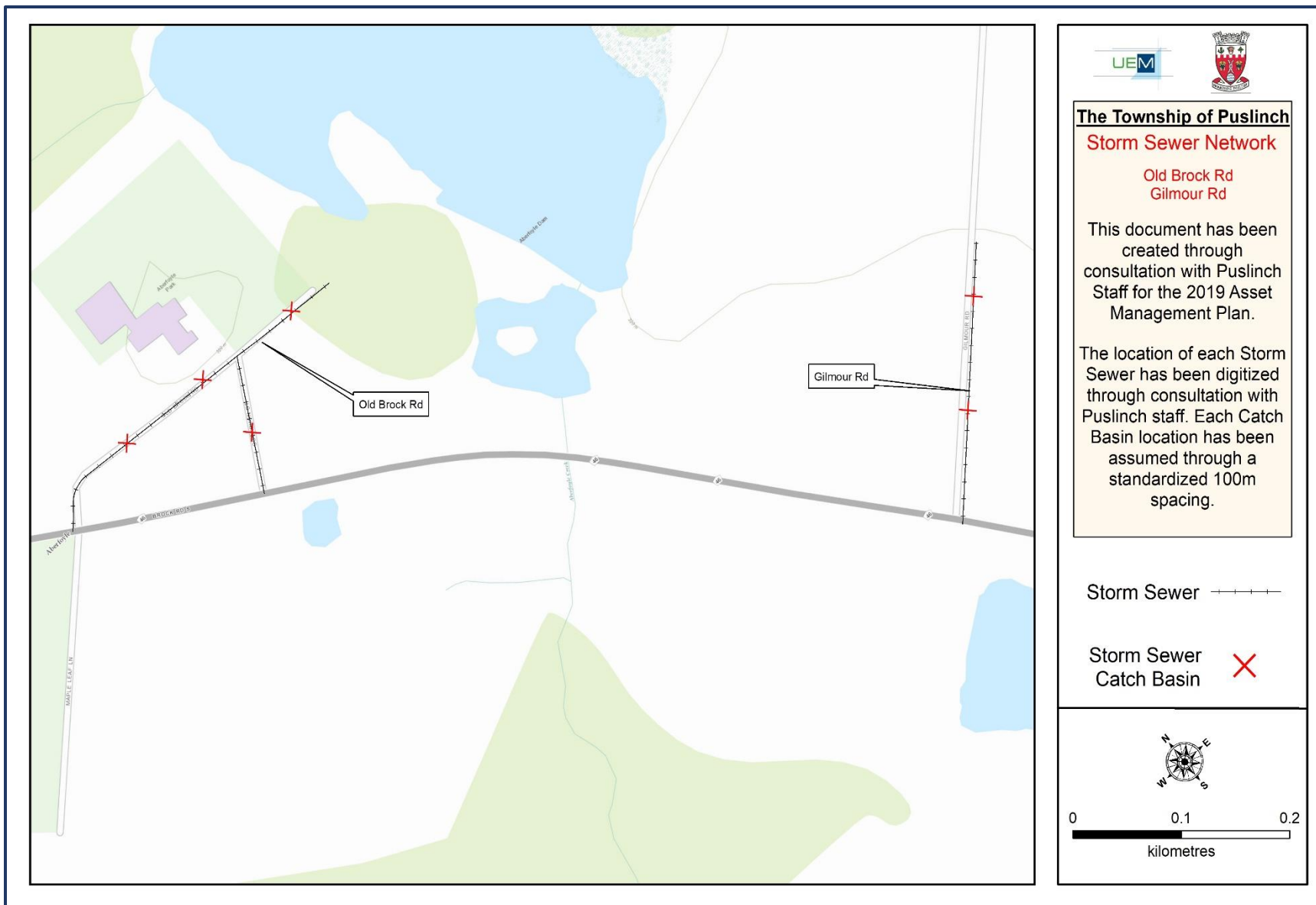
### Total Replacement Cost

\$1,360,711.11



7.0 - 11 Storm Sewer Network: Carriage Lane, Daymond Drive, Fox Run Drive





7.0 - 12 Storm Sewer Network: Old Brock Rd, Gilmour Rd



## 7.18 Street Lights

### Lifecycle Management Methodology:

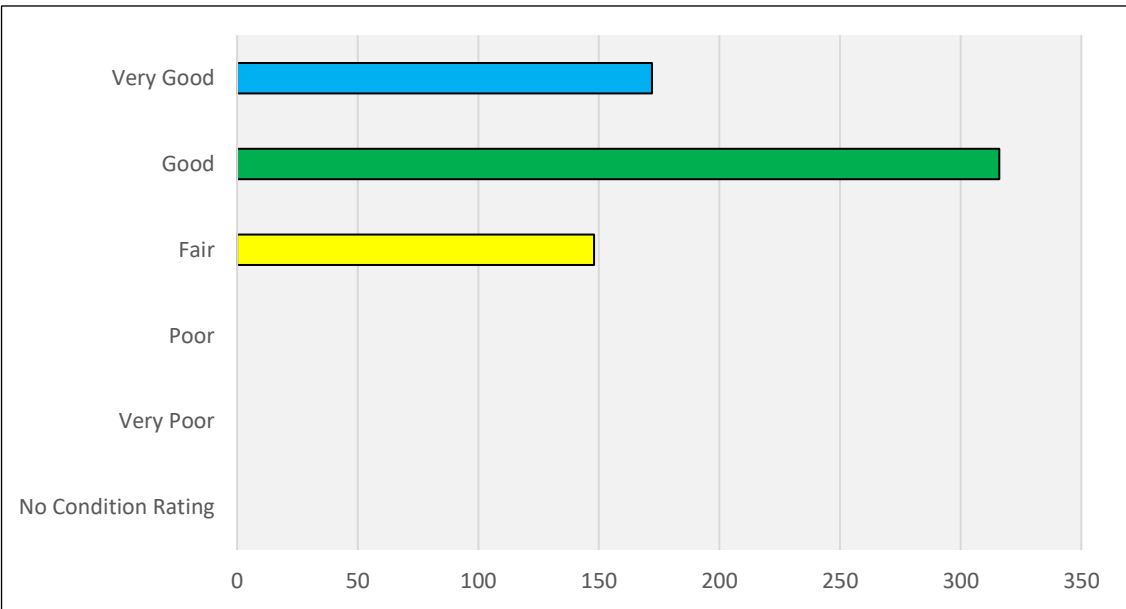
Street Light assets were identified in the asset registry using a linear deterioration rate for each individual asset component. Condition ratings were provided for each pole based on a random sample assessment done by UEM during the summer of 2018.

### Replacement Cost Calculation:

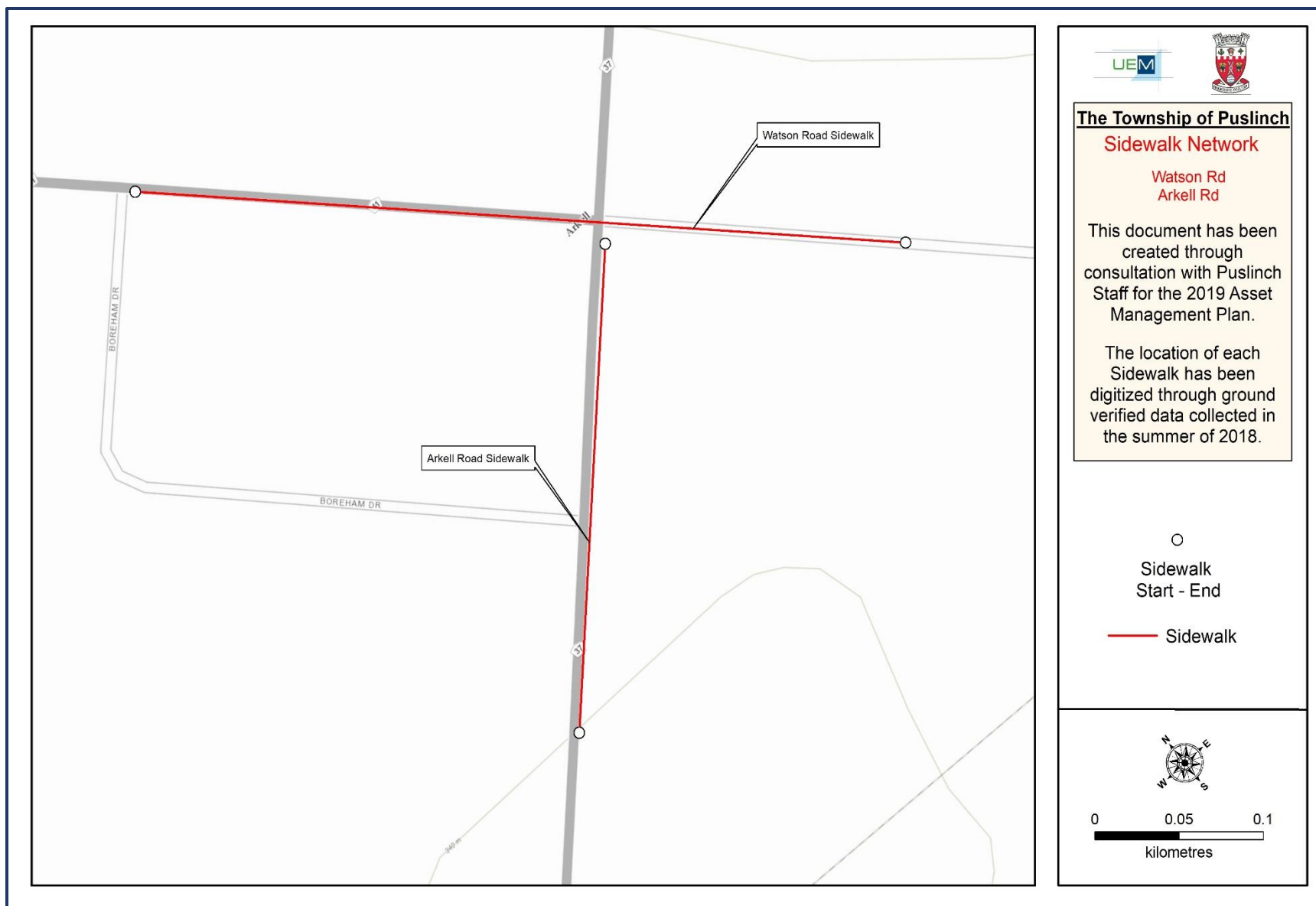
Each Street Light has been broken down into two parts: Fixture and Pole. The cost for each fixture is consistent across all pole types at \$300; the pole cost varies from \$1,300 to \$4000 depending on the type.

### Source Documentation

UEM professional recommendation



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$-	\$-	\$181,325.39	\$381,414.50	\$216,910.74	\$779,650.62



7.0 - 14 Streetlight locations: Arkell







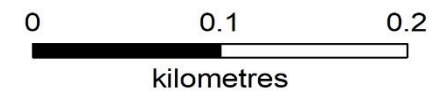
## The Township of Puslinch

### Street Light Locations: Little Lake

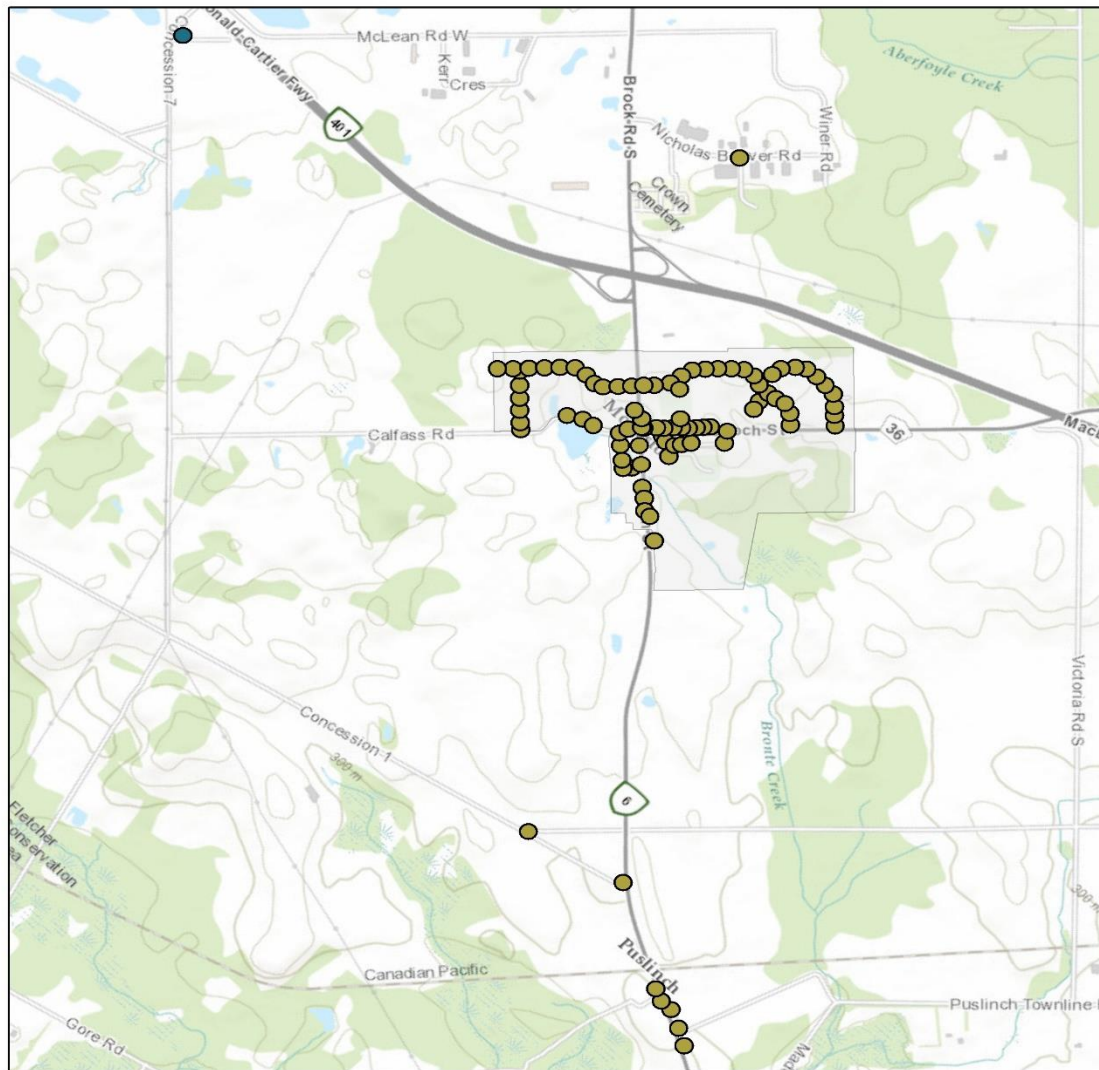
This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.

The location of each streetlight pole and or fixture has been identified with reference to the Investment Grade Audit for the Township of Puslinch LED Streetlighting Conversion document.

-  Cobrahead
-  Decorative
-  Floodlight
-  Sentinel
-  Wallpack
-  Urban Centre Boundary



7.0 - 15 Streetlight Locations: Little Lake



## The Township of Puslinch

### Street Light Locations: Morrison

This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.

The location of each streetlight pole and or fixture has been identified with reference to the Investment Grade Audit for the Township of Puslinch LED Streetlighting Conversion document.

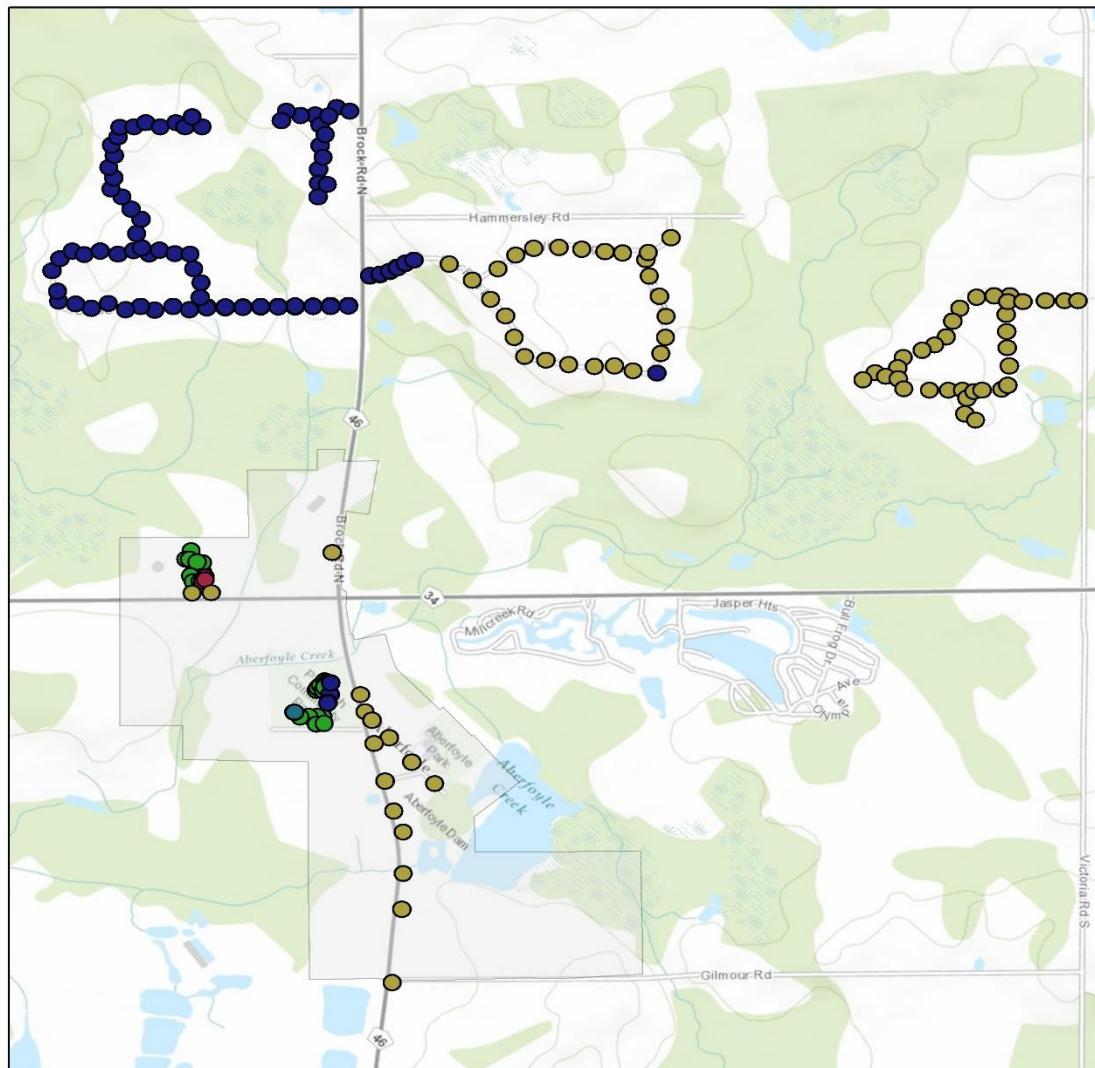
- Cobrahead
- Decorative
- Floodlight
- Sentinel
- Wallpack
- Urban Centre Boundary



0 0.75 1.5  
kilometres

7.0 - 16 Streetlight Locations: Morrison





## The Township of Puslinch

### Street Light Locations: Aberfoyle

This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.

The location of each streetlight pole and or fixture has been identified with reference to the Investment Grade Audit for the Township of Puslinch LED Streetlighting Conversion document.

- Cobrahead
- Decorative
- Floodlight
- Sentinel
- Wallpack
- Urban Centre Boundary



7.0 - 17 Streetlight Locations: Aberfoyle

## 7.19 Regulatory & Warnings Signs

### Lifecycle Management Methodology:

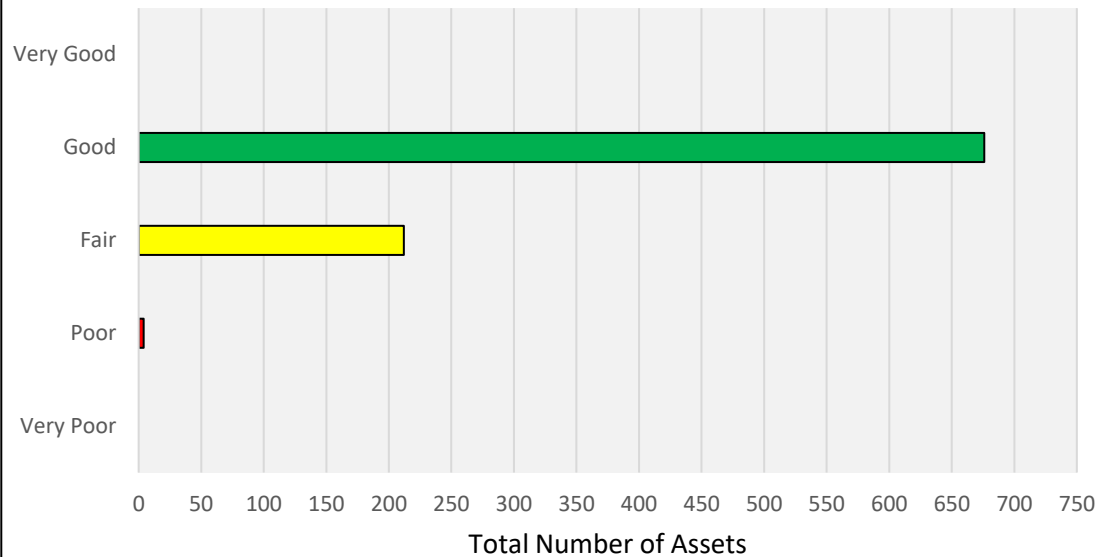
Regulatory & Warnings Sign assets were identified in the asset registry using a linear deterioration rate for each individual asset component. Condition ratings have been provided for each sign based on the last condition assessment of each sign.

### Replacement Cost Calculation:

Each Regulatory or Warning Sign has been valued at 150\$ per sign based on the recommendations of staff.

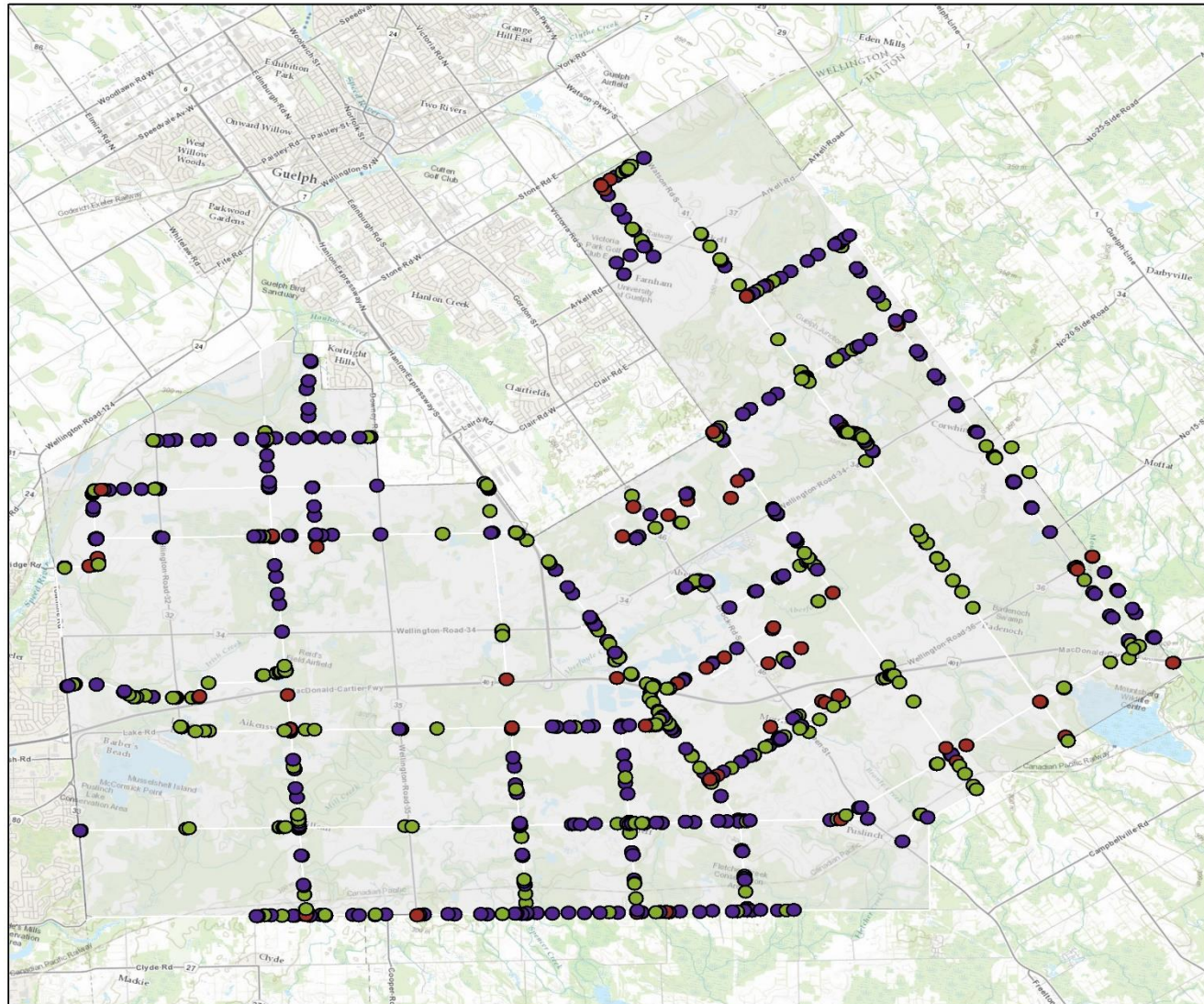
### Source Documentation

Provided datasets by Township staff



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$-	\$600.00	\$31,800.00	\$101,400.00	\$-	\$133,800.00








**The Township of Puslinch**

**Regulatory/Warning Sign Locations**

This document has been created through consultation with Puslinch Staff for the 2019 Asset Management Plan.

**Classification**

- Priority
- Regulatory
- Warning



0      1.75      3.5

**kilometres**

7.0 - 18 Regulatory/ Warnings Sign Locations

## 7.20 Fire Equipment

### Lifecycle Management Methodology:

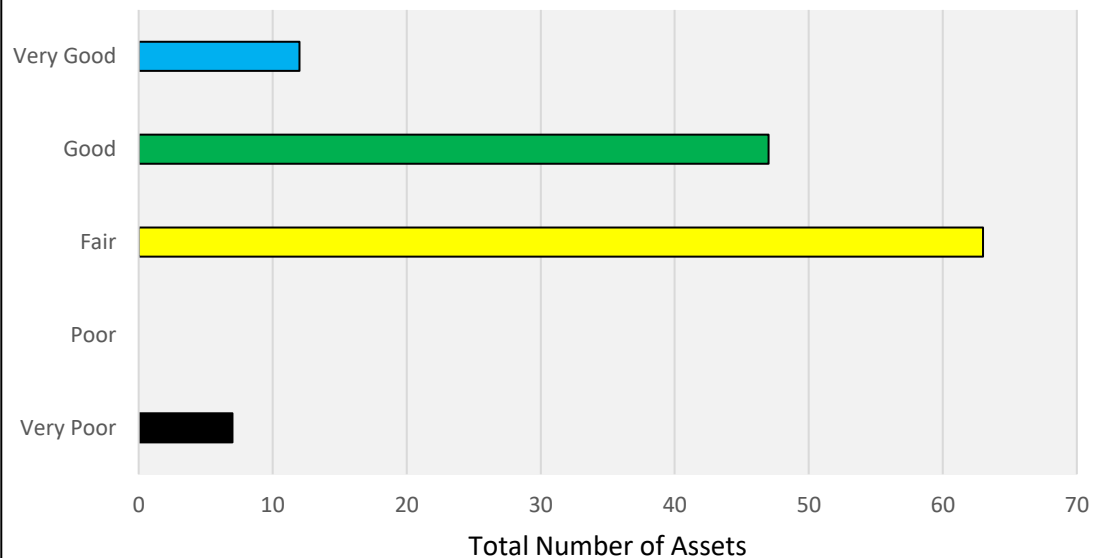
Fire Equipment Assets were identified in the asset registry using the defined lifecycle attributes provided by Puslinch Township staff. Each fire equipment asset was given a condition rating based on the proximity to its defined end of service level or a pre-defined condition rating provided by the Township.

### Replacement Cost Calculation:

Replacement cost calculations for fire equipment assets have been sourced from Puslinch Township staff. Each asset has been individually assessed through tender documents in order to ensure reliable cost information.

### Source Documentation

Provided Datasets from Township.



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$76,500.00	\$-	\$156,800.00	\$361,350.00	\$69,990.00	\$664,640.00

## 7.21 Street Trees

### Lifecycle Management Methodology:

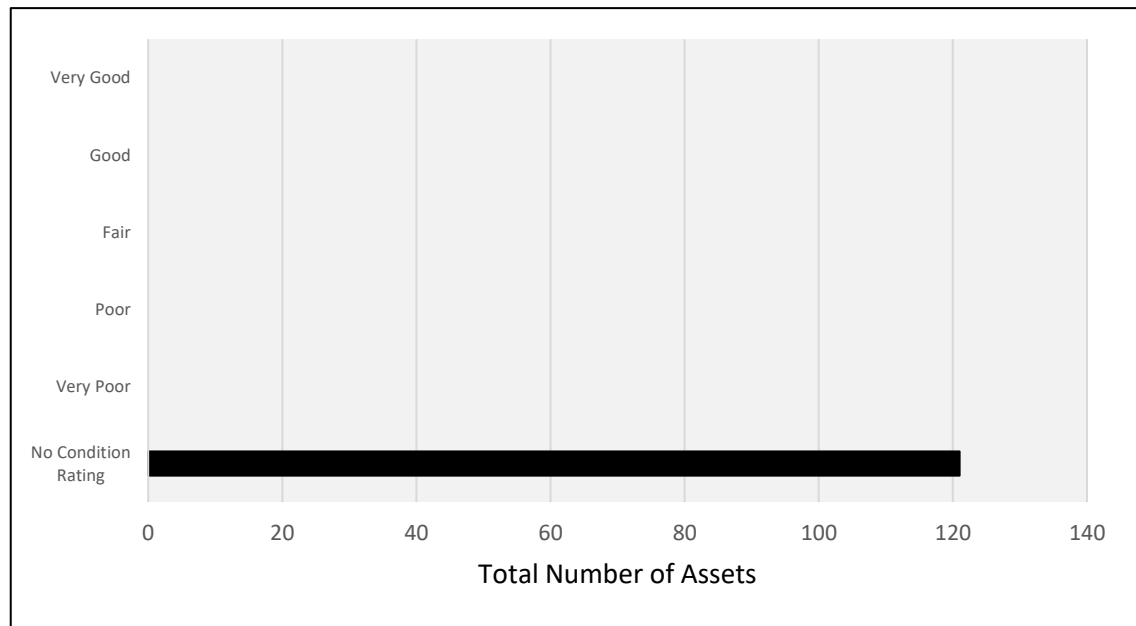
Street Tree assets were identified in the asset registry using a linear deterioration rate for each individual asset component. However, through this asset management plan it has been recognized that the data available for Street Trees is not sufficient for current or future use. For that reason, no condition data was displayed.

### Replacement Cost Calculation:

Replacement cost calculations for Street Tree assets have been sourced from Puslinch Township staff. Each asset has been individually assessed through tender documents in order to ensure reliable cost information. The price to replace each tree has been sourced from tender documentation from \$300 to \$600 depending on the species type.

### Source Documentation

Provided datasets by Township staff



Total Replacement Cost					
Very Poor	Poor	Fair	Good	Very Good	Total
\$-	\$-	\$-	\$-	\$-	\$64,325.00

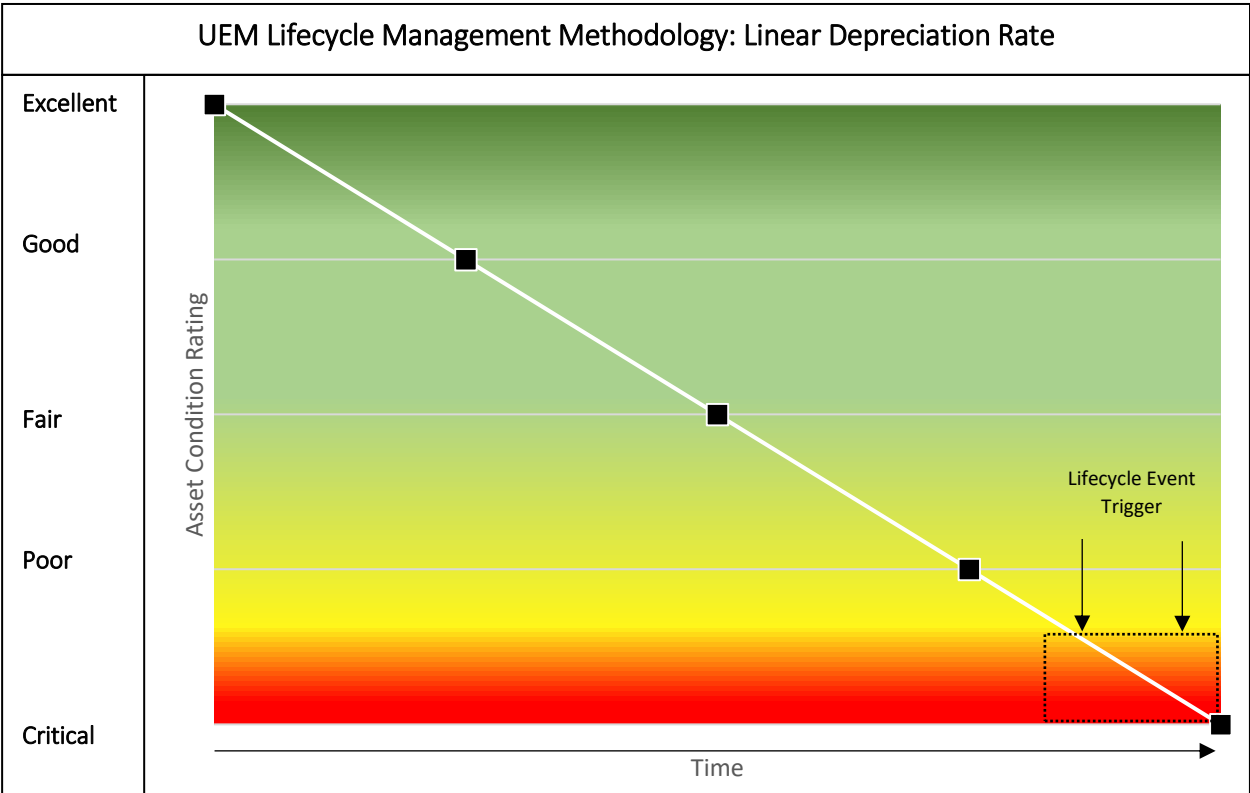
# 8.0 10 Year Capital Plan

## 8.1 Capital Plan: Summary

This 10 Year Capital Plan has been developed using the Asset Registry and through referencing provided documents by the Township described in Section 1.

## 8.2 Capital Plan: Lifecycle Management Methodology

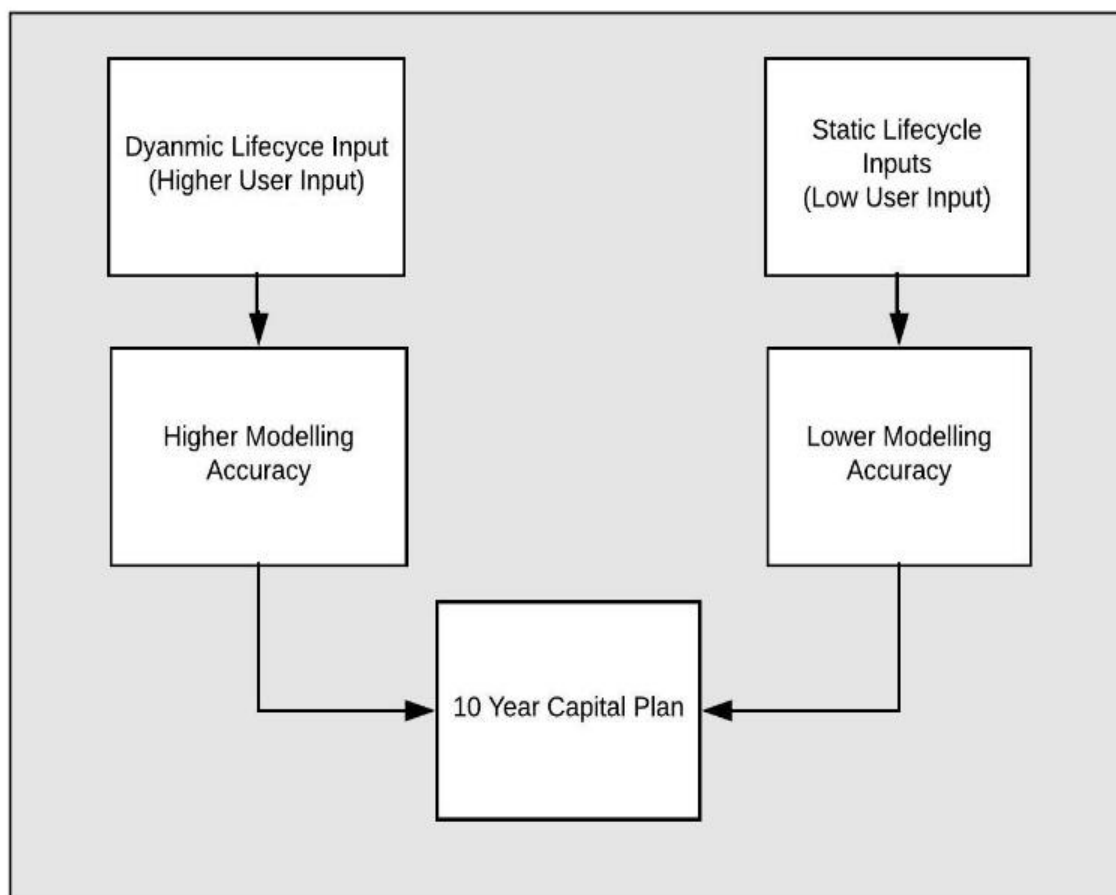
As stated in the State of The Infrastructure section of this report, some asset classes were identified in the Asset Registry with a linear deterioration rate lifecycle management methodology. As well, as stated in the State of the Infrastructure section of this report there are many assets that have significant amounts of staff input that determine the year of replacement. UEM defines manual asset lifecycle parameterization (staff intervention) as dynamic inputs. For this reason, this 10 Year Capital Plan had been developed to model both static (Linear Depreciation Rate) and dynamic inputs (Staff Intervention) to project capital expenditures for existing infrastructure for the Township of Puslinch.



### 8.3 Static and Dynamic Inputs

Static inputs for this Asset Management Plan are defined as data attributes that have high levels of transferability to models. Furthermore, these inputs are user-defined at one point in time. For some assets, UEM employed a linear deterioration rate that incorporates condition, expected life, remediation costs/replacement costs, and installation date. These variables allow for seamless transferability to different modelling methods and softwares. These variables when loaded into a model create static results and are affixed to one point in time. The output is thus affixed to the inputs point of acquisition and have reduced reliability.

Dynamic inputs allow for the user to manually or systematically alter the attributes of the model's datasets. It can allow for highly accurate modelling outcomes but with high amounts of user intervention into the datasets. However, dynamically modelling may result in conflicting capital planning to the defined lifecycle attributes in the asset registry. Thus, a review of such asset classes that incorporate dynamic inputs have been summarized in the next page.



## 8.4 Input Mapping: 10 Year Capital Plan

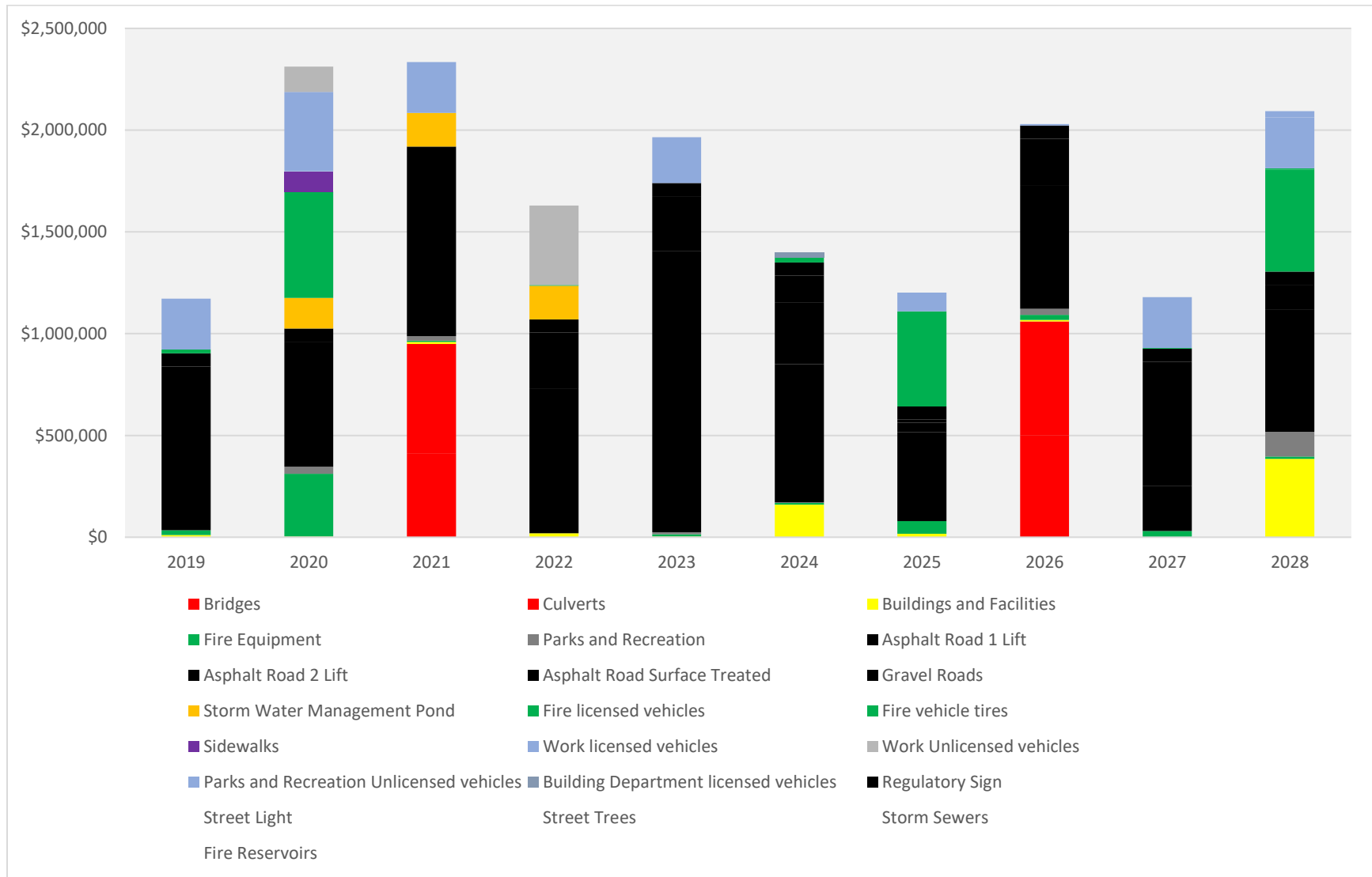
The below stated graph summarizes the methodology (Static or Dynamic) for capital planning and forecasting of lifecycle events for all asset classes in the Township of Puslinch. Generally speaking, the majority of the assets incorporate static inputs and have reliable modelling outputs. However, there is as well a large majority that do not – such as Fire Equipment, Storm Water Management Ponds and Fleet Assets. These asset classes either have lifecycle activities planned with no lifecycle attributes or through reference to a remediation schedule.

Overall, the resulting modelling output is consistent with the defined service level policies though there resulting replacement logics are not consistent.

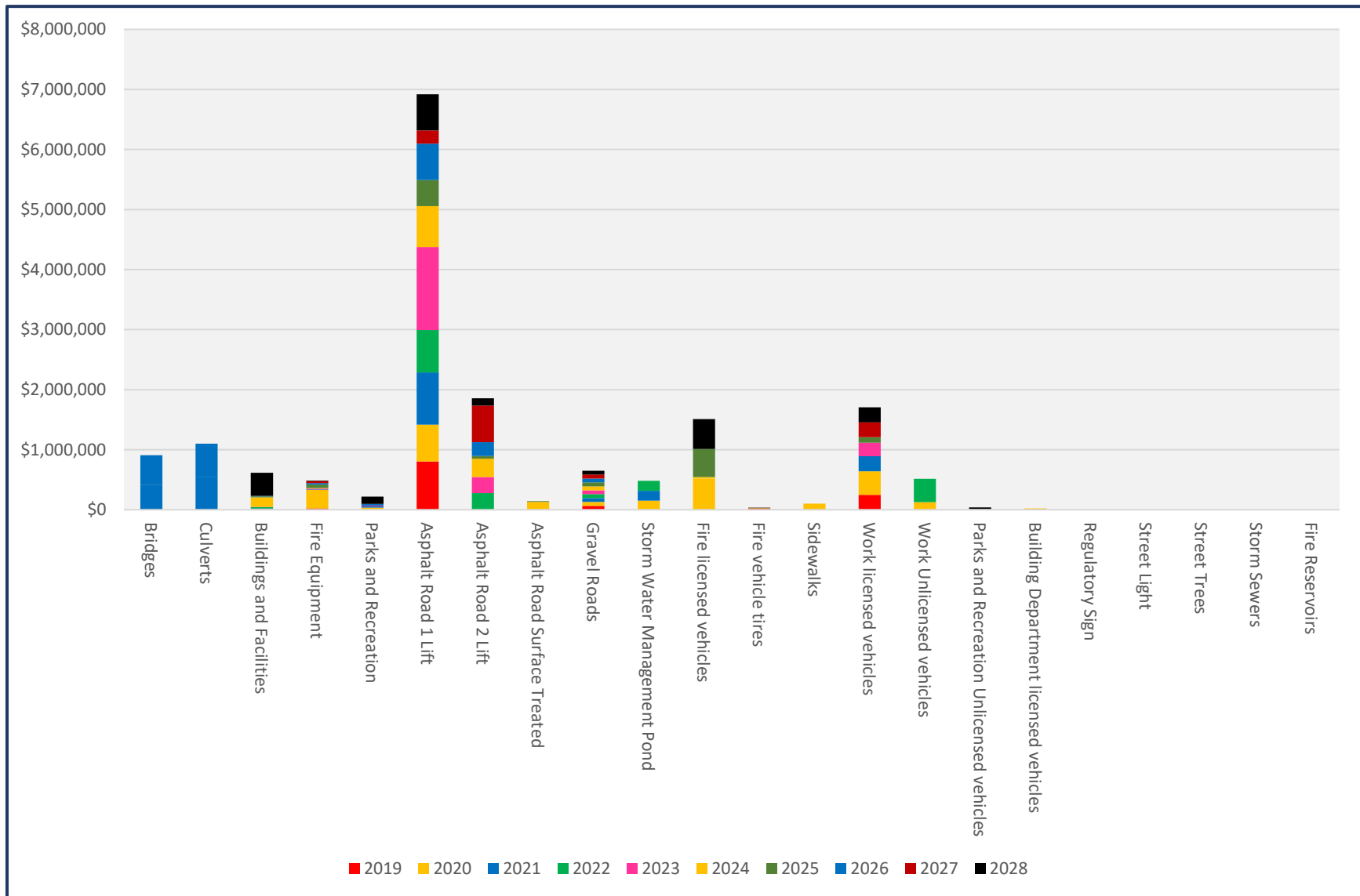
Asset Class	Static	Dynamic	Combination of Both
Bridges		✓	
Culverts		✓	
Buildings and Facilities		✓	
Fire Equipment			✓
Parks and Recreation		✓	
Asphalt Road 1 Lift	✓		
Asphalt Road 2 Lift	✓		
Asphalt Road Surface Treated	✓		
Gravel Roads	✓		
Storm Water Management Pond		✓	
Fire Licensed Vehicles			✓
Fire Vehicle Tires			✓
Work Licensed Vehicles	✓		
Work Unlicensed Vehicles			✓
Parks and Recreation Unlicensed Vehicles			✓
Storm Sewers	✓		
Signs	✓		
Trees	✓		
Fire Reservoirs	✓		
Sidewalks			✓

8.0 - 4 Capital Plan Modelling Logic: Puslinch Asset Classes

## 9.0 All Existing Infrastructure Included in 10 Year Capital Plan



9.0 - 1 All Existing Infrastructure Included in 10 Year Capital Plan Year Over Year



9.0 - 2 All Existing Infrastructure Included in 10 Year Capital Plan Asset Class Year over Year

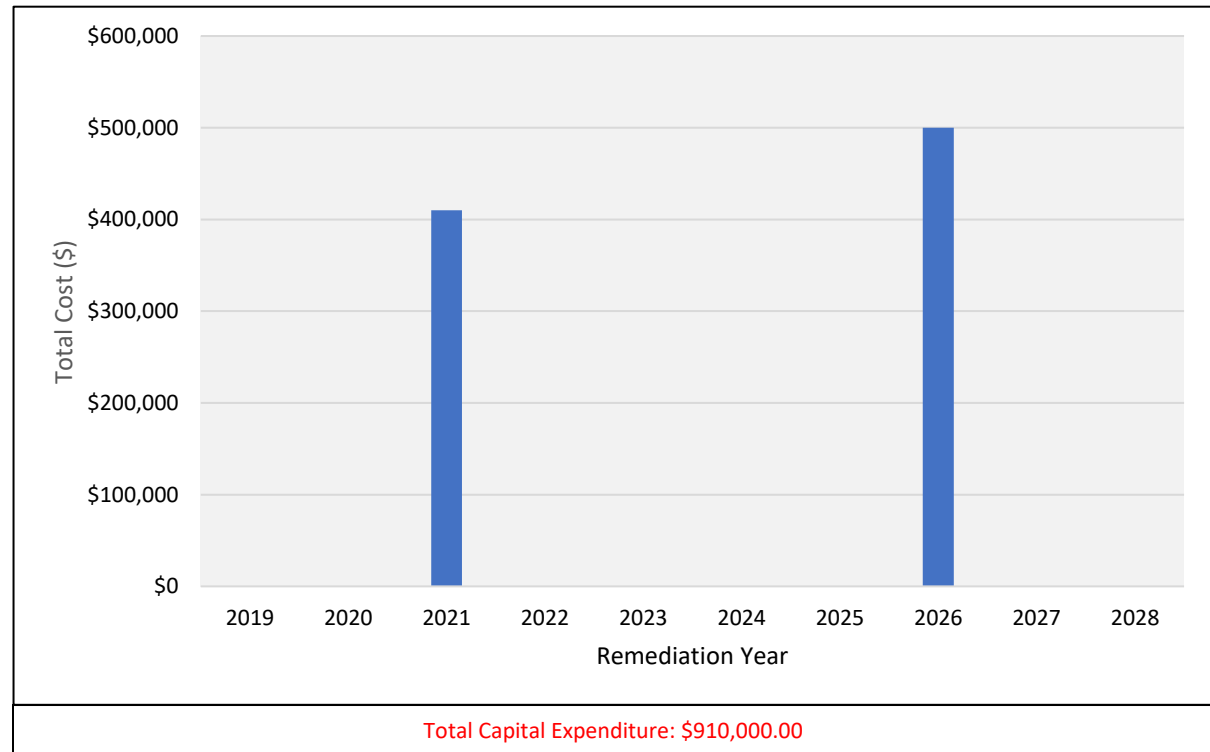


	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Bridges	\$0	\$0	\$410,000	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$910,000
Culverts	\$0	\$0	\$540,000	\$0	\$0	\$0	\$0	\$560,000	\$0	\$0	\$1,100,000
Buildings and Facilities	\$10,750	\$3,000	\$10,000	\$20,000	\$3,000	\$160,000	\$17,500	\$8,000	\$0	\$328,346	\$560,596
Fire Equipment	\$24,000	\$308,650	\$6,000	\$0	\$12,000	\$9,000	\$61,500	\$24,000	\$31,000	\$12,000	\$488,150
Parks and Recreation	\$0	\$34,668	\$22,000	\$0	\$10,000	\$1,800	\$0	\$29,828	\$0	\$121,230	\$219,526
Asphalt Road 1 Lift	\$803,726	\$614,689	\$866,757	\$708,589	\$1,382,126	\$679,928	\$437,028	\$604,693	\$219,975	\$601,534	\$6,919,045
Asphalt Road 2 Lift	\$0	\$0	\$0	\$276,398	\$268,226	\$304,305	\$46,560	\$230,721	\$610,044	\$121,118	\$1,857,372
Asphalt Road Surface Treated	\$0	\$0	\$0	\$0	\$0	\$130,292	\$14,849	\$0	\$0	\$0	\$145,141
Gravel Roads	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$650,000
Storm Water Management Pond	\$0	\$150,000	\$165,000	\$165,000	\$0	\$0	\$0	\$0	\$0	\$0	\$480,000
Fire licensed vehicles	\$0	\$520,000	\$0	\$0	\$0	\$23,000	\$468,000	\$0	\$0	\$500,000	\$1,511,000
Fire vehicle tires	\$18,146	\$1,650	\$0	\$4,116	\$0	\$1,650	\$0	\$0	\$3,300	\$7,188	\$36,050
Sidewalks	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
Work licensed vehicles	\$250,000	\$390,000	\$250,000	\$0	\$225,000	\$0	\$92,000	\$0	\$250,000	\$250,000	\$1,707,000
Work Unlicensed vehicles	\$0	\$125,000	\$0	\$390,000	\$0	\$0	\$0	\$0	\$0	\$0	\$515,000
Parks and Recreation Unlicensed vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$30,000	\$38,000
Building Department licensed vehicles	\$0	\$0	\$0	\$0	\$0	\$23,000	\$0	\$0	\$0	\$0	\$23,000
Regulatory Sign											\$0
Street Light											\$0
Street Trees											\$0
Storm Sewers											\$0
Fire Reservoirs											\$0
Total	\$1,171,622	\$2,312,657	\$2,334,757	\$1,629,103	\$1,965,352	\$1,397,976	\$1,202,437	\$2,030,242	\$1,179,319	\$2,036,416	\$17,259,880

## 9.1 Bridges

### Capital Plan Summary

As Stated in the State of The Infrastructure section of this report, Bridges do not follow a linear deterioration rate for lifecycle events. Instead, they follow the schedule of the qualified engineer upon inspection of the Bridge. As of 2017, The Township of Puslinch employed an engineering consulting firm to do such inspections. The graph and table reflect the recommendations set out by the firm.

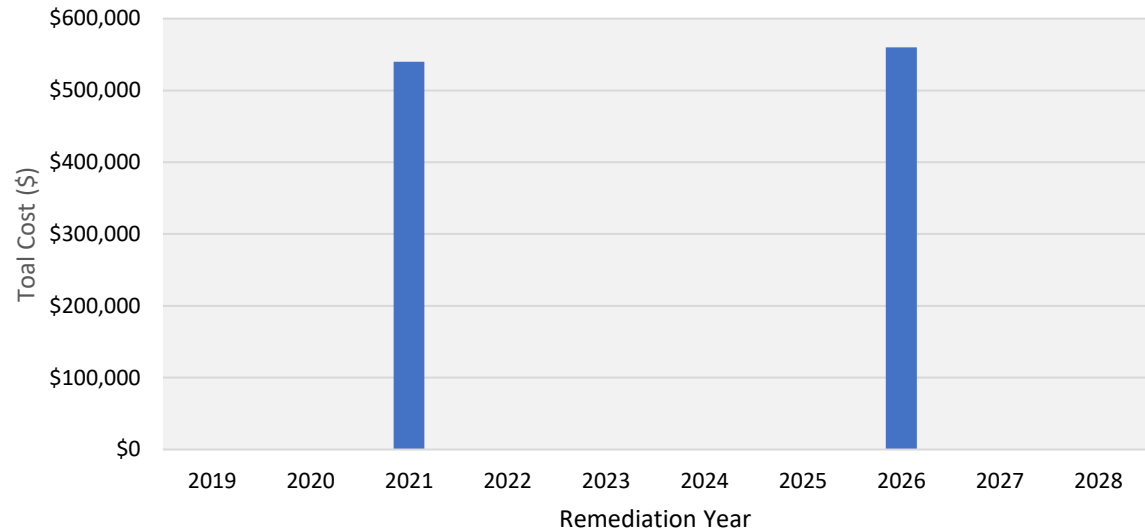


Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition (BCI)	Risk
1003	Bridge	Little's Bridge	50	2021	\$ 240,000.00	22	Very High
1008	Bridge	Galt Creek Bridge Gore Road Lot 2	50	2021	\$ 170,000.00	60	Very High
1004	Bridge	Moyer's Bridge	50	2026	\$ 500,000.00	63	Very High

## 9.2 Culverts

### Capital Plan Summary

As Stated in the State of The Infrastructure section of this report, Culverts do not follow a linear deterioration rate for lifecycle events. Instead, they follow the schedule of the qualified engineer upon inspection of the Culvert. As of 2017, The Township of Puslinch employed an engineering consulting firm to do such inspections. The graph and table reflect the recommendations set out by the firm.



Total Capital Expenditure: \$1,100,000.00

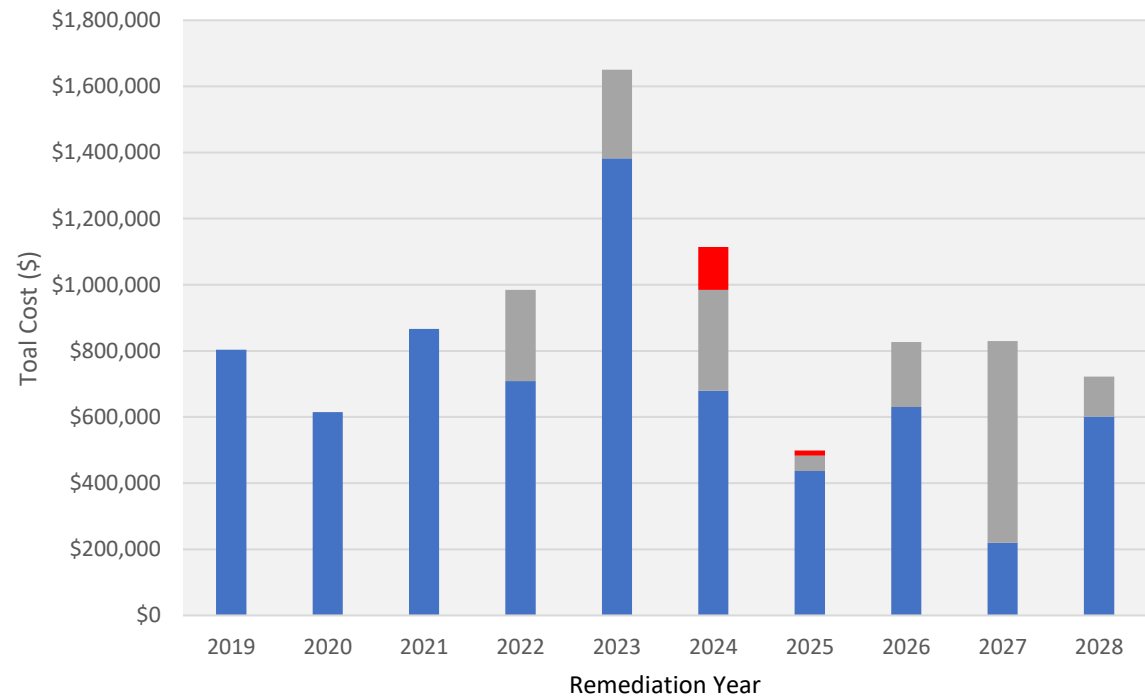
Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition (BCI)	Risk
2009	Culvert	Gilmour Rd Culvert Over Aberfoyle Creek	50	2021	\$ 540,000.00	50	Very High
2006	Culvert	Victoria Road Culvert Over Galt Creek	50	2026	\$ 65,000.00	72	Very High
2007	Culvert	Irish Creek Culvert On Townline Road	50	2026	\$ 180,000.00	57	Very High
2010	Culvert	Ellis Road Culvert Over Puslinch Lake Irish Creek	50	2026	\$ 250,000.00	43	Very High
2013	Culvert	Victoria Road Culvert North Of Leslie	50	2026	\$ 65,000.00	70	Very High

### 9.3 Hard Surface Roads – 1 Lift, 2 Lift, and Surface Treated

#### Capital Plan Summary

As stated in the State of The State of the Infrastructure section of this report, Hard Surface Roads follow a linear deterioration rate for lifecycle events. The rate of deterioration is two PCI points per year where 100 is “Excellent” and “Critical” is 60. For this capital plan, class 3 roads remediation PCI are 65, class 4 and 5 roads are 60.

Surface Treated roadways were as well modeled to depreciate a linear rate at 6 points per year. This works out to lifecycle events being triggered every 7 years.



Total Capital Expenditure: \$8,921,559.00

#### Capital Plan Summary Static and Dynamic Inputs

The Township has recognized that a linear deterioration rate for road assets is not the best lifecycle management methodology due to variable road conditions, traffic volumes, and weather. Further, A static input such as a PCI gives lower quality data confidence when modelling for longer term trends. Thus, The Township through its own management practices has optimized its decisions making methodology through the implementation of the dynamic inputs through regular visual inspections to verify the condition of the paved surface and plan for capital expenditures accordingly.

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Road Class</b>	<b>L.E</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition (PCI)</b>	<b>Risk</b>
<b>124</b>	Asphalt Road 1 Lift	Victoria Road South	3	25	2019	\$ 304,916.59	60	Very High
<b>125A</b>	Asphalt Road 1 Lift	Victoria Road South	3	25	2019	\$ 63,752.69	60	Very High
<b>137</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2019	\$ 435,056.65	60	Very High
<b>1</b>	Asphalt Road 1 Lift	Gore Road	4	25	2020	\$ 217,167.77	60	Very High
<b>6</b>	Asphalt Road 1 Lift	Gore Road	4	25	2020	\$ 50,337.34	60	Very High
<b>56</b>	Asphalt Road 1 Lift	Concession 4	4	25	2020	\$ 217,480.04	60	Very High
<b>58</b>	Asphalt Road 1 Lift	Concession 4	4	25	2020	\$ 129,704.14	60	Very High
<b>134</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2021	\$ 64,906.17	60	Very High
<b>135</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2021	\$ 60,251.17	60	Very High
<b>136</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2021	\$ 89,556.28	60	Very High
<b>140</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2021	\$ 172,801.23	60	Very High
<b>139</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2021	\$ 214,310.11	60	Very High
<b>133</b>	Asphalt Road 1 Lift	Watson Road South	3	25	2021	\$ 103,794.95	60	Very High
<b>52</b>	Asphalt Road 1 Lift	Maple Leaf Lane	5	25	2021	\$ 74,719.41	60	Very High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Road Class</b>	<b>L.E</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition (PCI)</b>	<b>Risk</b>
<b>57</b>	Asphalt Road 1 Lift	Concession 4	4	25	2021	\$ 86,417.25	60	Very High
<b>88</b>	Asphalt Road 1 Lift	Townline Road	4	25	2022	\$ 153,118.55	60	Very High
<b>40_SURFACE</b>	Asphalt Road 2 Lift	McLean Road West	3	25	2022	\$ 276,397.81	60	Very High
<b>59</b>	Asphalt Road 1 Lift	Concession 4	4	25	2022	\$ 217,096.90	60	Very High
<b>158</b>	Asphalt Road 1 Lift	McLean Road East	4	25	2022	\$ 68,451.36	60	Very High
<b>121A</b>	Asphalt Road 1 Lift	Maddaugh Road	4	25	2022	\$ 25,593.57	60	Very High
<b>121B</b>	Asphalt Road 1 Lift	Maddaugh Road	4	25	2022	\$ 26,657.77	60	Very High
<b>15</b>	Asphalt Road 1 Lift	Concession 1	4	25	2022	\$ 217,671.29	60	Very High
<b>204_SURFACE</b>	Asphalt Road 2 Lift	Bridle Path	5	25	2023	\$ 155,793.60	60	Very High
<b>185_SURFACE</b>	Asphalt Road 2 Lift	Bridle Path	5	25	2023	\$ 62,265.67	60	Very High
<b>212A</b>	Asphalt Road 1 Lift	Winer Road	4	25	2023	\$ 62,387.18	60	Very High
<b>212B_SURFACE</b>	Asphalt Road 2 Lift	Winer Road	4	25	2023	\$ 50,166.87	60	Very High
<b>63B</b>	Asphalt Road 1 Lift	Maltby Road East	4	25	2023	\$ 106,047.09	60	Very High
<b>63A</b>	Asphalt Road 1 Lift	Maltby Road East	4	25	2023	\$ 106,960.16	60	Very High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Road Class</b>	<b>L.E</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition (PCI)</b>	<b>Risk</b>
<b>17</b>	Asphalt Road 1 Lift	Concession 1	4	25	2023	\$ 216,762.17	60	Very High
<b>97</b>	Asphalt Road 1 Lift	Sideroad 10 North	4	25	2023	\$ 108,921.31	60	Very High
<b>108</b>	Asphalt Road 1 Lift	Sideroad 20 North	4	25	2023	\$ 214,743.89	60	Very High
<b>148</b>	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	5	25	2023	\$ 31,635.26	60	Very High
<b>22</b>	Asphalt Road 1 Lift	Leslie Road West	4	25	2023	\$ 56,595.30	60	Very High
<b>23</b>	Asphalt Road 1 Lift	Leslie Road West	4	25	2023	\$ 128,411.36	60	Very High
<b>25</b>	Asphalt Road 1 Lift	Leslie Road West	4	25	2023	\$ 106,699.36	60	Very High
<b>54A</b>	Asphalt Road 1 Lift	Roszell Road 2013	4	25	2023	\$ 138,648.22	60	Very High
<b>90</b>	Asphalt Road 1 Lift	Roszell Road	4	25	2023	\$ 104,314.38	60	Very High
<b>166</b>	Asphalt Road 1 Lift	Sideroad 20 North	4	25	2024	\$ 116,905.32	60	Very High
<b>164_SURFACE</b>	Asphalt Road 2 Lift	McLean Road/Concession 7	3	25	2024	\$ 149,046.19	60	Very High
<b>165_SURFACE</b>	Asphalt Road 2 Lift	McLean Road/Concession 7	3	25	2024	\$ 115,798.12	60	Very High
<b>18</b>	Asphalt Road 1 Lift	Concession 1/Leslie Rd W	4	25	2024	\$ 255,662.64	60	Very High

Asset #	Asset Class	Description	Road Class	L.E	Replacement Years	Total Capital Costs	Condition (PCI)	Risk
19	Asphalt Road 1 Lift	Concession 1	4	25	2024	\$ 48,441.10	60	Very High
4	Asphalt Road 1 Lift	Gore Road	4	25	2024	\$ 136,800.74	60	Very High
28_SURFACE	Asphalt Road 2 Lift	Victoria Street And Church Street	5	25	2024	\$ 39,461.07	60	Very High
5	Asphalt Road 1 Lift	Gore Road	4	25	2024	\$ 80,118.57	60	Very High
153	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	4	7	2024	\$ 54,920.78	60	Medium
154	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	4	7	2024	\$ 28,974.04	60	Medium
155	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	4	7	2024	\$ 21,612.59	60	Medium
120	Asphalt Road Surface Treated	Maddaugh Road	4	7	2024	\$ 24,784.57	60	Very High
71	Asphalt Road 1 Lift	Laird Road West	4	50	2024	\$ 42,000.00	60	Very High
7	Asphalt Road Surface Treated	Gore Road	4	7	2025	\$ 14,849.14	60	Very High
32	Asphalt Road 1 Lift	Concession 2	4	25	2025	\$ 220,554.56	60	Very High
51_SURFACE	Asphalt Road 2 Lift	Old Brock Road	5	25	2025	\$ 46,560.00	60	Very High



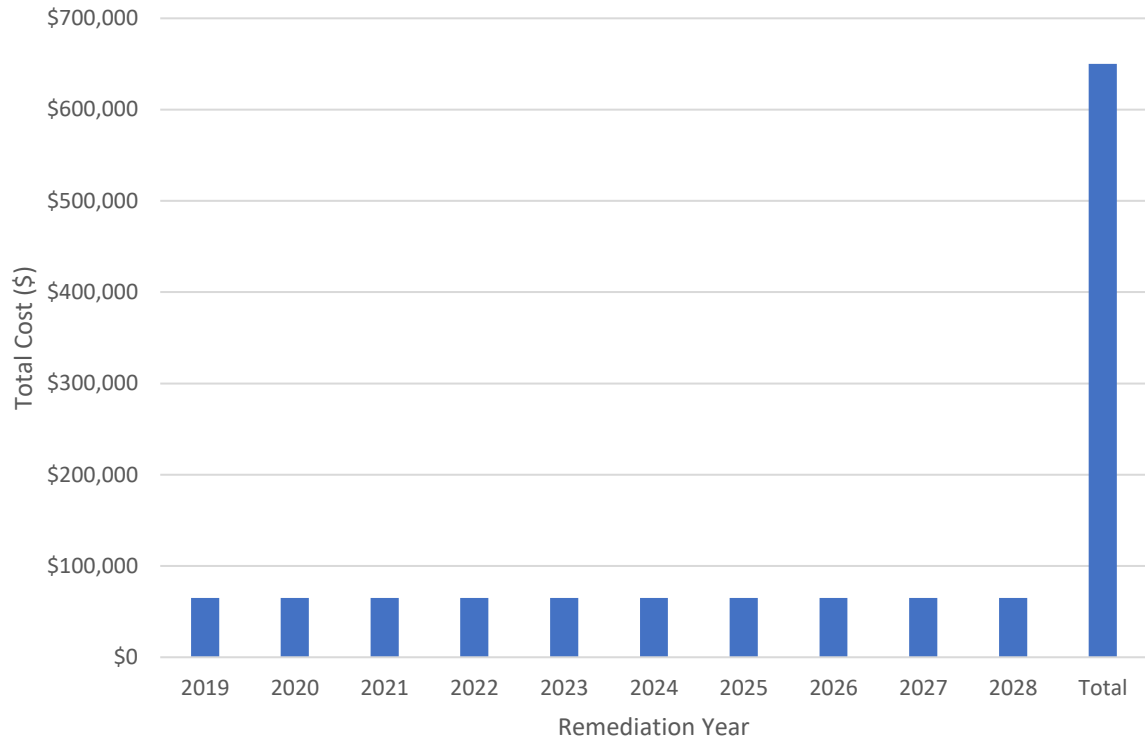
Asset #	Asset Class	Description	Road Class	L.E	Replacement Years	Total Capital Costs	Condition (PCI)	Risk
16	Asphalt Road 1 Lift	Concession 1	4	25	2025	\$ 216,473.65	60	Very High
195	Asphalt Road 2 Lift	Deer View Ridge	5	25	2026	\$ 92,916.73	60	High
48	Asphalt Road 1 Lift	Smith Road	5	25	2026	\$ 34,843.10	60	High
21	Asphalt Road 1 Lift	Leslie Road West	4	25	2026	\$ 211,569.82	60	High
115	Asphalt Road 2 Lift	Concession 7	3	25	2026	\$ 59,774.06	60	High
116	Asphalt Road 2 Lift	Concession 7	3	25	2026	\$ 43,396.49	60	High
14	Asphalt Road 1 Lift	Concession 1	4	25	2026	\$ 217,138.73	60	High
46_SURFACE	Asphalt Road 2 Lift	Gilmour Road	4	25	2026	\$ 34,633.75	60	Very High
160	Asphalt Road 1 Lift	Concession 4	4	25	2026	\$ 46,904.02	60	Very High
161	Asphalt Road 1 Lift	Concession 4	4	25	2026	\$ 35,471.58	60	Very High
132	Asphalt Road 1 Lift	McRae Station Road	3	25	2026	\$ 35,396.73	60	Very High
38	Asphalt Road 1 Lift	Mason Road	5	25	2026	\$ 23,368.76	60	Very High
34	Asphalt Road 1 Lift	Concession 2	4	25	2027	\$ 219,975.00	60	High
35	Asphalt Road 2 Lift	Concession 2	3	25	2027	\$ 286,220.75	60	High
36	Asphalt Road 2 Lift	Concession 2/2A	3	25	2027	\$ 124,715.65	60	High
205	Asphalt Road 2 Lift	Fox Run Drive	5	25	2027	\$ 32,822.68	60	High
206	Asphalt Road 2 Lift	Fox Run Drive	5	25	2027	\$ 17,412.23	60	High
207	Asphalt Road 2 Lift	Fox Run Drive	5	25	2027	\$ 91,323.90	60	High
196	Asphalt Road 2 Lift	Fox Run Drive	5	25	2027	\$ 57,548.85	60	High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Road Class</b>	<b>L.E</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition (PCI)</b>	<b>Risk</b>
<b>30</b>	Asphalt Road 1 Lift	Main St And Back	5	25	2028	\$ 36,264.05	60	High
<b>190</b>	Asphalt Road 2 Lift	Telfer Glen	5	25	2028	\$ 97,421.12	60	High
<b>9</b>	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	4	25	2028	\$ 56,748.41	60	High
<b>10</b>	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	4	25	2028	\$ 69,805.42	60	High
<b>214</b>	Asphalt Road 2 Lift	Beiber Road	5	25	2028	\$ 23,696.95	60	High
<b>13A</b>	Asphalt Road 1 Lift	Concession 1	4	25	2028	\$ 333,716.08	60	High
<b>96</b>	Asphalt Road 1 Lift	Sideroad 10 North	4	25	2028	\$ 105,000.00	60	High

## 9.4 Gravel Roads

### Capital Plan Summary

Gravel Road surfaces have been assumed to require \$65,000 of maintenance expenditures annually. This cost is consistent despite weather or traffic volumes. The right positioned graph showcases this linear expenditure over the next 10-year period amounting to \$650,000.



Total Capital Expenditure: \$650,00

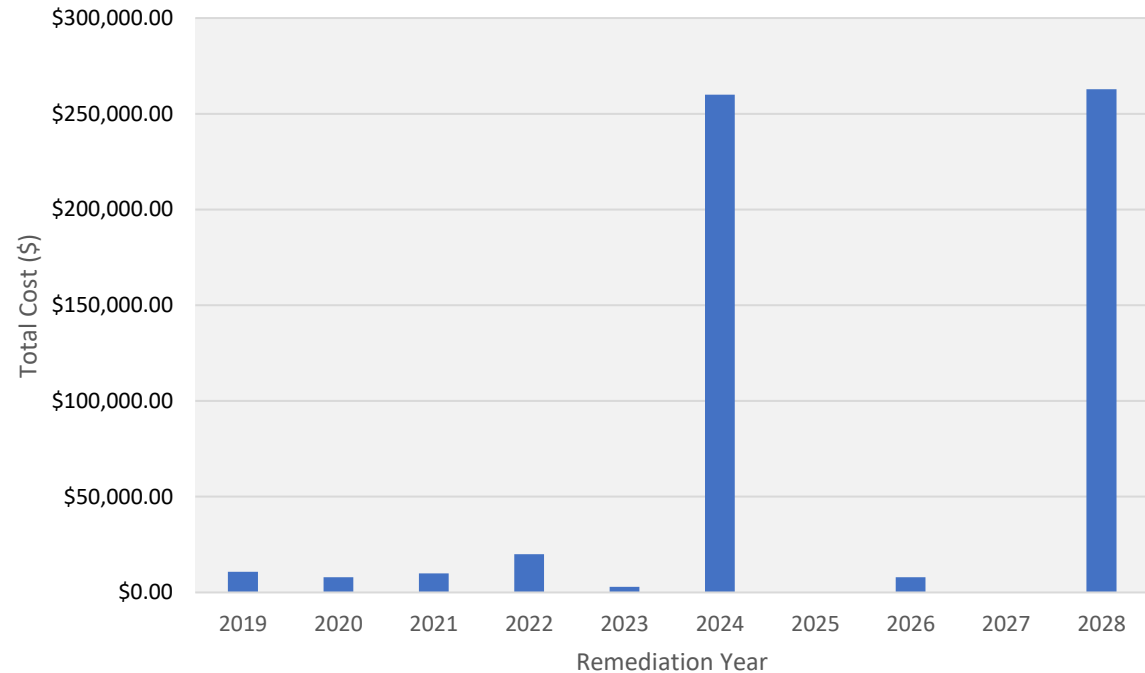
### Capital Plan Summary Static and Dynamic Inputs

This capital expenditures for gravel roads are static inputs as they do not incorporate expected costs from increased or decreases volumes, or volatile weather conditions. UEM has assumed that the Township manages each gravel road equally and repairs each according to staff understood deterioration triggers. As stated in the service level policy for gravel roads each road segment should be monitored more closely to acquire a greater detail of rate of decay of each segment and as well attempt to quantify the maintenance expenditures associated with each segments lifecycle management.

## 9.5 Buildings and Facilities

### Capital Plan Summary

As Stated in the State of The Infrastructure section of this report, Buildings and Facilities do not follow a linear deterioration rate for lifecycle events. Instead, Buildings and Facilities follow the schedule of the qualified engineer upon inspection of the Building or Facility. As of 2014, The Township employed an engineering consulting firm to do such inspections. The graph and table reflects the recommended remediation schedule set out by the firm.



Total Capital Expenditure: \$560,596

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
67PCC	Buildings and Facilities	Puslinch Community Centre: Roof	40	2028	\$100,000.00	5	Low
93PCC	Buildings and Facilities	Puslinch Community Centre: Mechanical	40	2024 2025 2026	\$40,000.00	5	Low

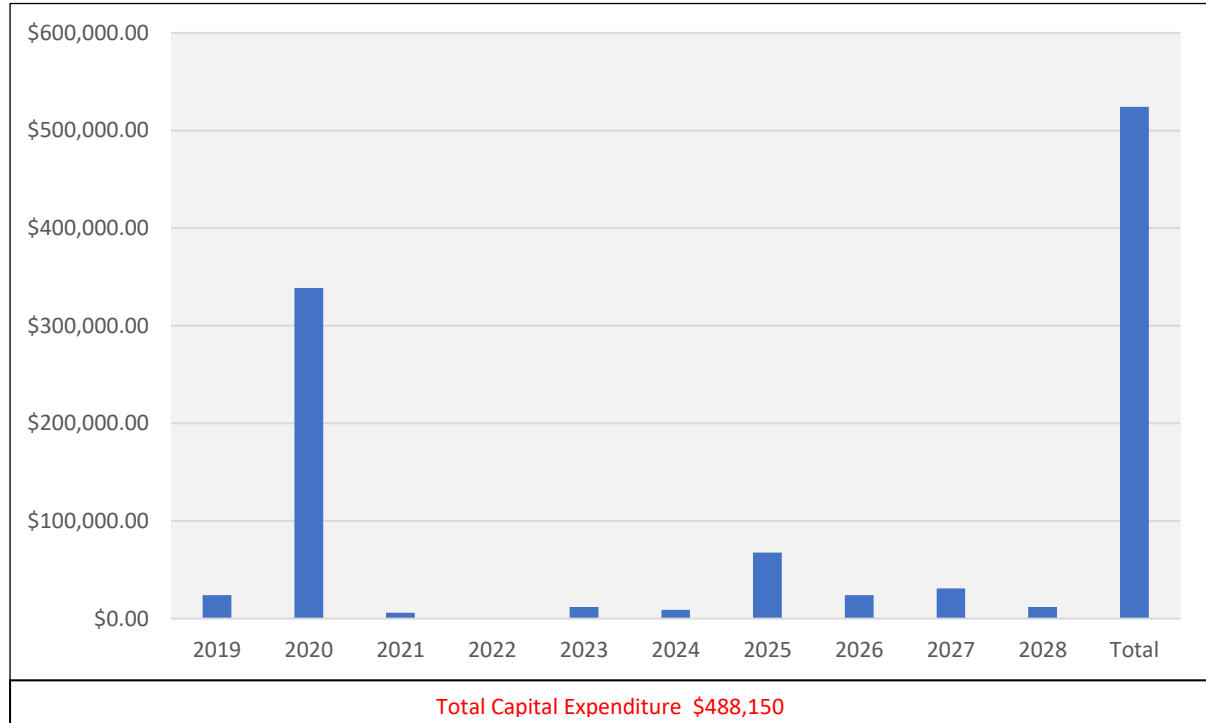
Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
<b>26PCC</b>	Buildings and Facilities	Puslinch Community Centre: Electrical	40	<b>2019</b>	\$5,000.00	5	Low
<b>40PCC</b>	Buildings and Facilities	Puslinch Community Centre: Fire, Life-Safety	40	<b>2024</b>	\$750.00	5	Low
<b>95MC</b>	Buildings and Facilities	Municipal Complex: Structure	40	<b>2024</b>	\$125,000.00	4	Medium
<b>56MC</b>	Buildings and Facilities	Municipal Complex: Roof	40	<b>2028</b>	\$42,734.10	5	Low
<b>59MC</b>	Buildings and Facilities	Municipal Complex: Mechanical	40	<b>2019 2021 2022 2024 2026</b>	\$54,750.00	5	Low
<b>21MC</b>	Buildings and Facilities	Municipal Complex: Electrical	40	<b>2020 2023</b>	\$6,000.00	5	Low
<b>1MC</b>	Buildings and Facilities	Municipal Complex: Fire, Life-Safety	40	<b>2024</b>	\$750.00	5	Low
<b>15002</b>	Buildings and Facilities	Municipal Complex: Parking Lot Municipal Complex	25	<b>2028</b>	\$162,750.00	2	Medium
<b>71BSBBPCC</b>	Buildings and Facilities	Blue Storage Building Behind PCC :Roof	40	<b>2028</b>	\$8,523.62	3	Medium

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
95RSB	Buildings and Facilities	Roads Storage Building Roof	40	2028	\$14,337.95	4	Medium

## 9.6 Fire Equipment

### Capital Plan Summary

The Township of Puslinch through its internal resources created a remediation schedule for all known Fire Equipment assets. For the majority of the assets the replacement year is triggered by its end of life (linear deterioration rate). However, for some assets staff intervention Dynamic inputs were applied to the replacement date and have been incorporated into the model.



Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
8_93FE	Fire Equipment	Thermal Imaging Camera	10	2019	\$6,000.00	1	Very High
66_21FE	Fire Equipment	Bunker Gear #317 907001148 907001150	10	2019	\$3,000.00	1	Very High
67_60FE	Fire Equipment	Bunker Gear #395 1307006351 1104007407	10	2019	\$3,000.00	1	Very High
68_80FE	Fire Equipment	Bunker Gear #376 1104007399 3707960	10	2019	\$3,000.00	1	Very High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>69_51FE</b>	Fire Equipment	Bunker Gear #386 1104007401 907001149	10	2019	\$3,000.00	1	Very High
<b>FE_122_1</b>	Fire Equipment	Bunker Gear #351	10	2019	\$3,000.00	1	Very High
<b>6_70FE</b>	Fire Equipment	Power Hydraulic Tool set	20	2020	\$52,500.00	1	Very High
<b>11_103FE</b>	Fire Equipment	Rapid Deployment Water Craft	10	2020	\$6,000.00	4	Medium
<b>14_25FE</b>	Fire Equipment	Air Cylinder:84	15	2020	\$1,500.00	3	High
<b>15_87FE</b>	Fire Equipment	Air Cylinder:85	15	2020	\$1,500.00	3	High
<b>16_87FE</b>	Fire Equipment	Air Cylinder:87	15	2020	\$1,500.00	3	High
<b>17_76FE</b>	Fire Equipment	Air Cylinder:88	15	2020	\$1,500.00	3	High
<b>18_90FE</b>	Fire Equipment	Air Cylinder:100	15	2020	\$1,500.00	3	High
<b>19_90FE</b>	Fire Equipment	Air Cylinder:101	15	2020	\$1,500.00	3	High
<b>20_85FE</b>	Fire Equipment	Air Cylinder:102	15	2020	\$1,500.00	3	High
<b>21_85FE</b>	Fire Equipment	Air Cylinder:103	15	2020	\$1,500.00	3	High
<b>22_9FE</b>	Fire Equipment	Air Cylinder:104	15	2020	\$1,500.00	3	High
<b>23_42FE</b>	Fire Equipment	Air Cylinder:105	15	2020	\$1,500.00	3	High



<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>24_94FE</b>	Fire Equipment	Air Cylinder:106	15	2020	\$1,500.00	3	High
<b>25_35FE</b>	Fire Equipment	Air Cylinder:107	15	2020	\$1,500.00	3	High
<b>26_23FE</b>	Fire Equipment	Air Cylinder:108	15	2020	\$1,500.00	3	High
<b>27_67FE</b>	Fire Equipment	Air Cylinder:109	15	2020	\$1,500.00	3	High
<b>28_48FE</b>	Fire Equipment	Air Cylinder:310	15	2020	\$1,500.00	3	High
<b>29_64FE</b>	Fire Equipment	Air Cylinder:311	15	2020	\$1,500.00	3	High
<b>30_89FE</b>	Fire Equipment	Air Cylinder:312	15	2020	\$1,500.00	3	High
<b>31_89FE</b>	Fire Equipment	Air Cylinder:313	15	2020	\$1,500.00	3	High
<b>32_104FE</b>	Fire Equipment	Air Cylinder:314	15	2020	\$1,500.00	3	High
<b>33_34FE</b>	Fire Equipment	Air Cylinder:315	15	2020	\$1,500.00	3	High
<b>34_30FE</b>	Fire Equipment	Air Cylinder:316	15	2020	\$1,500.00	3	High
<b>35_104FE</b>	Fire Equipment	Air Cylinder:317	15	2020	\$1,500.00	3	High
<b>36_48FE</b>	Fire Equipment	Air Cylinder:318	15	2020	\$1,500.00	3	High
<b>37_107FE</b>	Fire Equipment	Air Cylinder:319	15	2020	\$1,500.00	3	High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>38_15FE</b>	Fire Equipment	Air Cylinder:320	15	2020	\$1,500.00	3	High
<b>39_99FE</b>	Fire Equipment	Air Cylinder:323	15	2020	\$1,500.00	3	High
<b>40_31FE</b>	Fire Equipment	Air Cylinder:334	15	2020	\$1,500.00	3	High
<b>41_37FE</b>	Fire Equipment	Air Cylinder:335	15	2020	\$1,500.00	3	High
<b>42_79FE</b>	Fire Equipment	Air Cylinder:336	15	2020	\$1,500.00	3	High
<b>43_107FE</b>	Fire Equipment	Air Cylinder:337	15	2020	\$1,500.00	3	High
<b>44_55FE</b>	Fire Equipment	Air Cylinder:339	15	2020	\$1,500.00	3	High
<b>45_27FE</b>	Fire Equipment	Air Cylinder:340	15	2020	\$1,500.00	3	High
<b>46_91FE</b>	Fire Equipment	Air Cylinder:341	15	2020	\$1,500.00	3	High
<b>47_55FE</b>	Fire Equipment	Air Cylinder:342	15	2020	\$1,500.00	3	High
<b>48_109FE</b>	Fire Equipment	Air Cylinder:343	15	2020	\$1,500.00	3	High
<b>49_104FE</b>	Fire Equipment	Air Cylinder:344	15	2020	\$1,500.00	3	High
<b>50_57FE</b>	Fire Equipment	Air Cylinder:345	15	2020	\$1,500.00	3	High
<b>51_94FE</b>	Fire Equipment	Air Cylinder:346	15	2020	\$1,500.00	3	High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>52_95FE</b>	Fire Equipment	Air Cylinder:347	15	2020	\$1,500.00	3	High
<b>53_40FE</b>	Fire Equipment	Air Cylinder:348	15	2020	\$1,500.00	3	High
<b>54_31FE</b>	Fire Equipment	Air Cylinder:349	15	2020	\$1,500.00	3	High
<b>55_41FE</b>	Fire Equipment	Air Cylinder:350	15	2020	\$1,500.00	3	High
<b>56_58FE</b>	Fire Equipment	Air Cylinder:351	15	2020	\$1,500.00	3	High
<b>57_105FE</b>	Fire Equipment	Air Cylinder:352	15	2020	\$1,500.00	3	High
<b>58_88FE</b>	Fire Equipment	Air Cylinder:353	15	2020	\$1,500.00	3	High
<b>59_35FE</b>	Fire Equipment	Air Cylinder:354	15	2020	\$1,500.00	3	High
<b>60_57FE</b>	Fire Equipment	Air Cylinder:355	15	2020	\$1,500.00	3	High
<b>61_17FE</b>	Fire Equipment	Air Cylinder:356	15	2020	\$1,500.00	3	High
<b>62_96FE</b>	Fire Equipment	Air Cylinder:357	15	2020	\$1,500.00	3	High
<b>63_48FE</b>	Fire Equipment	Air Cylinder:358	15	2020	\$1,500.00	3	High
<b>64_106FE</b>	Fire Equipment	Air Cylinder:359	15	2020	\$1,500.00	3	High
<b>65_4FE</b>	Fire Equipment	Air Cylinder:360	15	2020	\$1,500.00	3	High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>77_9FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
<b>78_16FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
<b>79_57FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
<b>80_30FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
<b>69_41FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
<b>74_27FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>75_43FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
<b>76_67FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
<b>59_56FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>62_23FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>67_99FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>60_51FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>61_92FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>68_20FVT</b>	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>70_84FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>71_45FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>72_79FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>73_30FVT</b>	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
<b>63_86FVT</b>	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
<b>64_69FVT</b>	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
<b>65_29FVT</b>	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
<b>66_17FVT</b>	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
<b>67_17FVT</b>	Fire Equipment	SCBA Masks	15	2020	\$8,250.00	4	Medium
<b>71_102FE</b>	Fire Equipment	Bunker Gear #308	10	2021	\$3,000.00	3	High
<b>72_58FE</b>	Fire Equipment	Bunker Gear #378 1104007403 1104007408	10	2021	\$3,000.00	3	High
<b>73_67FE</b>	Fire Equipment	Bunker Gear #301 1301002761 1301002766	10	2023	\$3,000.00	3	High
<b>74_22FE</b>	Fire Equipment	Bunker Gear #336 1301002757 1301002762	10	2023	\$3,000.00	3	High
<b>75_67FE</b>	Fire Equipment	Bunker Gear #392 1301002758 1301002763	10	2023	\$3,000.00	4	Medium

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
76_55FE	Fire Equipment	Bunker Gear #337 1301002760 1301002765	10	2023	\$3,000.00	4	Medium
77_100FE	Fire Equipment	Bunker Gear #388 4748801 4749620	10	2024	\$3,000.00	4	Medium
78_9FE	Fire Equipment	Bunker Gear #318	10	2024	\$3,000.00	4	Medium
79_75FE	Fire Equipment	Bunker Gear #310 4748800 4749619	10	2024	\$3,000.00	4	Medium
12_41FE	Fire Equipment	Defibrillators Fire & Rescue Service Trucks	8	2025	\$15,000.00	3	High
1212_41FE	Fire Equipment	Defibrillators - Municipal Buildings	8	2025	\$15,000.00	5	Medium
80_57FE	Fire Equipment	Bunker Gear #333 4924090 4924085	10	2025	\$3,000.00	4	Medium
81_37FE	Fire Equipment	Bunker Gear #387 4924092 4924080	10	2025	\$3,000.00	4	Medium
83_94FE	Fire Equipment	Bunker Gear #326 4924091 4924082	10	2025	\$3,000.00	4	Medium
84_89FE	Fire Equipment	Bunker Gear #321 4992302 4924081	10	2025	\$3,000.00	4	Medium
85_11FE	Fire Equipment	Bunker Gear #370 4924095 4924083	10	2025	\$3,000.00	4	Medium
86_72FE	Fire Equipment	Bunker Gear #381 4924093 4924086	10	2025	\$3,000.00	4	Medium
87_51FE	Fire Equipment	Bunker Gear #306 4992301 4992304	10	2025	\$3,000.00	4	Medium
88_35FE	Fire Equipment	Bunker Gear #309 4924096 4924084	10	2025	\$3,000.00	4	Medium

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>89_97FE</b>	Fire Equipment	Bunker Gear #307 4924089 4924079	10	2025	\$3,000.00	4	Medium
<b>90_29FE</b>	Fire Equipment	Bunker Gear #380 4992303 4992306	10	2025	\$3,000.00	4	Medium
<b>91_44FE</b>	Fire Equipment	Bunker Gear #375 4924077 4992305	10	2025	\$3,000.00	4	Medium
<b>92_20FE</b>	Fire Equipment	Bunker Gear #303 5017234 5017235	10	2025	\$3,000.00	4	Medium
<b>93_73FE</b>	Fire Equipment	Bunker Gear #320 4924094 4924087	10	2025	\$3,000.00	4	Medium
<b>94_89FE</b>	Fire Equipment	Bunker Gear #355 4924088 4924078	10	2025	\$3,000.00	4	Medium
<b>13_89FE</b>	Fire Equipment	Portable Pumps	20	2026	\$15,000.00	4	Medium
<b>95_47FE</b>	Fire Equipment	Bunker Gear #315 5085806 5085940	10	2026	\$3,000.00	5	Medium
<b>96_14FE</b>	Fire Equipment	Bunker Gear #319 5122954 5085938	10	2026	\$3,000.00	5	Medium
<b>97_58FE</b>	Fire Equipment	Bunker Gear #391 5085805 5085939	10	2026	\$3,000.00	5	Medium
<b>9_104FE</b>	Fire Equipment	Washer/Extractor	10	2027	\$10,000.00	4	Medium
<b>10_2FE</b>	Fire Equipment	Gear Dryer	10	2027	\$6,000.00	4	Medium
<b>98_23FE</b>	Fire Equipment	Bunker Gear #379 5312492 5312493	10	2027	\$3,000.00	5	Medium
<b>99_1FE</b>	Fire Equipment	Bunker Gear #382 5310558 5310560	10	2027	\$3,000.00	5	Medium

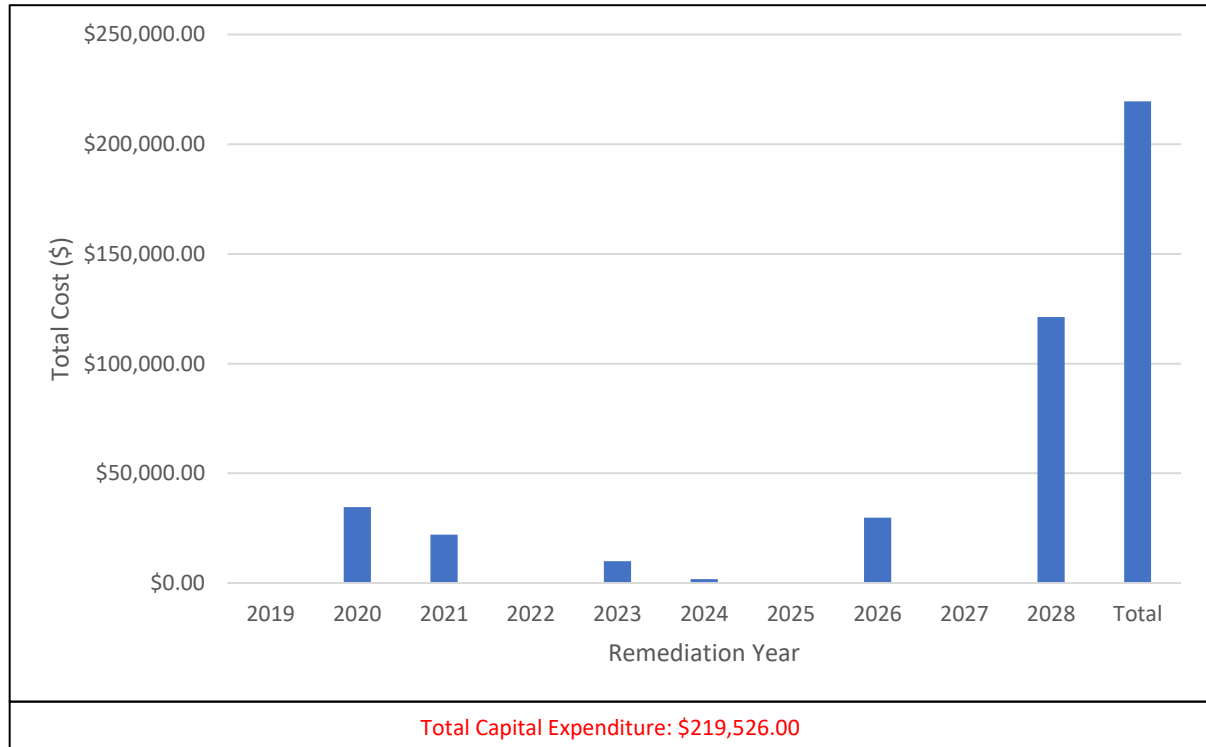
<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Years</b>	<b>Total Capital Costs</b>	<b>Condition</b>	<b>Risk</b>
<b>100_87FE</b>	Fire Equipment	Bunker Gear #323 5310555 5310559	10	2027	\$3,000.00	5	Medium
<b>101_49FE</b>	Fire Equipment	Bunker Gear #385 5310557 5310562	10	2027	\$3,000.00	5	Medium
<b>102_20FE</b>	Fire Equipment	Bunker Gear #322 5310556 5310561	10	2027	\$3,000.00	5	Medium
<b>103_101FE</b>	Fire Equipment	Bunker Gear #350 5483616 5483622	10	2028	\$3,000.00	5	Medium
<b>104_60FE</b>	Fire Equipment	Bunker Gear #335 5483615 5483621	10	2028	\$3,000.00	5	Medium
<b>105_24FE</b>	Fire Equipment	Bunker Gear #302 5483614 5483619	10	2028	\$3,000.00	5	Medium
<b>106_92FE</b>	Fire Equipment	Bunker Gear #305 5483613 5483618	10	2028	\$3,000.00	5	Medium



## 9.7 Parks and Recreation

### Capital Plan Summary

Parks and Recreation assets lifecycle activity schedule has been developed exclusively from their modelled end of expected life. Thus, the illustrated capital plan in the chart and table has been developed exclusively from the defined static conditions in the asset registry and as well life expectancy.



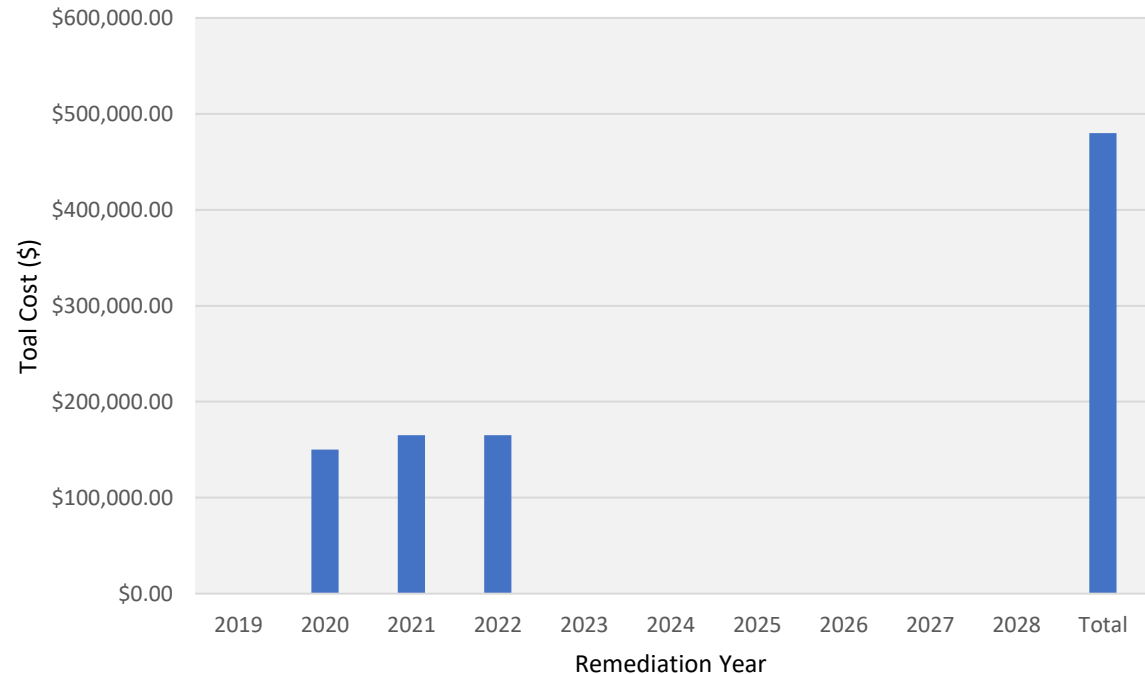
Asset #	Asset Class	Description	Life Expectancy	Replacement Year	Capital Expenditure	Condition	Risk
3036	Parks and Recreation	Community Centre Complex: Horse Paddock Bleachers	20	2020	\$30,000.00	1	High
3059	Parks and Recreation	Old Morriston : Fencing Backstop	20	2020	\$3,668.00	1	High
3047	Parks and Recreation	Morrison Meadows: Benches	20	2020	\$1,000.00	1	High
3046	Parks and Recreation	Morrison Meadows: Bleachers	25	2021	\$10,000.00	1	High

<b>Asset #</b>	<b>Asset Class</b>	<b>Description</b>	<b>Life Expectancy</b>	<b>Replacement Year</b>	<b>Capital Expenditure</b>	<b>Condition</b>	<b>Risk</b>
<b>3052</b>	Parks and Recreation	Morrison Meadows: 6 Seat High Bleachers	25	2021	\$5,000.00	1	High
<b>3053</b>	Parks and Recreation	Morrison Meadows: 6 Seat High Bleachers	25	2021	\$5,000.00	1	High
<b>3068</b>	Parks and Recreation	Badenoch Soccer Field: 3 Seat Bleacher	25	2021	\$2,000.00	1	High
<b>3060</b>	Parks and Recreation	Old Morrison : 6 seat Concrete Bleachers	50	2023	\$10,000.00	1	High
<b>3025</b>	Parks and Recreation	Community Centre Complex: Wooden Fences Beside Batting Cages	15	2024	\$1,800.00	2	High
<b>3070</b>	Parks and Recreation	Badenoch Soccer Field: Fencing (East Side)	20	2026	\$14,934.00	2	High
<b>3029</b>	Parks and Recreation	Community Centre Complex: Fencing	20	2026	\$9,694.00	2	High
<b>3028</b>	Parks and Recreation	Community Centre Complex: Light Poles	20	2026	\$5,200.00	2	High
<b>3082</b>	Parks and Recreation	Community Centre Complex: Parking Lot Community Centre Complex	25	2028	\$91,875.00	2	High
<b>14003</b>	Parks and Recreation	Community Centre Complex: Tennis Court Fencing	40	2028	\$21,615.00	5	Medium
<b>3056</b>	Parks and Recreation	Old Morrison : Gravel Road	25	2028	\$7,740.00	2	High

## 9.8 Storm Water Management Ponds

### Capital Plan Summary

As stated in the State of The Infrastructure section of this report, Storm Water Management Ponds do not follow a linear deterioration rate for lifecycle events. Instead, they follow the schedule of the qualified engineer upon inspection of the pond. As of 2017, The Township of Puslinch employed a consultant to do such inspections. The graph and table reflects the recommendations set out by the firm.



Total Capital Expenditure: \$480,000.00

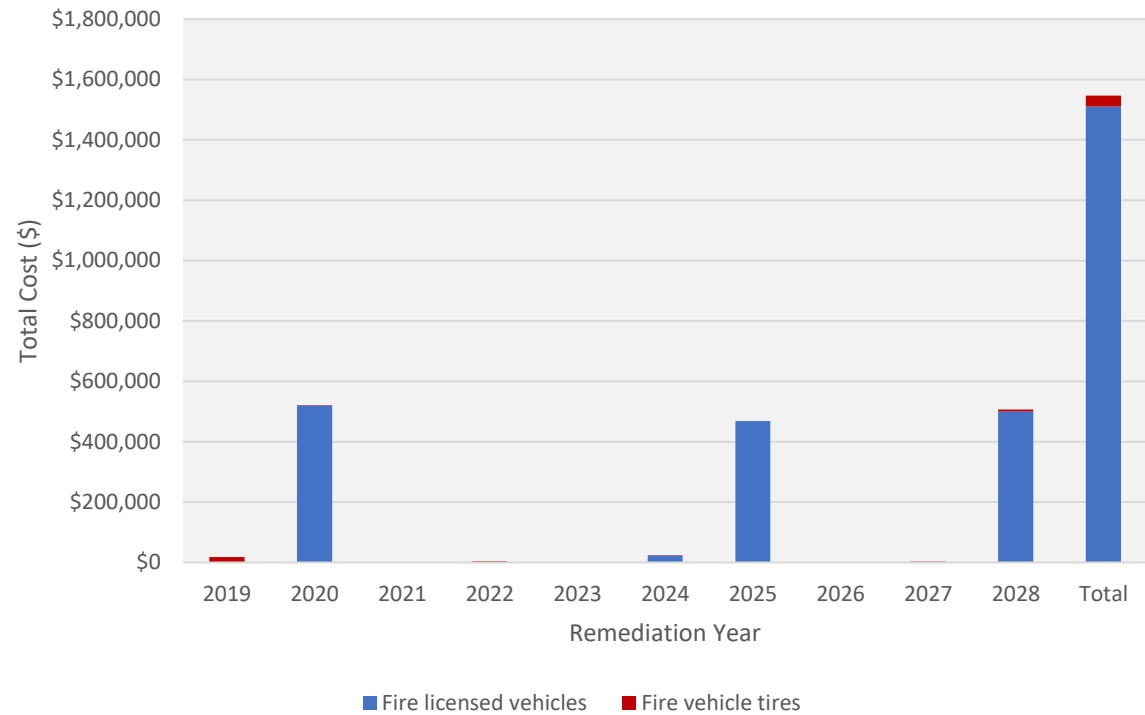
### Capital Plan Summary Cont'd

The Capital costs over the next 10 years are for three different Storm Water Management Ponds. The first, being Kerr Crescent SWM Facility at cost of \$150,000 for remediation works, the second for Fox Run Drive Storm Water Management Pond 1 at a cost of \$165,000 and the third at Carriage Lane Storm Water Management Pond at a cost of \$165,000.

## 9.9 Fire Vehicles – Licensed Vehicles & Tires

### Capital Plan Summary Cont'd

The Capital costs over the next 10 years are for three different Storm Water Management Ponds. The first, being Kerr Crescent SWM Facility at cost of \$150,000 for remediation works, the second for Fox Run Drive Storm Water Management Pond 1 at a cost of \$165,000 and the third at Carriage Lane Storm Water Management Pond at a cost of \$165,000.



Total Capital Expenditure: \$1,547,050.00

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
5033	Fire licensed vehicles	Quint Truck	25	2028	\$500,000.00	3	Medium
5031	Fire licensed vehicles	Fire Pumper 31	20	2025	\$468,000.00	3	Medium

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
5035	Fire licensed vehicles	Rescue Truck 35	20	2020	\$520,000.00	3	Medium
7005A	Fire licensed vehicles	2013 Vehicle For Fire & Rescue	7	2024	\$23,000.00	4	Medium
1_66FVT	Fire vehicle tires	P-31	10	2019	\$648.00	1	High
2_11FVT	Fire vehicle tires	P-31	10	2019	\$648.00	1	High
3_3FVT	Fire vehicle tires	P-31	10	2019	\$825.00	1	High
4_96FVT	Fire vehicle tires	P-31	10	2019	\$825.00	1	High
5_81FVT	Fire vehicle tires	P-31	10	2019	\$825.00	1	High
6_77FVT	Fire vehicle tires	P-31	10	2019	\$825.00	1	High
7_64FVT	Fire vehicle tires	P-32	10	2022	\$686.00	3	Medium
8_19FVT	Fire vehicle tires	P-32	10	2022	\$686.00	3	Medium
9_22FVT	Fire vehicle tires	P-32	10	2022	\$686.00	3	Medium
10_14FVT	Fire vehicle tires	P-32	10	2022	\$686.00	3	Medium
11_90FVT	Fire vehicle tires	P-32	10	2022	\$686.00	3	Medium
12_46FVT	Fire vehicle tires	P-32	10	2022	\$686.00	3	Medium

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
13_63FVT	Fire vehicle tires	A-33	8	2020 2028	\$1,650.00	3	Medium
14_38FVT	Fire vehicle tires	A-33	8	2020 2028	\$1,650.00	3	Medium
15_73FVT	Fire vehicle tires	A-33	8	2019 2027	\$1,650.00	3	Medium
16_16FVT	Fire vehicle tires	A-33	8	2019 2027	\$1,650.00	3	Medium
17_74FVT	Fire vehicle tires	A-33	8	2019 2027	\$1,650.00	3	Medium
18_76FVT	Fire vehicle tires	A-33	8	2019 2027	\$1,650.00	3	Medium
25_57FVT	Fire vehicle tires	T-37	10	2024	\$825.00	4	Medium
26_100FVT	Fire vehicle tires	T-37	10	2024	\$825.00	4	Medium
27_69FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
28_4FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
29_40FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
30_35FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
31_1FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
32_77FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
33_70FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
45_1FVT	Fire vehicle tires	C-1	10	2019	\$250.00	1	High
46_31FVT	Fire vehicle tires	C-1	10	2019	\$250.00	1	High
47_71FVT	Fire vehicle tires	C-1	10	2019	\$250.00	1	High
48_70FVT	Fire vehicle tires	C-1	10	2019	\$250.00	1	High
34_59FVT	Fire vehicle tires	T-37	10	2019	\$825.00	1	High
35_18FVT	Fire vehicle tires	T-38	10	2028	\$825.00	1	High
36_27FVT	Fire vehicle tires	T-38	10	2028	\$825.00	1	High
37_60FVT	Fire vehicle tires	T-38	10	2028	\$648.00	1	High
38_76FVT	Fire vehicle tires	T-38	10	2028	\$648.00	1	High
39_53FVT	Fire vehicle tires	T-38	10	2028	\$648.00	1	High
40_1FVT	Fire vehicle tires	T-38-FT	10	2019	\$825.00	1	High
41_1FVT	Fire vehicle tires	T-38-FT	10	2019	\$825.00	1	High
42_14FVT	Fire vehicle tires	T-38	10	2028	\$648.00	1	High

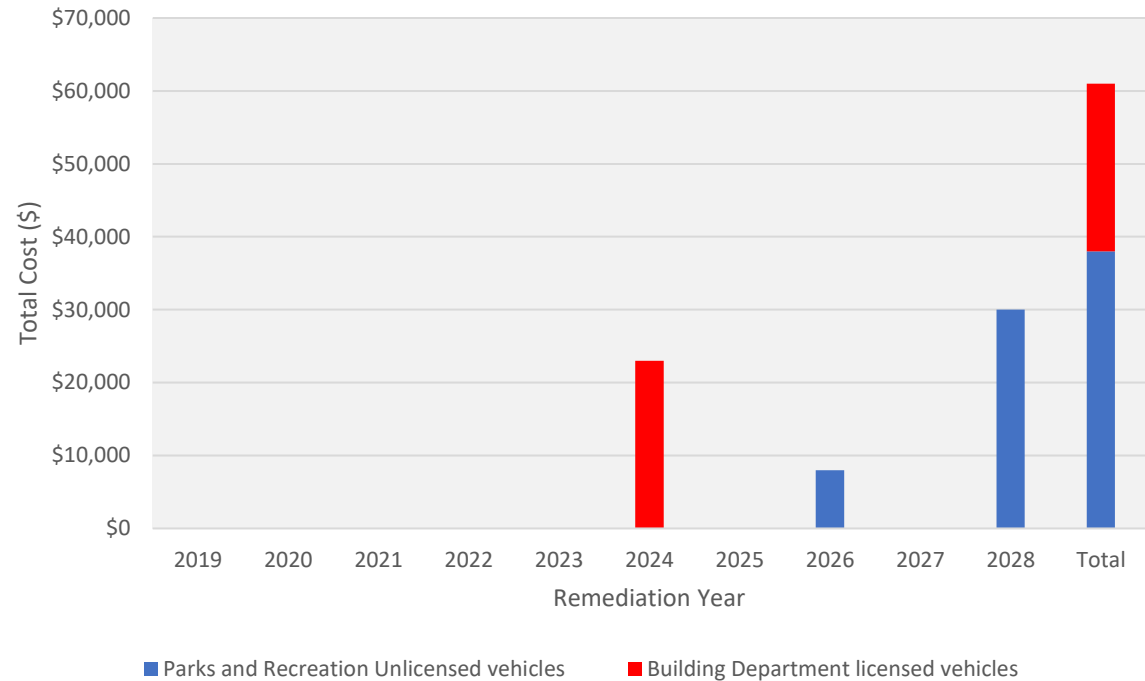
Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
43_24FVT	Fire vehicle tires	T-38	10	2028	\$648.00	1	High
44_8FVT	Fire vehicle tires	T-38	10	2028	\$648.00	1	High
49_56FVT	Fire vehicle tires	C-1 Winter	10	2019	\$250.00	1	High
50_57FVT	Fire vehicle tires	C-1 Winter	10	2019	\$250.00	1	High
51_94FVT	Fire vehicle tires	C-1 Winter	10	2019	\$250.00	1	High
52_10FVT	Fire vehicle tires	C-1 Winter	10	2019	\$250.00	1	High



## 9.10 Parks and Recreation and Building Department Vehicles

### Capital Plan Summary

As stated in the State of the Infrastructure section of this report all Parks and Recreation and Building Department Vehicle assets were loaded into the asset registry with high level of dynamic input. The schedule that is visualized in the graph and chart has been formulated exclusively from staff and recommendations from the 2017 Fleet Management Report.



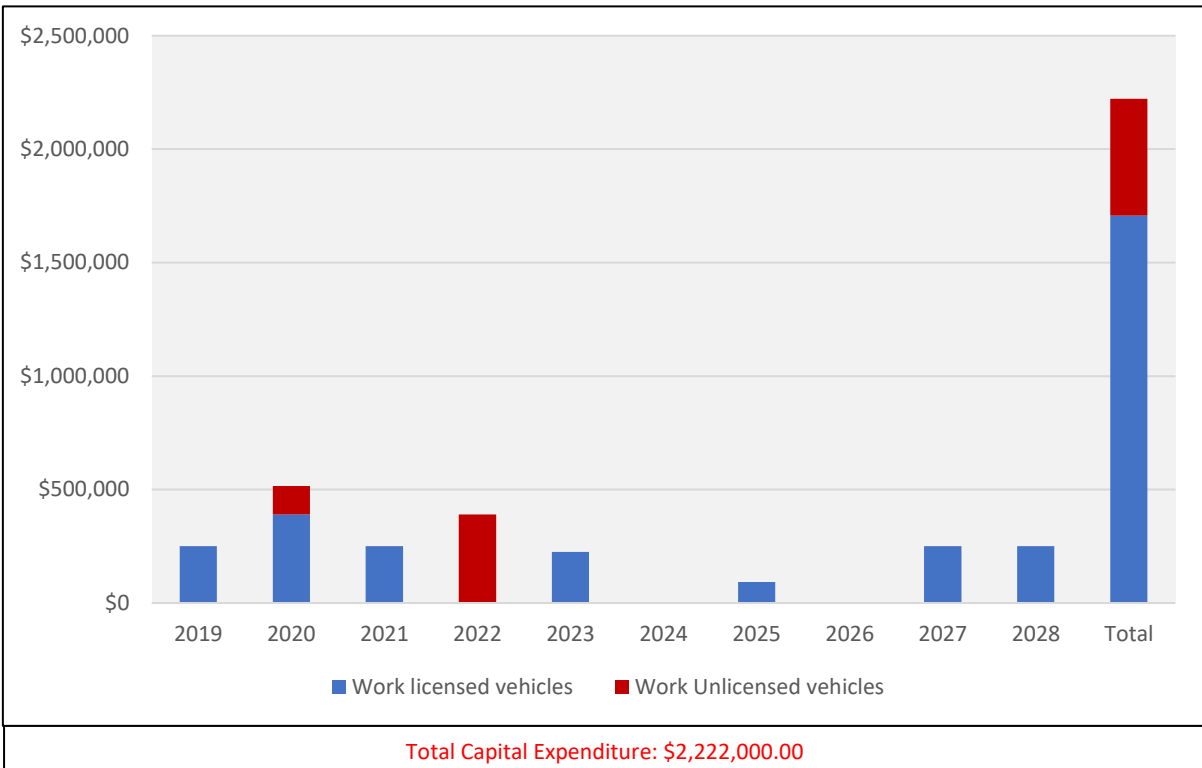
Total Capital Expenditure: \$61,000.00

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
7005B	Building Department licensed vehicles	2016 Mid-Size Pickup	7	2024	\$23,000.00	3	Medium
4060	Parks and Recreation Unlicensed vehicles	Floor Scrubber	10	2026	\$8,000.00	4	Medium
7007	Parks and Recreation Unlicensed vehicles	Lawn Tractor	10	2028	\$30,000.00	4	Medium

### 9.11 Works Department – Licensed and Unlicensed Vehicles and Equipment

#### Capital Plan Summary

As stated in the State of the Infrastructure section of this report all Work Vehicle assets were loaded into the asset registry with high level of dynamic input. The schedule that is visualized in the graph and chart has been formulated exclusively from staff and recommendations from the 2017 Fleet Management Report



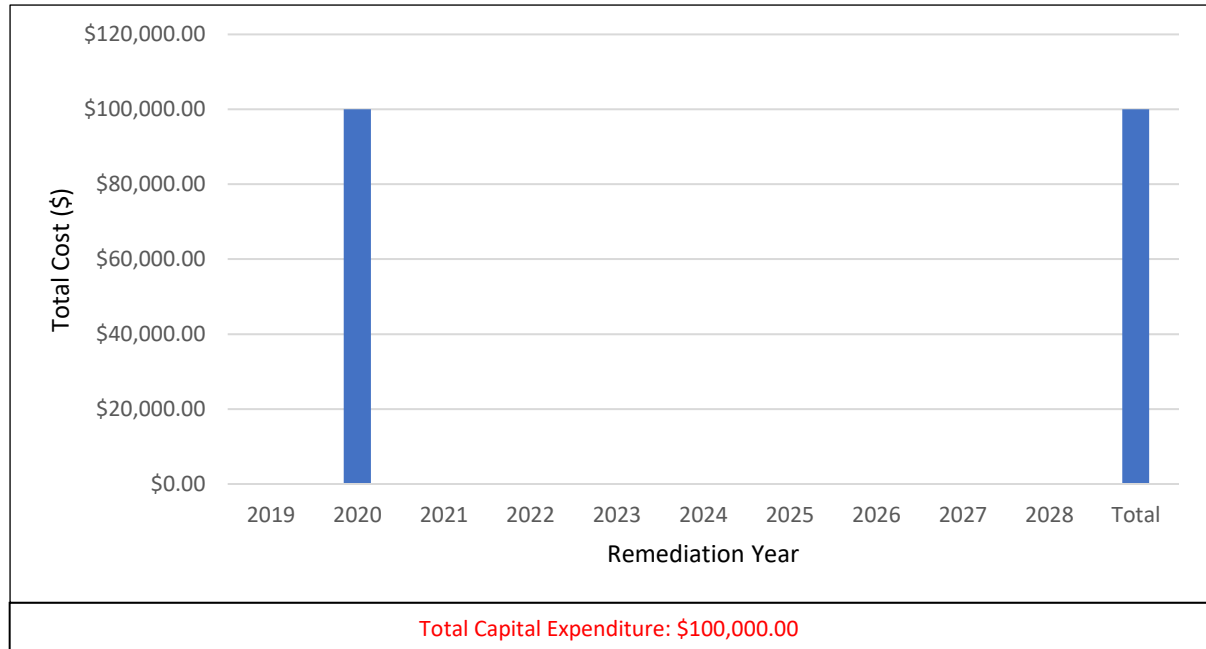
Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
8016	Work licensed vehicles	2013 International Plow Truck 301	8	2021	\$250,000.00	2	Medium
8014	Work licensed vehicles	2012 Dump/Plow 302	8	2020 2028	\$500,000.00	2	Medium
8017	Work licensed vehicles	2015 International Plow Truck - 303	8	2023	\$225,000.00	2	Medium

Asset #	Asset Class	Description	Life Expectancy	Replacement Years	Total Capital Costs	Condition	Risk
8013	Work licensed vehicles	2011 Single Axle Truck 304	8	2019 2027	\$500,000.00	1	High
7003	Work licensed vehicles	1 Ton Dump/Plow 305	12	2020	\$100,000.00	2	Medium
8019	Work licensed vehicles	2015 GMC Sierra 1500	5	2020 2025	\$80,000.00	3	Medium
7009	Work licensed vehicles	2017 Pickup Truck - Staff - 3/4 Ton	8	2025	\$52,000.00	3	Medium
8001	Work Unlicensed vehicles	JCB Backhoe 6	12	2020	\$125,000.00	2	Medium
8002	Work Unlicensed vehicles	Road Grader G740 501	25	2022	\$350,000.00	2	Medium
8018	Work Unlicensed vehicles	Brush Chipper	10	2022	\$40,000.00	4	Medium

## 9.12 Sidewalks

### Capital Plan Summary

Sidewalks assets lifecycle activity schedule has been developed in the asset registry from their modelled end of expected life. However, the capital expenditure illustrated in the included graph and chart has been generated exclusively from the recommended remediation schedule provided by staff.



Asset #	Asset Class	Description	Life Expectancy	Replacement Year	Capital Expenditure	Condition	Risk
304	Sidewalk	Brock Road Sidewalk	20	2020	\$100,000.00	4	Medium

## 10.0 Risk

The asset management strategy & framework for this asset management plan takes a risk-centric approach. Risk is an important measure in asset management. Besides cost, risk is one of the few measures that can be compared across asset classes. The comparison of risk across asset classes is only appropriate if risk is calculated using an appropriate methodology explained in the body of this section. The methodology for assessing asset risk utilized in the Township's Asset Management Strategy and Framework developed as part of this project allows for the comparison of assets across asset classes, categories, and even programs.

Risk is the combination of the Consequence of Failure (CoF) and the Probability of Failure (POF) of an asset as shown in Figure 1. The PoF of an asset determined using the estimated service of life of the asset, the age of the asset, and the assessed condition of the asset. CoF is determined for each asset class based on seven weighted consequences factors Health and Safety, Financial, Environmental, Regulatory, Operational and internal demand.

Workshops were held with the departments responsible for maintaining assets to determine the CoF for each asset class. The PoF and CoF are combined in a risk matrix, as shown in Figure 1, to determine an asset's Risk Level which determines its priority for replacement. Risk levels are on a five-point scale: Very High, High, Moderate, Low, and Very Low. The risk matrix shows the highest risk in the top right and the lowest risk in the bottom left.

Risk Matrix		Consequence of Failure (CoF)				
		Insignificant	Low	Medium	High	Severe
Probability of Failure (PoF)	Almost Certain	High	High	Very High	Very High	Very High
	Highly Likely	Moderate	Moderate	High	High	Very High
	Likely	Low	Low	Moderate	High	High
	Unlikely	Very Low	Low	Low	Moderate	Moderate
	Almost Certainly Not	Very Low	Very Low	Very Low	Low	Low

10.0 - 2 Risk Matrix

## 10.1 Probability of Failure

The probability of failure is the first of two variables required to calculate risk. Probability of failure is the likelihood that an asset will not achieve a desired level of service. Levels of service can be based on the condition of the asset or the performance of the asset.

While asset performance is often tied directly to the condition of the asset, there are performance measures that do not relate to the condition of an asset. These measures can include:

- The appropriateness/size of an asset
- The available of backups for critical assets
- The ability to meet legislated requirements

The Township of Puslinch does not currently collect the data required to assess assets based on performance. For the purpose of this project probability of failure is based solely on condition and serviceable life.

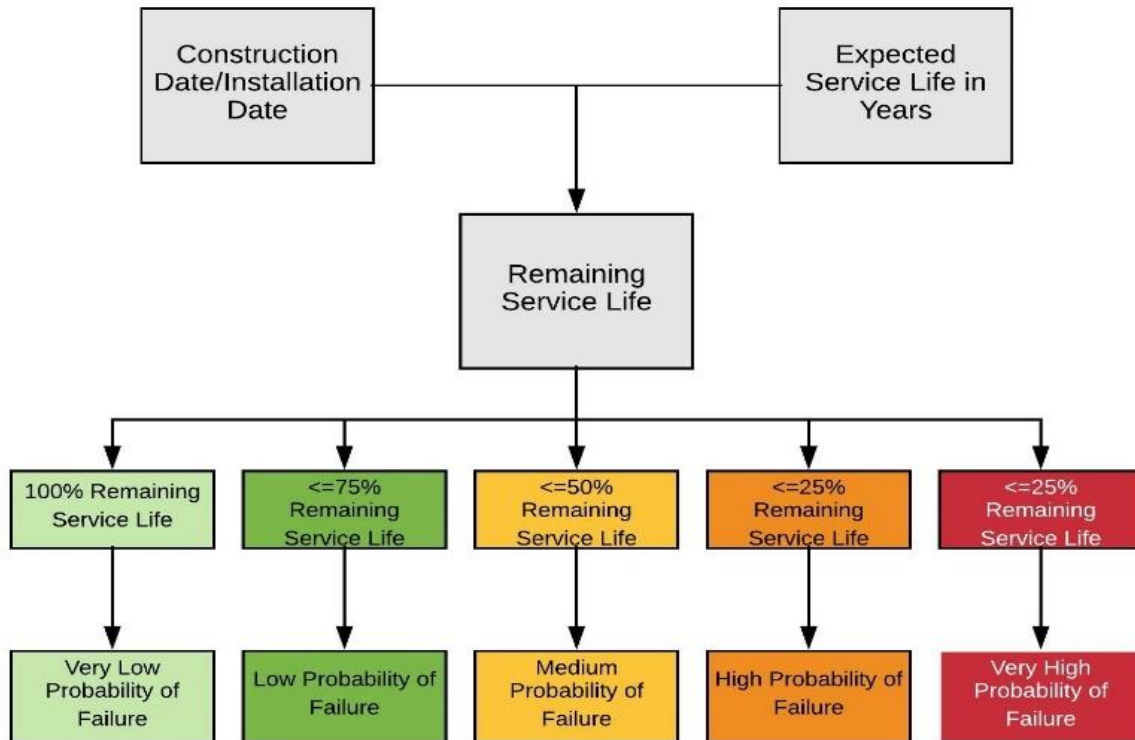
For this asset management plan, condition and remaining serviceable life was the sole determinant of Probability of Failure. For example, an asset with a condition rating of “1” would have a “Very High” probability of failure, while an asset with a condition rating of “5” would have a “Very Low” probability of failure. For this asset management plan, the thresholds for probability of failure were scaled based off the technical level of service for the asset class. For all asset classes except for Hard Surface Roads and Bridges and Culverts, the probability of failure calculation was the inverse of the condition rate.

Further, when condition data was not available an asset risk was be calculated based on the remaining service life of the asset. For example, for many of the vehicles in the asset registry condition data was not available. Thus, in order to create a risk profile for the asset the remaining service life of the asset was used. This process can be reviewed in 10.4.

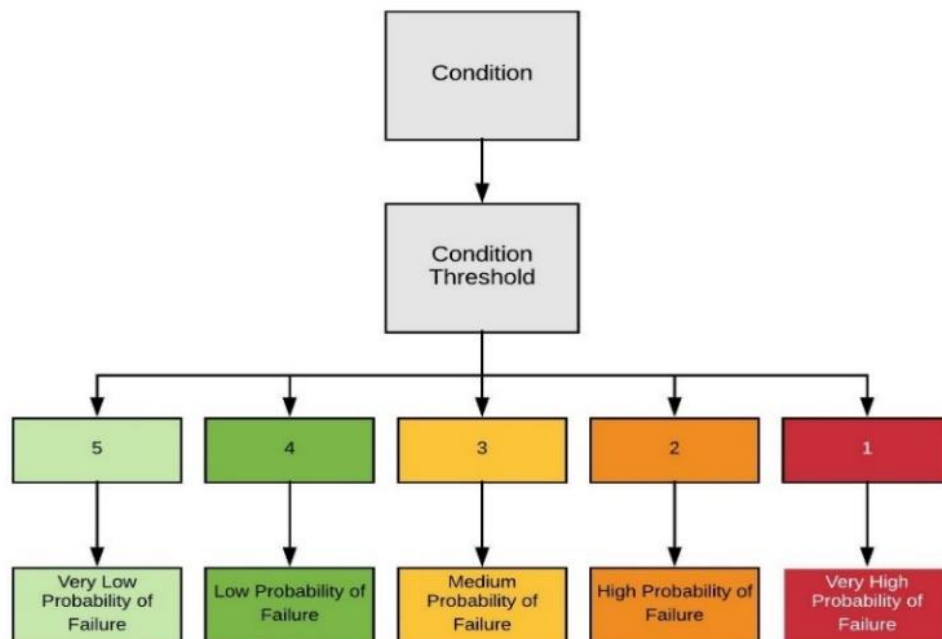
## 10.2 Consequence of Failure

The Consequence of Failure is determined for each asset class based on five weighted consequence factors: *Health and Safety, Operational & Internal Demand, Environmental, Financial, and Legal & Regulatory Compliance*

### 10.3 Calculating Risk Based on Remaining Service Life



### 10.4 Calculating Risk Based off Condition



## 10.5 Consequence of Failure Factors

Health and Safety: Considers impacts to Public and Employee health and safety of asset failure

Operational & Internal Demand: Considers losses or interruptions to internal operations and services provided both internally and externally as a result of asset failure

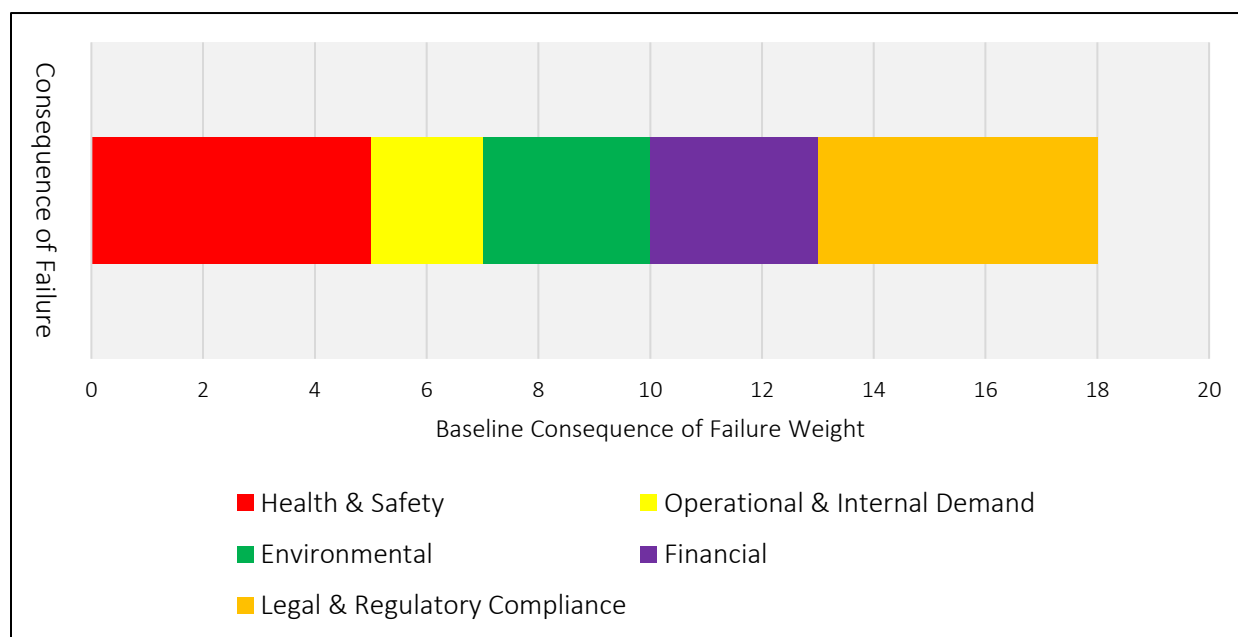
Environmental: Considers direct impacts to the natural environment as the result of asset failure

Financial: Considers financial impacts to the organization as a result of asset failure

Legal & Regulatory Compliance: Considers legal implications and ability to meet regulatory requirements as a result of asset failure

## 10.6 Consequence of Failure: Establishing Baseline Risk

These factors, when considered collectively were given a baseline weighting factor in order to justify their relative importance against other factors. This weighting factor is a number that would give each asset class a pre-conceived/overall risk weighting. This was necessitated in order to justify each assets baseline risk despite it's condition ratings. To establish this Baseline Risk workshops were held with Staff in order to appropriately classify the most important (highest weighted) consequence of failure factors. The results of these workshops are illustrated in Figure 2.



10.0 - 3 Baseline Risk Calculation



## 10.7 Consequence of Failure: Quantifying the Qualitative Methodology

To further quantify each asset class and create full risk profiles for each of the factors: Health and Safety, Internal Demand/Operational Environmental, Financial and Regulatory. UEM converted the qualitative consequence of failure matrix into a quantitative format. Each respective qualitative category was converted to a number that ranged from 1-10. Where 1 means very low consequence of failure impact and 10 meaning very high consequence of failure impact.

Consequence of Failure		Environmental
1-2	Insignificant	Very negligible impact. Reversible within 1 week.
3-4	Low	Material damage of local importance. Minor, short-term (within 6 months) very isolated damage to the environment.
5-6	Medium	Significant short-term (< 1 year) local damage to the environment.
7-8	High	Significant long-term (> 1 year) widespread damage to the environment.
9-10	Severe	Major long-term (+5 years) or permanent widespread damage to the environment.

Consequence of Failure		Health & Safety
1-2	Insignificant	No obvious potential for injury or affects to health.
3-4	Low	Potential for minor injury or affects to health of an individual. Full recovery is expected.
5-6	Medium	Possibility of serious injuries or affects to health. May affect one or more individuals and/or result in short-term disabilities.
7-8	High	Probable likelihood for serious injury or affects to the health of one or more individuals with a possibility for loss of a life and the possibility of long-term disabilities.
9-10	Severe	Definite certainty for death or multiple deaths with possible permanent disabilities.

Consequence of Failure		Financial
1-2	Insignificant	Cost of Reactive response and replacement is 100% of the cost of proactive replacement and an increase cost to providing service is negligible
3-4	Low	Cost of Reactive response and replacement is 110% to 120% of proactive replacement and an Increase in cost to providing service is over 5%
5-6	Medium	Cost of Reactive response and replacement is over 110% to 125% of proactive replacement and an Increase in cost to providing service is over 10%
7-8	High	Cost of Reactive response and replacement is over 125% to 200% of proactive replacement and an Increase in cost to providing service is over 25%
9-10	Severe	Cost of Reactive response and replacement is over 200% of proactive replacement and an Increase in cost to providing service is over 50%

Consequence of Failure		Legal & Regulatory Compliance
1-2	Insignificant	No prosecution
3-4	Low	Potential claims by an individual possible.
5-6	Medium	Possible Claims and prosecution by public groups or Government Agencies.
7-8	High	Probable Claims and prosecution by interest groups or Government Agencies.
9-10	Severe	Definite claims and prosecution by interest groups or government agencies.

Consequence of Failure		Operational & Internal Demand
1-2	Insignificant	Small number of customers experiencing service disruption: Under 10 people affected
3-4	Low	Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day
5-6	Medium	Significant localized service disruption: 200 - 1,000 people affected, Service interrupted 1-5 days
7-8	High	Major localized disruption: 1,000 - 5,000 people affected, Service interrupted 5-30 days
9-10	Severe	Township-wide service disruption: Over 5,000 people affected service interruption over 30 days

Asset Classes	Consequence of Failure Score Card					
	<u>Health and Safety</u>	<u>Internal Demand/Operational</u>	<u>Environmental</u>	<u>Financial</u>	<u>Legal and Regulatory Compliance</u>	<u>Total Consequence of Failure Score</u>
Hard Surface Roads	10	5	3	10	3	31
Gravel Roads	10	5	4	10	3	32
Bridges and Culverts	10	5	3	10	6	34
Buildings and Facilities	2	4	3	8	3	20
Work, Park, and Building Department Vehicles and Equipment	1	8	2	6	3	20
Fire Vehicles and Tires	2	8	2	8	4	24
Parks and Recreation	5	6	2	7	3	23
Fire Reservoirs	2	7	2	8	8	27
Streetlights and Poles	2	5	2	5	6	20
Sidewalks	4	5	2	7	4	22
Fire Equipment	7	8	2	8	4	29
Regulatory/Warning Signs	7	5	2	8	9	31
Storm Water Management Ponds and Storm Sewer	1	4	8	6	8	27
Trees	1	3	8	3	2	17

10.0 - 4 Consequence of Failure Scores all Asset Classes

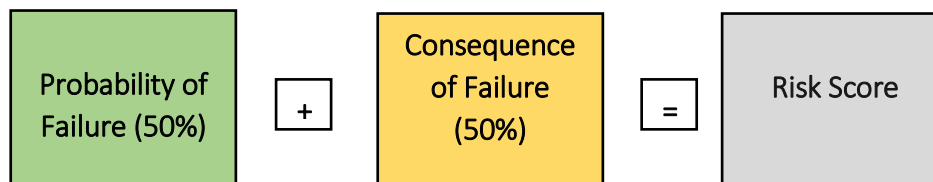
## 10.8 Consequence of Failure Classifications: Puslinch AMP Asset Classes



10.0 - 5 Consequence of Failure Classification all Asset Classes (Stacked Bar Chart)

## 10.9 Technical Walkthrough: Calculating Risk & Risk Profiling

Once calculated, Probability of Failure and Consequence of Failure are combined to create a Risk Score. Risk levels were set on a five-point scale: *Very High, High, Moderate, Low, and Very Low*.



10.0 - 6 Risk Calculation

There are many different methods for calculating a risk score, UEM for this asset management plan employed a simple ratio algorithm where a risk score is weighted 50% on its Consequence of Failure and 50% on its Probability of Failure. **Figure 6** illustrates that a risk score is devised first from the addition of the Probability of Failure and Consequence of Failure scores and second divided by two to generate a Risk Score.

**Figure 6** was intentionally designed to showcase that a high Probability of Failure when joined to a low Consequence of Failure results in a Risk score of 3. The result is the same if there is a high Consequence of Failure and low Probability of Failure, resulting in a Risk score of 3.

Probability of Failure	Addition	Consequence of Failure	Division	Risk Score
5	+	1	÷2	3
4	+	2	÷2	3
3	+	3	÷2	3
2	+	4	÷2	3
1	+	5	÷2	3

10.0 - 7 Example Risk Calculation

### 10.10 Risk: Summary of Methods

The methodology in to which the Consequence of Failure and the Probability of Failure is combined to generate a risk score is as follows:

1. Classification of Probability of Failure
  - a. The condition data for each asset was converted from its condition index score (BCI, PCI, Vehicle Kilometers or Condition Rating) 1-5 to a number between 1 and 5. If an asset was in “Critical” condition then it would have a high Probability of Failure or a 5. Further – if an asset was in “Excellent” condition then it would

have a low Probability of Failure or a 1. This classification procedure is summarized below.

- i. Excellent = 1
  - ii. Good = 2
  - iii. Fair = 3
  - iv. Poor = 4
  - v. Critical = 5
2. Classification of Consequence of Failure – Based on UEM’s experience, the Consequence of Failure for each asset type in the asset registry for the Township of Puslinch were quantified as follows:
- a. Each Asset was given a baseline Consequence of Failure score – which is consistent across all asset types. This is to indicate that Risk is always a factor to an asset. (Reference to 10.6)
  - b. Subsequently, each of the Consequence of Failure factors was given a score on a scale between 1 to 10 and then summed to give a total Consequence of Failure score.
    - i. A score of 1 means that the Consequence of Failure impact of that factor would be low on that asset class.
    - ii. A score of 10 means that the Consequence of Failure impact of that factor would be high on that asset class.
  - c. Standardization of the Consequence of Failure Score
    - i. The next step was to standardize the Consequence of Failure score to the same maximum and minimum values as the Probability of Failure score.

Standardizing Consequence of Failure Scores		
Hard Surface Roads COF Score: 31 -> 5	Gravel Roads COF Score: 32 -> 5	Bridges and Culverts COF Score: 34 -> 5
Buildings and Facilities COF Score: 20 -> 3	Work, Park, and Building Department Vehicles and Equipment COF Score: 20 -> 2	Fire Vehicles COF Score: 20 -> 3
Parks and Recreation COF Score: 24 -> 3	Fire Reservoirs COF Score: 23 -> 4	Streetlights and Poles COF Score: 20 -> 2
Sidewalks COF Score: 22 -> 2	Fire Equipment COF Score: 29 -> 4	Regulatory/Warning Signs COF Score: 31 -> 4

Standardizing Consequence of Failure Scores		
Storm Water Management COF Score: Ponds 27 -> 3	Storm Sewers COF Score: 27 -> 3	Street Trees COF Score: 17-> 1

10.0 - 8 Standardization of Consequence of Failure Scores

### 10.11 10 Year Capital Plan Risk Summaries

This following will illustrate the relative risk across all asset classes included in the capital plan. The table below encompass the spread of risk in a risk matrix in order to map the relative risk incurred by the Township should they defer the projects proposed in the capital plan.

### 10.12 Risk Matrix: 10 Year Capital Plan Total Costs

		(POF)				
All Assets Consequence of Failure	(COF)	\$0.00	\$0.00	\$0.00	\$0.00	\$8,510,241.38
		\$0.00	\$0.00	\$0.00	\$3,380,405.02	\$0.00
		\$0.00	\$0.00	\$3,970,797.03	\$0.00	\$0.00
		\$0.00	\$928,584.42	\$366,837.37	\$0.00	\$0.00
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

10.0 - 9 10 Year Capital Plan Total Expenditure

## 11.0 Asset Class Risk Summaries

In the following pages, each asset class is summarized using the exact logic and procedures necessary for risk profiling. These logics have already been stated in Quantifying the Qualitative Methodology section. The financial figures included in each summary page represent the outputs from the 10-year capital plan. Thus, for all asset classes that are not included in the capital plan, there will be a “No Data” in the title header.

## 11.1 Bridges

### Consequence of Failure Descriptions

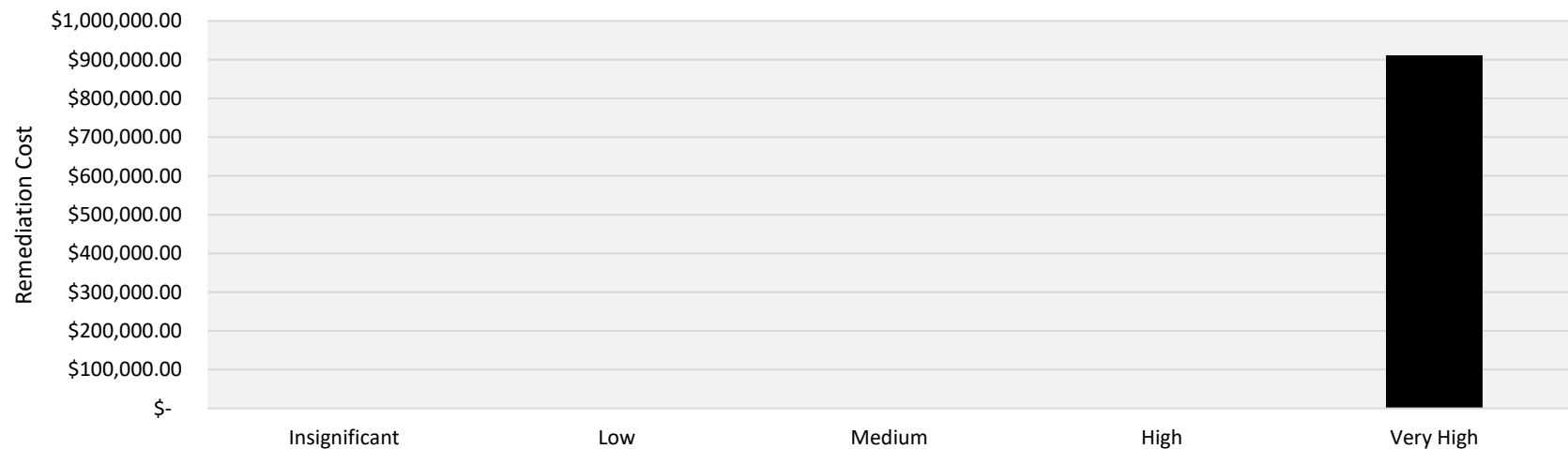
**Health and Safety:** Definite certainty for death or multiple deaths with possible permanent disabilities.

**Operational & Internal Demand:** Significant localized service disruption: 200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Material damage of local importance. Minor, short-term (within 6 months) very isolated damage to the environment.

**Financial:** Cost of Reactive response and replacement are over 200% of proactive replacement or Increase in cost to providing service is over 50%

**Legal & Regulatory Compliance:** Possible Claims and prosecution by public groups or Government Agencies.



Probability of Failure (PoF)					
Bridges	Consequence of Failure (CoF)	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ 910,000.00
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -



## 11.2 Culverts

### Consequence of Failure Descriptions

**Health and Safety:** Definite certainty for death or multiple deaths with possible permanent disabilities.

**Operational & Internal Demand:** Significant localized service disruption: 200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Material damage of local importance. Minor, short-term (within 6 months) very isolated damage to the environment.

**Financial:** Cost of Reactive response and replacement are over 200% of proactive replacement or Increase in cost to providing service is over 50%

**Legal & Regulatory Compliance:** Possible Claims and prosecution by public groups or Government Agencies.



Probability of Failure (PoF)					
Culverts	Consequence of Failure (CoF)	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ 970,000.00
		\$ -	\$ -	\$ -	\$ 130,000.00
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -

### 11.3 1 Lift, 2 Lift, Gravel and Surface Treated Roads

#### Consequence of Failure Descriptions

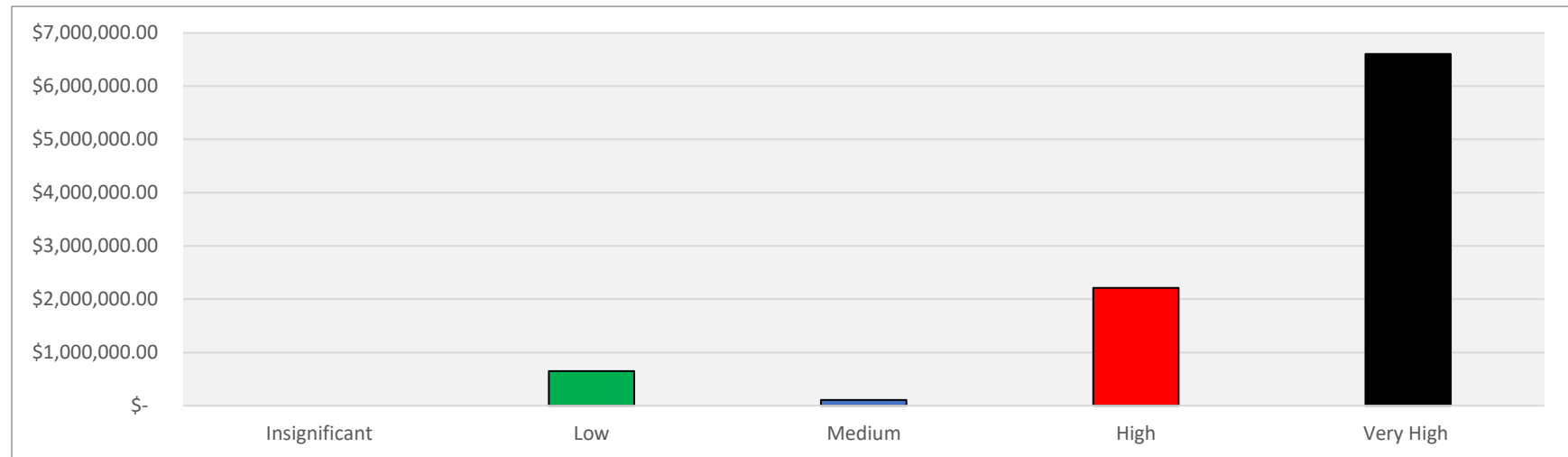
**Health and Safety:** Definite certainty for death or multiple deaths with possible permanent disabilities.

**Operational & Internal Demand:** Significant localized service disruption: 200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Material damage of local importance. Minor, short-term (within 6 months) very isolated damage to the environment.

**Financial:** Cost of Reactive response and replacement are over 200% of proactive replacement or Increase in cost to providing service is over 50%

**Legal & Regulatory Compliance:** Potential claims by an individual possible.



Probability of Failure (PoF)				
Road Surfaces	Consequence of Failure (CoF)	\$-	\$-	\$-
		\$-	\$-	\$2,212,310.02
		\$-	\$-	\$-
		\$-	\$650,000.00	\$-
		\$-	\$-	\$-

## 11.4 Buildings and Facilities

### Consequence of Failure Descriptions

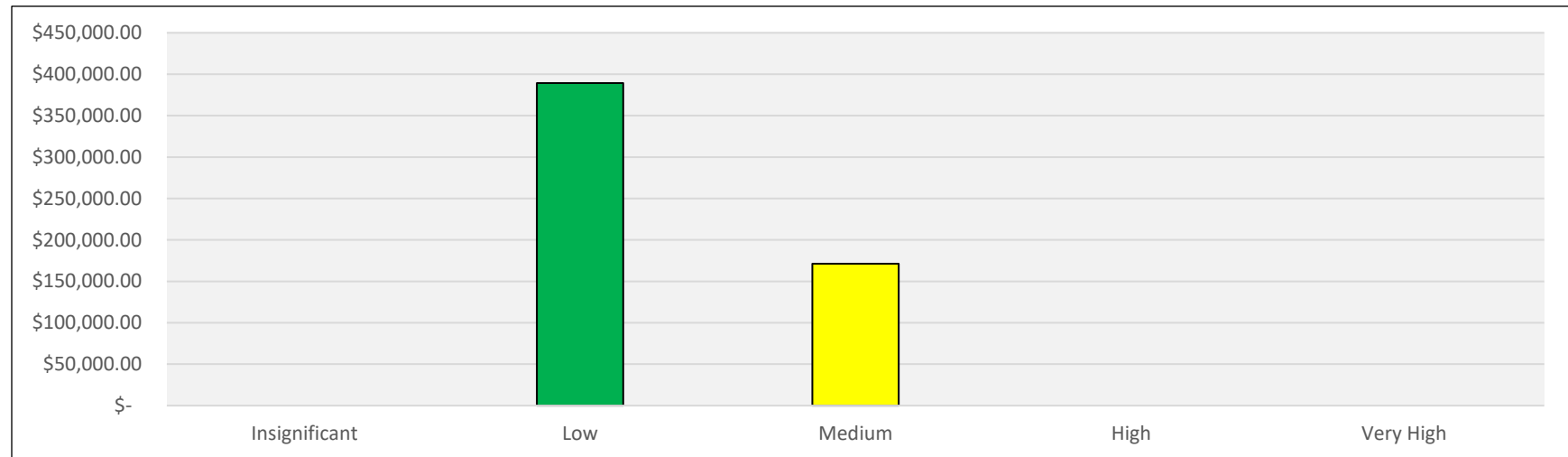
**Health & Safety:** No obvious potential for injury or affects to health.

**Legal & Regulatory Compliance:** Claims by an individual possible.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Environmental:** Material damage of local importance. Minor, short-term (within 6 months) very isolated damage to the environment.

**Operational & Internal Demand:** Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day



Probability of Failure (PoF)					
Buildings and Facilities	Consequence of Failure (CoF)	\$-	\$-	\$-	\$-
		\$-	\$-	\$-	\$-
		\$-	\$-	\$171,273.62	\$-
		\$-	\$249,984.10	\$139,337.95	\$-
		\$-	\$-	\$-	\$-

## 11.5 Parks and Recreation

### Consequence of Failure Descriptions

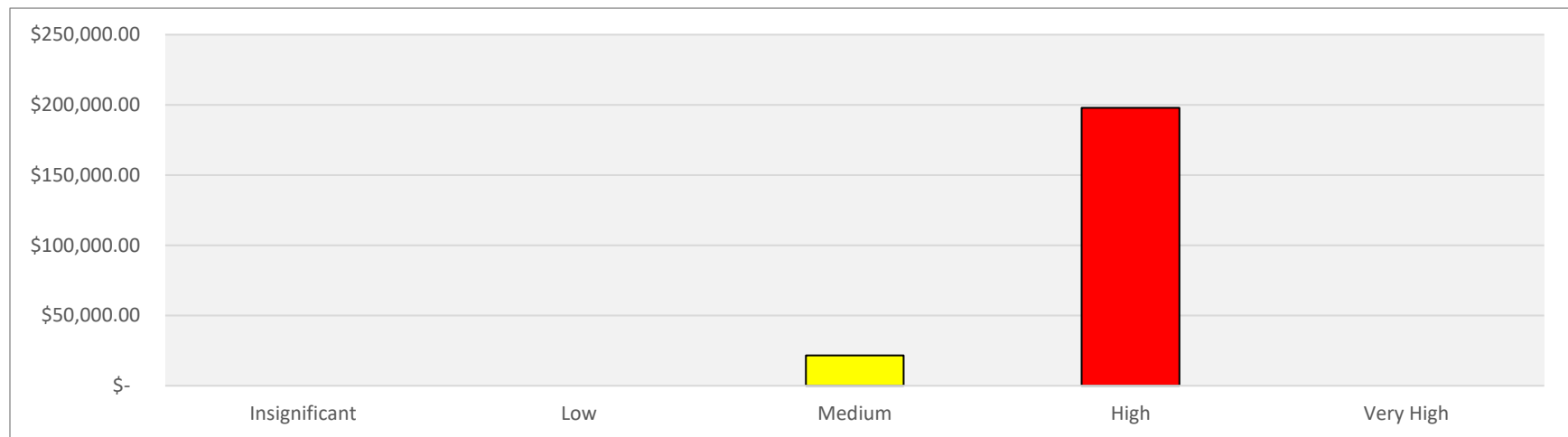
**Health and Safety:** Possibility of serious injuries or affects to health. May affect one or more individuals and/or result in short-term disabilities.

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Legal & Regulatory Compliance:** Potential claims by an individual possible



Probability of Failure (PoF)					
Parks and Recreation	Consequence of Failure (CoF)	\$-	\$-	\$-	\$66,668.00
		\$-	\$-	\$-	\$131,243.00
		\$-	\$-	\$-	\$-
		\$-	\$-	\$-	\$-
		\$-	\$-	\$21,615.00	\$-

## 11.6 Work, Parks and Recreation, and Building Department Vehicles – Licensed & Unlicensed

### Consequence of Failure Descriptions

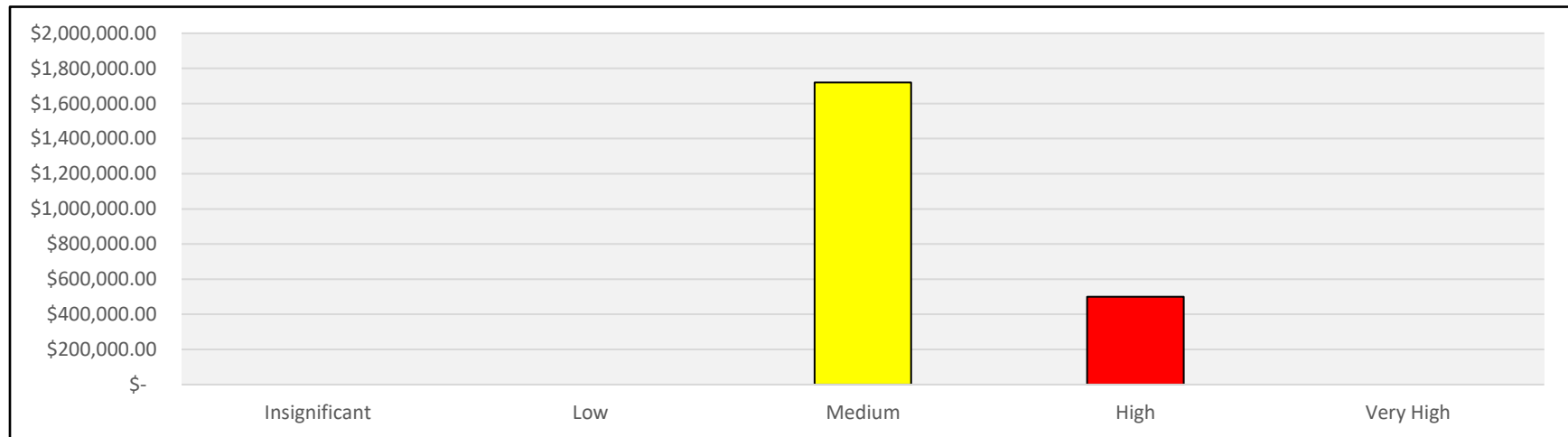
**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Major localized disruption: 1,000 - 5,000 people affected, Service interrupted 5-30 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement is over 110% to 125% of proactive replacement or Increase in cost to providing service is over 10%

**Legal & Regulatory Compliance:** Potential claims by an individual possible



Probability of Failure (PoF)					
Works, Parks, Building Dpts.	Consequence of Failure (CoF)	\$-	\$-	\$-	\$-
		\$-	\$-	\$-	\$500,000.00
		\$-	\$-	\$1,705,000.00	\$-
		\$-	\$-	\$78,000.00	\$-
		\$-	\$-	\$-	\$-

## 11.7 Fire Licensed Vehicles (Vehicles and Tires)

### Consequence of Failure Description

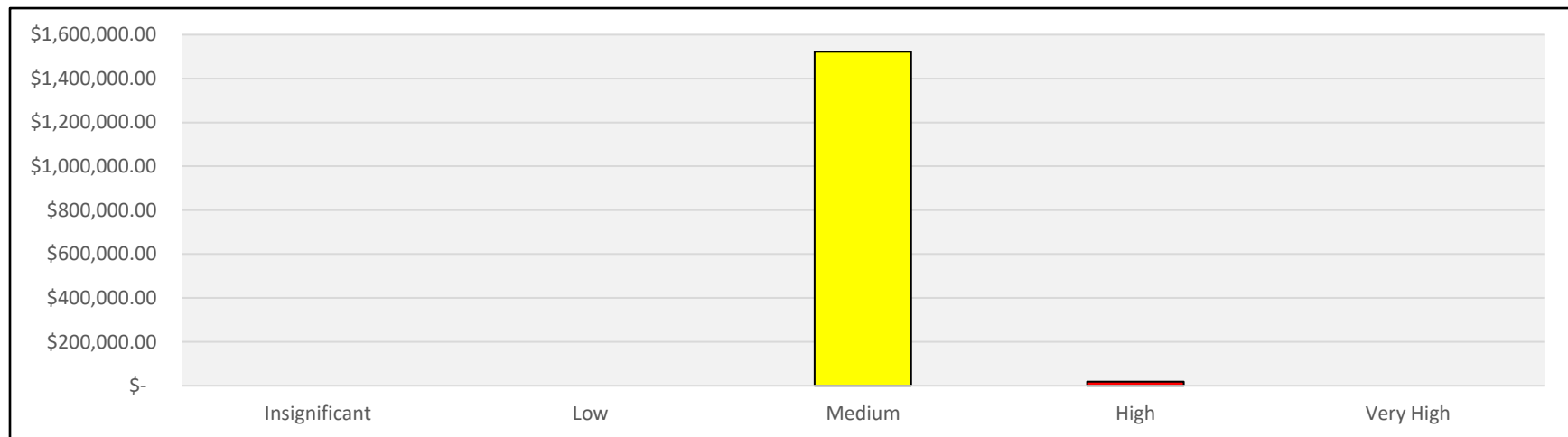
**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Major localized disruption: 1,000 - 5,000 people affected, Service interrupted 5-30 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Legal & Regulatory Compliance:** Cost of Reactive response and replacement is 110% to 120% of proactive replacement or Increase in cost to providing service is over 5%



Probability of Failure (PoF)				
Fire Licensed Vehicles	Consequence of Failure (CoF)	\$-	\$-	\$-
		\$-	\$-	\$20,384.00
		\$-	\$1,526,666.00	\$-
		\$-	\$-	\$-
		\$-	\$-	\$-

## 11.8 Fire Equipment

### Consequence of Failure Descriptions

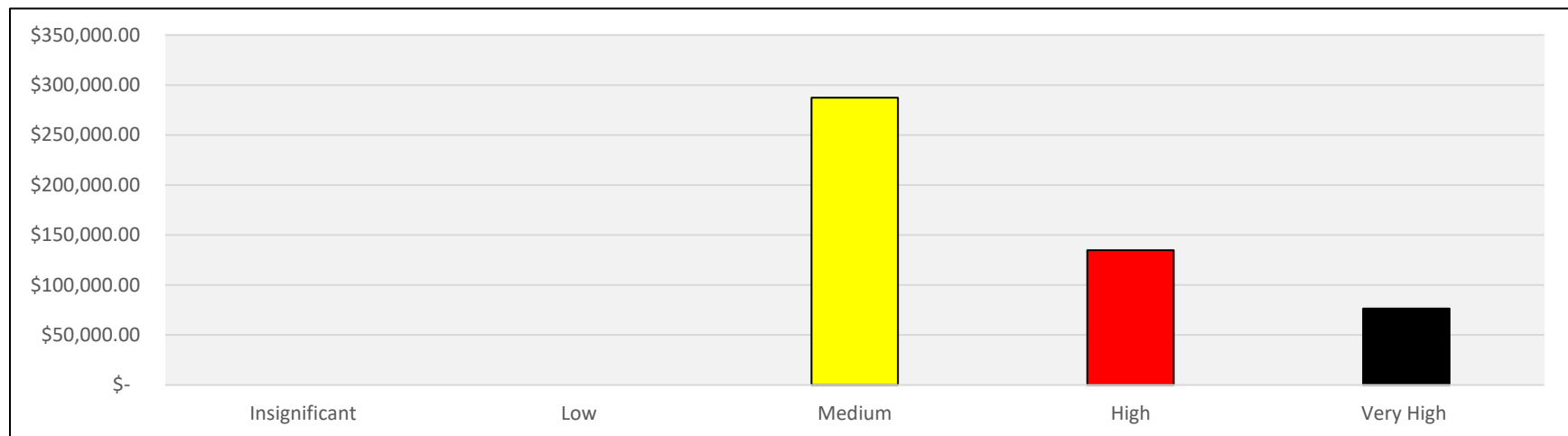
**Health and Safety:** Probable likelihood for serious injury or affects to the health of one or more individuals with a possibility for loss of a life and the possibility of long-term disabilities.

**Operational & Internal Demand:** Major localized disruption: 1,000 - 5,000 people affected, Service interrupted 5-30 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Legal & Regulatory Compliance:** Potential claims by an individual possible.



Probability of Failure (PoF)				
Fire Equipment	Consequence of Failure (CoF)	\$-	\$-	\$-
		\$-	\$-	\$-
		\$-	\$-	\$-
		\$-	\$-	\$-
		\$-	\$-	\$-

## 11.9 Storm Water Management Ponds

### Consequence of Failure Descriptions

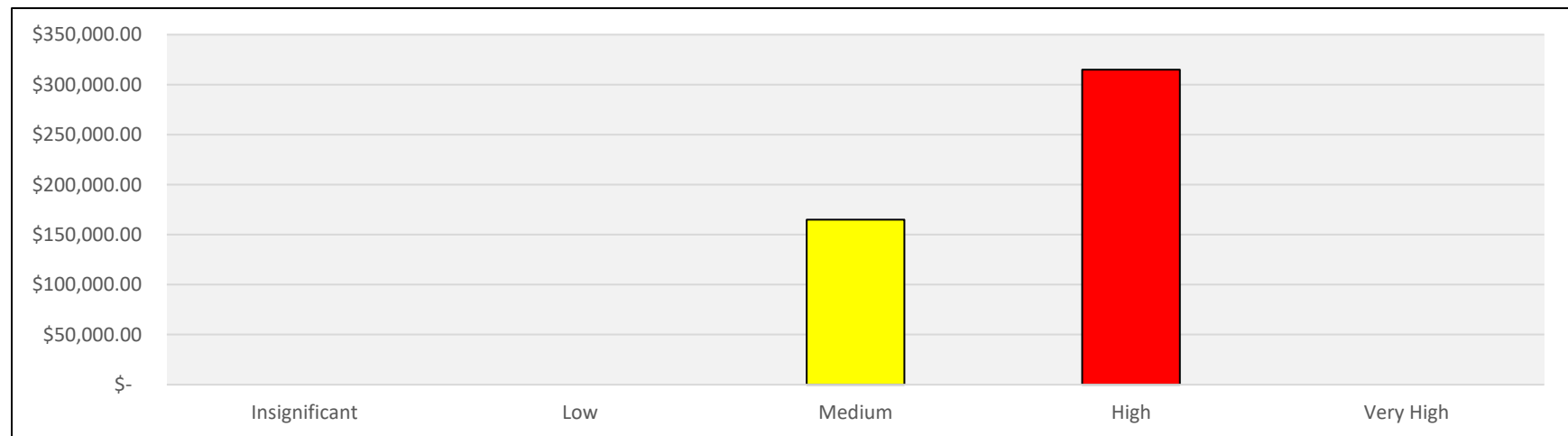
**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day

**Environmental:** Significant long-term (> 1 year) widespread damage to the environment.

**Financial:** Cost of Reactive response and replacement is over 110% to 125% of proactive replacement or Increase in cost to providing service is over 10%

**Legal & Regulatory Compliance:** Possible Claims and prosecution by public groups or Government Agencies



Probability of Failure (PoF)				
Storm Water Management Ponds	Consequence of Failure (CoF)	\$-	\$-	\$-
		\$-	\$-	\$315,000.00
		\$-	\$-	\$-
		\$-	\$-	\$-
		\$-	\$165,000.00	\$-
		\$-	\$-	\$-



### 11.10 Streetlights and Poles (No Data)

#### Consequence of Failure Descriptions

**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement is over 110% to 125% of proactive replacement or Increase in cost to providing service is over 10%

**Legal & Regulatory Compliance:** Probable Claims and prosecution by interest groups or Government Agencies

Insignificant	Low	Medium	High	Very High

Probability of Failure (PoF)					
Streetlight and Poles	Consequence of Failure (CoF)				

## 11.11 Sidewalks

### Consequence of Failure Descriptions

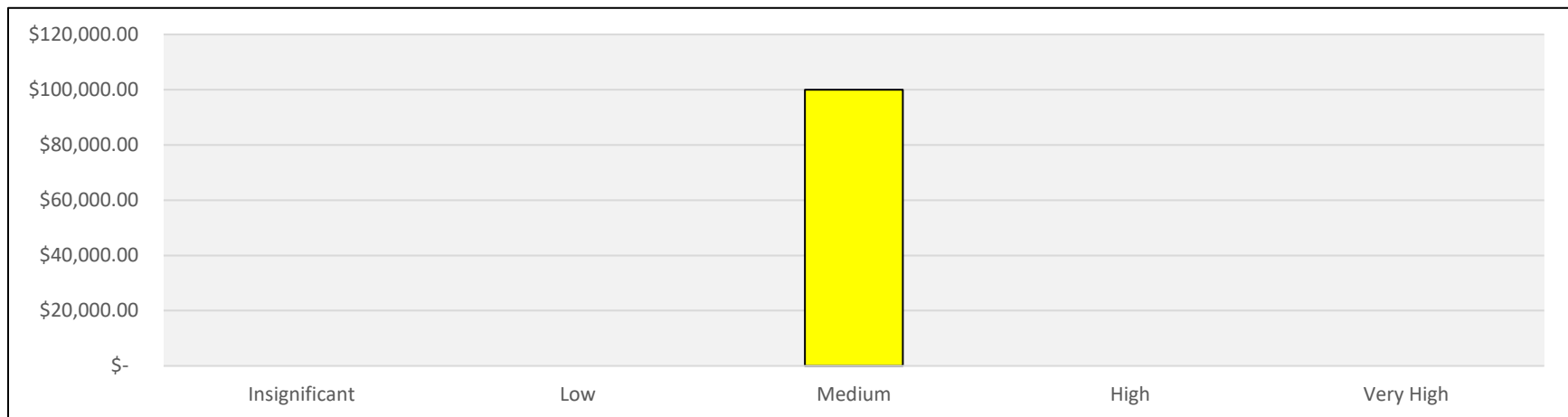
**Health and Safety:** Potential for minor injury or affects to health of an individual. Full recovery is expected.

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Legal & Regulatory Compliance:** Potential claims by an individual possible.



Probability of Failure (PoF)					
Sidewalks	Consequence of Failure (CoF)	\$-	\$-	\$-	\$-
		\$-	\$-	\$-	\$-
		\$-	\$-	\$-	\$-
		\$-	\$-	\$100,000.00	\$-
		\$-	\$-	\$-	\$-

## 11.12 Fire Reservoirs (No Data)

### Consequence of Failure Descriptions

**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Major localized disruption: 1,000 - 5,000 people affected, Service interrupted 5-30 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Legal & Regulatory Compliance:** Probable Claims and prosecution by interest groups or Government Agencies.


Probability of Failure (PoF)					
Fire Reservoirs	Consequence of Failure (CoF)				

### 11.13 Regulatory & Warnings Signs (No Data)

#### Consequence of Failure Descriptions

**Health and Safety:** Probable likelihood for serious injury or affects to the health of one or more individuals with a possibility for loss of a life and the possibility of long-term disabilities.

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days

**Environmental:** Very negligible impact. Reversible within 1 week.

**Financial:** Cost of Reactive response and replacement are over 125% to 200% of proactive replacement or Increase in cost to providing service is over 25%

**Legal & Regulatory Compliance:** Definite claims and prosecution by interest groups or government agencies.

Insignificant	Low	Medium	High	Very High

Probability of Failure (PoF)					
Regulatory & Warnings Signs	Consequence of Failure (CoF)				

### 11.14 Storm Sewers (No Data)

#### Consequence of Failure Descriptions

**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day

**Environmental:** Significant long-term (> 1 year) widespread damage to the environment.

**Financial:** Cost of Reactive response and replacement is over 110% to 125% of proactive replacement or Increase in cost to providing service is over 10%

**Legal & Regulatory Compliance:** Probable Claims and prosecution by interest groups or Government Agencies.

Insignificant	Low	Medium	High	Very High

Probability of Failure (PoF)					
Storm Sewers	Consequence of Failure (CoF)				

### 11.15 Street Trees (No Data)

#### Consequence of Failure Descriptions

**Health and Safety:** No obvious potential for injury or affects to health.

**Operational & Internal Demand:** Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day

**Environmental:** Significant long-term (> 1 year) widespread damage to the environment.

**Financial:** Cost of Reactive response and replacement is 110% to 120% of proactive replacement or Increase in cost to providing service is over 5%

**Legal & Regulatory Compliance:** No prosecution


Probability of Failure (PoF)					
Street Trees	Consequence of Failure (CoF)				

## 12.0 Financial Plan

### 12.1 Legislative Requirement

Ontario Regulation 588/17 requires that for the proposed level of service a municipality shall prepare a 10-year lifecycle management and financial strategy. The regulation requires that the lifecycle management and financial strategy set out the following:

- An identification of the lifecycle activities that would need to be undertaken to achieve the proposed level of service for each asset category;
- An identification of the costs of undertaking the lifecycle activities;
- An identification of the annual funding projected to be available;
- An explanation of the financial options examined; and
- An identification of any funding shortfall and an explanation of how the funding shortfall and associated risks will be addressed.

Section 8-9 identified the lifecycle activities (and the projected costs associated with those activities) that would need to be undertaken to achieve the proposed level of service for each asset category. Sections 12-13 identify the proposed annual funding projected to be available, an explanation of the financial strategy options examined and an explanation of how any funding shortfall and associated risks will be addressed.

Under this section three financial strategy options were developed. It should be noted that a number of assumptions were required to be made in the development of these options, as well as financial policy considerations. These assumptions and financial policy considerations are discussed below.

### 12.2 Financial Strategy Assumptions

The information used in the development of the financial strategy options was provided by Township staff and UEM, with the three financial strategy options being based on funding the asset management lifecycle activities as detailed in Section 8-9. The following assumptions used in the development of these options were reviewed with Township staff and considered reasonable.

### 12.3 Capital Financing Assumptions

It has been assumed that certain capital grants would be available towards financing the asset management lifecycle activities. The grant amounts contained in the financial strategy are consistent with those outlined in the Township's 2019 Proposed Capital Budget, Township staff direction, and consist of the following grant sources:

- Ontario Community Infrastructure Grant (OCIF)
- Gas Tax Funding
- County Accessibility Grant

It should be noted that the OCIF grant is assumed to only be available to 2020 as this is the last year of the official grant program. Should this grant program be renewed it is recommended that the financial strategy be reviewed, and adjustments made at that time.

It has also been assumed that a portion of the Aggregate Revenue received annually by the Township would be available for financing AMP capital related activities. As well, approximately \$80 thousand has been assumed to be available from the Public Works DC Reserve Fund for financing the asset management lifecycles activities. This is consistent with the 2014 Development Charges Study that identified 15.6% of roads projects to be deemed growth-related, and therefore eligible for use of DC funds.

The balance of capital financing necessary to undertake the recommended lifecycle activities is assumed to come from the capital asset replacement discretionary reserve, or the use of long-term debt. It should be noted that the use of long-term debt will only be considered for financing asset management lifecycles activities when available funds are insufficient in the capital asset replacement discretionary reserve. Insufficient funds are deemed to occur when the capital asset replacement discretionary reserve reaches its recommended minimum target balance. The financial policies regarding the use of long-term debt and the capital asset replacement discretionary reserve recommended target balances is discussed later in this section.

Assumptions on the sources of capital financing are also discussed under Annual Capital Levy Assumptions and Debt Management Assumptions, as well as under Financial Policy Considerations regarding the Recommended Asset Management Lifecycle Activity Funding Target and Recommended Long-Term Debt Capacity Restrictions

#### **12.4 Capital Asset Replacement Discretionary Reserve Assumptions**

There are several discretionary reserves which have been established by the Township for a variety of purposes. All discretionary reserves were reviewed with Township staff, and capital asset replacement related reserves were identified. It is assumed that the projected balances contained in these capital asset replacement related discretionary reserves would be available towards the funding of asset management lifecycle activities as recommended in this report. The sum-total of the 2019 opening balances of these capital asset replacement related discretionary reserves is estimated at \$2,331,214. For purposes of the development of the financing strategy options it is assumed that there will be one consolidated discretionary reserve for capital asset management lifecycle activities. It is assumed that contributions to this reserve will come from the Township's annual capital levy, with annual draws going towards funding the recommended asset management lifecycle activities. Assumptions regarding the annual AMP capital levy and the asset management lifecycle activities is discussed below.

Assumptions have also been made regarding the extent to which annual draws can be made from this reserve. It is assumed that the capital asset replacement discretionary reserve can only be drawn on to fund annual asset management lifecycle activities to the extent that funds in the reserves exceed the recommended minimum target balance. Policies on the Recommended Capital Asset Replacement Discretionary Target Balances are discussed further under Financial Policy Considerations



## **12.5 Asset Management Lifecycle Activities Assumptions**

The asset management lifecycle activities and associated costs used in the development of the financial strategy options are as detailed in Section 8-9 of this report. The costs as detailed in Section 8-9 are however reflected in 2019 dollars. For purposes of developing the financial strategy options, the asset management lifecycle activities costs have been inflated to the year in which they are recommended to be incurred. The inflation of these costs is necessary in developing a realistic financial strategy as the Township's tax levy that will be required to, in-part, fund the asset management lifecycle activities will be in future dollars. It is assumed that the asset management lifecycle activities costs inflate annually by 2%.

## **12.6 Annual AMP Capital Levy Assumptions**

Each year, as part of the Townships annual budget setting process a capital levy is provided for in the annual estimates of costs to be funded from the current tax levy. In 2018 the Township's capital levy was established at \$690,849, with a one-time adjustment of \$232,500 being made to accommodate an operational matter related to OMERS. It is assumed that the base budget for the capital levy has been adjusted back in 2019 to a normalized level of \$923,349. Upon discussions with Township staff it was directed that 75% of the 2019 base capital levy, or \$692,512, be assumed to be dedicated towards the funding of asset management related operating costs. For purposes of developing the three financial strategy options the asset management related operating costs shall consist of:

- transfers to the capital asset replacement discretionary reserve, and
- servicing of any asset management lifecycle activity related long-term debt.

## **12.7 Debt Management Assumptions**

In each year of the 10-year asset management lifecycle activity forecast, total capital financing must equal total capital expenditures. In years where available AMP capital financing from all sources, including available funds from the capital asset replacement discretionary reserve are insufficient to finance the inflated costs related to the asset management lifecycle activities, it is assumed that long-term debt will be used to balance capital financing with capital expenditures.

When debt is considered necessary in a given year, it is assumed that that the long-term debt is issued at the end of that year, with long-term debt servicing commencing in the following year. It is assumed that long-term debt will have a term of 10 years, with an interest rate of 3.5%. This is considered conservative as the Township has authority to issue long-term debt for financing capital assets for a term of the lesser of 40 years, or the useful life of the asset being financed by the long-term debt. The majority of assets impacted by the asset management lifecycle activities have useful lives far in excess of 10 years.

It is assumed that servicing of long-term debt will be provided from the annual capital levy, with the unallocated balance of the annual capital levy being transferred into the capital asset replacement discretionary reserve where it will be available, subject to the minimum balance policy, to fund the asset management lifecycle activities

The financial policies regarding the use of long-term debt are discussed later in this section.

## 13.0 Financial Policy Considerations

### 13.1 Recommended Asset Management Lifecycle Activity Target Funding Levels

One of main objectives of the financial strategy options is to achieve a sustainable level of funding towards asset management related costs. For purposes of this Financial Policy Consideration, asset management related costs include the cost associated with asset management lifecycle activities, and the costs associated with servicing long-term debt incurred for financing past asset management lifecycle activities.

It is recommended that a sustainable level of asset management funding is deemed to be achieved when total Township asset management funding is equivalent to 2% of the projected estimated capital asset replacement values of all asset classes as contained in the Township's Asset Registry. Capital asset replacement values are currently estimated at approximately \$80 million and are assumed to appreciate each year by 2%. This target level of asset management funding is considered best practice and is within the range of asset management target funding levels of other municipalities.

As noted previously it is assumed for the purposes of developing the Township's financial strategy options, the funding sources of asset management related costs consists of:

- Ontario Community Infrastructure Grant (OCIF)
- Gas Tax Funding
- County Accessibility Grant
- Aggregate Levy
- Public Works Development Charges
- AMP Capital Levy

Other than the AMP Capital Levy, all sources of funding asset management related costs have been clearly identified and quantified from the Township's 2019 Proposed Capital Budget and Township staff direction. Only the AMP Capital Levy will vary under each financial strategy option. For each financial strategy option, the AMP capital levy will increase each year at the % impact rate for each of the respective financial strategy options until the recommended asset management target funding level is achieved. Once this target funding level is achieved then only necessary increases in the Capital Levy will occur each year to ensure that the asset management target funding level is maintained.

### 13.2 Recommended Capital Asset Replacement Discretionary Reserve Target Balances

It is not uncommon for a municipality to have upper and lower target balances for their respective reserves. Under this Financial Policy Consideration, the minimum and maximum target balances of the capital asset replacement discretionary reserve be recommended such that the minimum reserve balance be set at an amount that would represent 10% of the inflated 10-year asset management lifecycle activity expenditures,

with the maximum target balance not to exceed an amount that would represent 20% of the inflated 10-year asset management lifecycle activity expenditures. For purposes of the financial strategy options, the capital asset replacement discretionary reserve shall have a minimum balance of \$1.73 million and a target balance of \$3.47 million. This Financial Policy Consideration regarding target balances are considered best practice for asset replacement related reserves and is in-line with target balances of other municipalities.

As noted earlier in this section it is assumed that contributions to this reserve will come from the Township's annual capital levy, with annual draws going towards funding the recommended asset management lifecycle activities. Assumptions have also been made regarding the extent to which annual draws can be made from this reserve. It is assumed that the capital asset replacement discretionary reserve can only be used to fund annual asset management lifecycle activities to the extent that funds in the reserves exceed the recommended minimum target balance.

### **13.3 Recommended Long-Term Debt Capacity Restrictions**

The use of long-term debt is an important financing tool that is available to the Township in providing flexibility for the financing of capital projects. The financial strategy options presented in this section identify the need for long-term debt to finance asset management lifecycle activities in years in which available funds in the capital asset replacement discretionary reserve are insufficient. When considering the use of long-term debt in the financing of capital works it is deemed best practice for a municipality to adopt a debt management policy to ensure the long-term debt is used and managed appropriately. While beyond the scope of this project to detail all possible considerations of a debt management policy, long-term debt capacity restrictions are discussed with the view to establishing a perspective on the degree to which long-term debt plays a role in the financial strategy options.

While statutory limitations of a municipality's indebtedness are provided annually by the Province, it is best practice for a municipality's debt management policy to contain tighter restrictions on the level of debt that the Township is willing to incur. Under Provincial regulation a municipality is not allowed to issue long-term debt which would result in the annual repayment of long-term debt and interest to exceed an amount that would represent 25% of that municipality's own source (net) revenues. Under this Financial Policy Consideration, it is recommended that this limit be reduced to long-term debt servicing that would not exceed an amount that would represent 10% of the Township's net revenues. Again, this is considered best practice and is used by many municipalities as an internal long-term debt capacity restriction.

## **14.0 Financial Strategy Options**

As noted earlier in this section three financial strategy options were developed. Under the financial strategy options, different levels of annual AMP capital levy funding increases are presented. The financial details of each of these options can be found in Financial Strategy Options Appendices 1.0, 2.0 and 3.0.

## 14.1 AMP Capital Levy

The three options for annual AMP capital levy funding increases are based on the tax impact that each respective increase in the annual AMP capital levy will have on the typical single family detached dwelling (median valued single family detached dwelling within the Township).

The AMP capital levy funding increase considered under the three financial strategy options are:

- Option 1 – Annual AMP Capital Levy Increase is Equivalent to a 1% Tax Impact on the Typical Single Family Detached Dwelling
- Option 2 – Annual AMP Capital Levy Increase is Equivalent to a 2% Tax Impact on the Typical Single Family Detached Dwelling
- Option 3 – Annual AMP Capital Levy Increase is Equivalent to a 3% Tax Impact on the Typical Single Family Detached Dwelling

In 2019 a \$37,500 increase in the capital levy represents a 1% tax impact on the typical single detached dwelling. \$75,000 represents a 2% impact, with \$112,500 representing a 3% impact. The dollar amounts of the capital levy increases will increase each year as projected changes occur in the Townships future assessment values, as well as changes in the medium value of a typical single family detached dwelling. A comparison of projected annual capital levy increases over the forecast period for the three financial strategy options can be found below in Table 14 - 1 (Comparison of Annual Capital Levy Increases - \$).

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	37,500	38,000	38,400	38,500	39,000	39,500	39,900	40,300	40,700	41,100
Option 2	75,000	76,500	78,000	79,500	81,000	82,700	84,200	86,387	86,563	87,294
Option 3	112,500	115,900	119,300	122,700	127,444	134,454	135,143	135,846	136,563	137,294

14.0 – 1 (Comparison of Annual Capital Levy Increases - \$)

It should be noted however that the annual AMP capital levy increase will occur each year at the same % impact rate for each of the respective financial strategy options until the recommended AMP target funding, or sustainable funding level, is achieved. Once the AMP target funding level is achieved then only necessary increases in the Capital Levy will occur to ensure that the AMP target funding level is maintained. A comparison of projected annual capital levy % impact rates over the forecast period for the three financial strategy options can be found below in Table 14 - 2 (Comparison of Annual Capital Levy Increases - %)

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Option 2	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	1.08%	0.84%	0.85%
Option 3	3.00%	3.00%	3.00%	3.00%	0.65%	0.81%	0.82%	0.83%	0.84%	0.85%

14.0 – 2 (Comparison of Annual Capital Levy Increases - %)

Table 14 - 3 (Comparison of Annual Capital Levy - \$) provides a comparison of the total capital levy generated each year under the three financial strategy options.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	730,012	768,012	806,412	844,912	883,912	923,412	963,312	1,003,612	1,044,312	1,085,412
Option 2	767,512	844,012	922,012	1,001,512	1,082,512	1,165,212	1,249,412	1,295,799	1,332,362	1,369,656
Option 3	805,012	920,912	1,040,212	1,162,912	1,190,356	1,224,810	1,259,953	1,295,799	1,332,362	1,369,656

14.0 – 3 (Comparison of Annual AMP Capital Levy - \$)

The total capital levy is allocated to between two AMP related costs:

- transfers to the capital asset replacement discretionary reserve, and
- servicing of any asset management lifecycle activity related long-term debt.

Table 14 – 4 (Comparison of Transfers of Capital Levy to Capital Asset Replacement Discretionary Reserve - \$) details for each financial strategy option the amounts that the AMP Reserve will receive from the annual capital Levy. As can be noted in this table, the transfers under Option 1 are decreasing. This is due to the significant increase in debt servicing noted in Table 14 - 5. The increased debt servicing is the direct result of the need for larger amounts of long-term debt to finance the asset management lifecycle activities under that option.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	730,012	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,973	202,655
Option 2	767,512	829,296	800,357	733,048	762,212	744,774	782,797	828,062	748,972	774,653
Option 3	805,012	910,705	932,854	924,678	923,328	877,016	881,883	917,729	860,213	897,507

14.0 – 4 (Comparison of Transfers of Capital Levy to Capital Asset Replacement Reserve - \$)

Table 14 - 5 (Comparison of Servicing of AMP Long Term Debt) details for each financial strategy option the amount of debt servicing which results from the financing of the asset management lifecycle activities. As noted, all three financial strategy options will require long-term debt in financing the asset management lifecycle activities.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	-	19,225	135,845	298,259	372,507	502,803	587,958	638,072	809,339	882,757
Option 2	-	14,716	121,655	268,464	320,299	420,438	466,615	467,737	583,390	595,003
Option 3	-	10,207	107,357	238,234	267,028	347,793	378,070	378,070	472,149	472,149

14.0 – 5 (Comparison of Servicing of AMP Long-Term Debt - \$)

## 14.2 AMP Funding

Total AMP funding represents the funding sources that the Township has directed towards funding asset management related costs. For the purposes for developing the Township's Financial Strategy options, the AMP funding sources consist of:

- Ontario Community Infrastructure Grant (OCIF)
- Gas Tax Funding
- County Accessibility Grant
- Aggregate Levy
- Public Works Development Charges
- AMP Capital Levy

The capital levy amount shown in Table 14 - 3, when combined with the other AMP funding sources as detailed in Table 14 - 6 (Other Sources of AMP Funding - \$) show the total funds dedicated by the Township towards funding asset management related costs (see Table 14 - 7).

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
<b>Total Other Sources of AMP Funding</b>	<b>709,528</b>	<b>681,030</b>	<b>522,222</b>	<b>522,222</b>	<b>532,338</b>	<b>532,338</b>	<b>532,338</b>	<b>532,338</b>	<b>532,338</b>	<b>532,338</b>

#### 14.0 – 6 (Other Sources of AMP Funding - \$)

Table 14 - 7 (Comparison of AMP Funding Levels - \$) details the Target AMP funding levels over the forecast period and compares that target level to the AMP Funding Levels provided under each financial strategy option. As can be seen in Table 14 - 7, Option 1 does not achieve a sustainable level of funding over the forecast period, whereas Option 2 achieves sustainable funding by 2026, and Option 3 achieves sustainable funding by 2023.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Target AMP Funding Level (2% of Capital Asset Values)</b>	<b>1,591,503</b>	<b>1,623,333</b>	<b>1,655,800</b>	<b>1,688,916</b>	<b>1,722,694</b>	<b>1,757,148</b>	<b>1,792,291</b>	<b>1,828,137</b>	<b>1,864,699</b>	<b>1,901,993</b>
Option 1	1,439,540	1,449,042	1,328,634	1,367,134	1,416,250	1,455,750	1,495,650	1,535,950	1,576,650	1,617,750
Option 2	1,477,040	1,525,042	1,444,234	1,523,734	1,614,850	1,697,550	1,781,750	1,828,137	1,864,700	1,901,994
Option 3	1,514,540	1,601,942	1,562,434	1,685,134	1,722,694	1,757,148	1,792,291	1,828,137	1,864,700	1,901,994

#### 14.0 - 7 (Comparison of AMP Funding Levels - \$)

### 14.3 Asset Management Lifecycle Activities Expenditures and Financing

Table 14 - 8 (Inflated Asset Management Lifecycle Activities - \$) presents the 2019-2018 asset management lifecycle activities' expenditures. As noted earlier in this section, these amounts reflect the asset management lifecycle activities' expenditure as presented in Section 8-9, but have been adjusted to account for inflation over the forecast period.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Bridges	-	-	426,564	-	-	-	-	574,343	-	-
Culverts	-	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	10,750	110,160	10,404	21,224	3,247	287,061	-	9,189	-	194,501
Fire Equipment	24,000	345,564	6,242	-	12,989	9,937	76,016	27,568	36,321	14,341
Parks and Recreation	-	35,361	22,889	-	10,824	1,987	-	34,263	-	144,881
Asphalt Road 1 Lift	1,033,125	626,983	901,774	751,961	1,496,057	746,919	492,165	724,514	257,736	593,404
Asphalt Road 2 Lift	576,739	-	-	293,316	290,337	335,978	52,434	225,243	714,764	144,747
Asphalt Road Surface Treated	-	15,146	-	-	-	143,853	-	-	-	-
Gravel Roads	65,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Pond	-	168,300	156,060	175,099	-	-	-	-	-	-
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	18,146	1,683	-	4,368	-	1,822	-	-	-	6,618
Sidewalks	-	102,000	-	-	-	-	-	-	-	-
Work licensed vehicles	250,000	397,800	260,100	-	243,547	36,435	103,607	-	292,915	298,773
Work Unlicensed vehicles	-	-	130,050	371,423	-	-	-	9,189	-	35,853
<b>Total Inflated Asset Management Lifecycle Activities Expenditures</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>

#### 14.0 - 8 (Inflated Asset Management Lifecycle Activities - \$)

The asset management lifecycle activities expenditure are financed from various AMP financing sources. These AMP financing sources consist of:

- Ontario Community Infrastructure Grant (OCIF)
- Gas Tax Funding

- County Accessibility Grant
- Aggregate Levy
- Public Works Development Charges
- Transfers the Capital Asset Replacement Discretionary Reserve
- Long-Term Debt

Only the mix of transfers from the Capital Asset Replacement Discretionary Reserve and the use of long-term debt vary among the three financial strategy options. This mix of reserve transfer/debt is determined by the financial strategy option and the proposed increase in the AMP Capital Levy in that option. Table 14 - 9 (AMP Capital Financing Sources - \$) details the 2019 – 2028 sources of capital financing

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
(Total of AMP Reserve / Long-Term Debt)	1,268,232	1,718,667	2,021,303	1,164,147	1,595,022	1,128,812	792,128	1,789,901	845,556	1,576,008
<b>Total AMP Capital Financing Sources</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>

14.0 – 9 (AMP Capital Financing Sources - \$)

The 2019-2028 AMP Reserve Financing is detailed for each financial strategy option in Table 14 - 10 (Comparison of AMP Reserve Financing - \$). The 2019-2028 Long-Term Debt Financing under each financial strategy option is detailed in Table 14 - 11 (Comparison of AMP Debt Financing - \$)

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	1,108,345	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,972	202,655
Option 2	1,145,845	829,296	800,356	733,049	762,212	744,774	782,797	828,062	748,972	774,653
Option 3	1,183,345	910,705	932,854	924,678	923,328	877,016	792,128	1,007,484	845,556	912,164

14.0 – 10 (Comparison of AMP Reserve Financing - \$)

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	159,887	969,880	1,350,736	617,494	1,083,618	708,203	416,775	1,424,361	610,584	1,373,353
Option 2	122,387	889,371	1,220,947	431,098	832,810	384,038	9,331	961,839	96,584	801,355
Option 3	84,887	807,962	1,088,449	239,469	671,694	251,796	-	782,417	-	663,844

14.0 – 11 (Comparison of AMP Debt Financing - \$)

## 14.4 Capital Asset Replacement Discretionary Reserve

As noted earlier, contributions to the capital asset replacement discretionary reserve come from the Township's annual capital levy, with annual draws going towards funding the recommended asset management lifecycle activities. With consideration given to the recommended financial policy regarding the minimum target balance of the capital asset replacement discretionary reserve, Table 14 - 12 (Comparison of AMP Reserve Balances - \$) provides a comparison of the recommended minimum target balance with the forecast reserve balances under each financial strategy option. As can be seen in this table, only under Option 3 in years 2025 and 2027 does the reserve balances exceed the minimum recommended balance. This is due to the magnitude of the asset management lifecycle activities and the need for long-term debt to finance these costs. The associated long-term debt servicing reduces the amount of capital levy that is able to be transferred into the capital asset replacement discretionary reserve, thereby reducing the reserve funds

available to finance future asset management lifecycle activities, which in-turn leads to the need for more long-term debt financing.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Minimum Balance at 10% of 10 year Capital Plan	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881
Option 1	1,952,881	1,952,880	1,952,880	1,952,880	1,952,881	1,952,880	1,952,881	1,952,880	1,952,881	1,952,881
Option 2	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881
Option 3	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	2,042,636	1,952,881	1,967,538	1,952,881

14.0 – 12 (Comparison of AMP Reserve Balances - \$)

## 14.5 Long-Term Debt

Long-term debt is required under each financing strategy option to fund the asset management lifecycle activities. The amount of required debt was previously detailed in Table 14 - 11 (Comparison of AMP Debt Financing - \$) with the resulting long-term debt servicing being previously detailed in Table 9-5 (Comparison of Servicing of AMP Long-Term Debt - \$).

Table 14 - 13 (Comparison of Outstanding Long-Term Debt - \$) details the outstanding debt balances over the forecast period for each financial strategy option. As can be seen Option 1 contains the highest level of outstanding debt at the end of the forecast period at \$5.4 million, with Option 3 with the lowest level of outstanding debt at \$2.5 million.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	159,887	1,116,138	2,370,094	2,772,282	3,580,423	3,911,138	3,876,844	4,798,822	4,768,026	5,425,503
Option 2	122,387	1,001,326	2,135,664	2,373,047	2,968,614	3,036,116	2,685,096	3,273,177	2,900,932	3,208,817
Option 3	84,887	885,613	1,897,701	1,965,356	2,438,809	2,428,170	2,135,086	2,614,161	2,233,508	2,503,377

14.0 - 13 (Comparison of Outstanding Long-Term Debt - \$)

The recommended long-term debt capacity restriction noted in the Financial Policy Considerations limits the repayment of long-term debt to an amount that would represent 10% of the Township's net revenues. Table 14 - 14 (Comparison of Debt Repayment Limit - \$) details the remaining debt servicing capacity under each financial strategy option. As noted under Option 1, long-term debt servicing exceeds the 10% debt repayment restriction.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Option 1	556,512	565,112	477,710	345,973	303,936	207,463	157,821	144,996	12,882	(19,424)
Option 2	556,512	569,621	491,899	375,768	356,144	289,828	279,164	315,331	238,832	268,329
Option 3	556,512	574,130	506,197	405,998	409,416	362,472	367,709	404,998	350,073	391,184

14.0 - 14 (Comparison of Remaining Debt Repayment Limit - \$)

Table 14 - 15 (Comparison of Remaining Debt Servicing Limit - %) views the long-term debt capacity restrictions from the perspective of a percentage of the limit remaining. Option 1 at the end of the forecast period exceeds the debt repayment limit and therefore under this option the Township would not be able to issue any additional debt until the existing debt matures. Option 2 has approximately a third of debt capacity remaining at the end of the forecast period, with Option 3 having just less than half of the debt capacity available at the end of the forecast period.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	100%	97%	78%	54%	45%	29%	21%	19%	2%	-2%
Option 2	100%	97%	80%	58%	53%	41%	37%	40%	29%	31%
Option 3	100%	98%	83%	63%	61%	51%	49%	52%	43%	45%

14.0 – 15 (Comparison of Remaining Debt Servicing Limit - %)



## 14.6 Assessment of Financial Strategy Options

All three financial strategy options presented identify the annual funding projected to be available over a 10-year period to finance the asset management lifecycle activities needed to deliver the proposed levels of services detailed in this report.

In assessing the three financial strategy options the overall level of AMP funding available, and the degree of use of long-term debt to underwrite shortfalls in available capital asset replacement discretionary reserves is considered.

Table 14 - 16 (2019-2028 AMP Funding - \$) totals all AMP funding sources over the forecast period, including other sources of AMP funding as well as the capital levy funding, which will vary by financial strategy option. As noted in Table 114 - 16, Option 3 provides the highest level of AMP financing over the forecast period, with \$17.2 million.

Description	Total Other AMP Funding Sources	Total AMP Capital Levy	Total AMP Funding
Option 1	5,629,030	9,053,318	14,682,348
Option 2	5,629,030	11,029,999	16,659,029
Option 3	5,629,030	11,601,982	17,231,012

14.0 – 16 (2019-2028 AMP Funding- \$)

Table 14 - 17 (2019-2028 Capital Levy Allocation) allocates the capital levy funding noted in Table 14 - 16 between the transfers to the capital asset replacement discretionary reserve and servicing of AMP related long-term debt.

Description	Total AMP Capital Levy	Total AMP Debt Servicing	Total Transferred in AMP Reserve
Option 1	9,053,318	4,246,765	4,806,552
Option 2	11,029,999	3,258,316	7,771,683
Option 3	11,601,982	2,671,057	8,930,925

14.0 – 17 (2019-2028 Capital Levy Allocation - \$)

As noted in Table 14 - 17, Option 1 provides the lowest level of tax supported funding (capital levy) over the forecast period with \$9.1 million, with Option 2 at \$11.0 million and Option 3 with the highest level of tax supported funding at \$11.6 million. While it should be noted that no funding shortfalls occurred in any of the financial strategy options presented, the use of long-term debt was necessary in all options to ensure that sufficient AMP financing was provided to ensure that the required asset management lifecycle activities could be undertaken.

The use of long-term debt requires debt servicing in the future, and therefore reduces the amount of the capital levy that can be transferred into the capital asset replacement discretionary reserve. The degree to which long-term debt was required under each option over the forecast period is evidenced by the amount AMP debt servicing shown in Table 14 - 17.

Option 3 has the least debt servicing other the forecast period with \$2.7 million of the total capital levy going towards servicing long-term debt that was required to fund the asset management lifecycle activities, with Option 2 requiring \$3.3 million and Option 1 requiring \$4.2 of the capital levy to servicing long-term debt

While the capital asset replacement discretionary reserve balances over the forecast period under all financial strategy options are relatively the same, the degree to which the reserve can be drawn upon to fund the asset management lifecycle activities varies greatly. The differences among the three financial strategy options in regards to the funding of the asset management lifecycle activities from the capital asset replacement discretionary reserve is due to the AMP capital levy being transferred into the reserve.

As can be seen in Table 14 - 17, over the forecast period, Option 1 transferred the least amount of funds into the capital asset replacement discretionary reserve at \$4.8 million, with Option 2 transferring \$7.8 million and Option 3 transferring the most at \$8.9 million. The transfers into the capital asset replacement discretionary reserve allow for the reserve financing of the asset management lifecycle activities, thereby reducing the need for long-term debt financing, and therefore the need to service that debt in the future.

Table 14 - 18 (2019-2028 Reserve vs Debt Financing) provides the level of total reserve financing vs. the level of total debt financing for each financial strategy option over the forecast period.

Description	Total AMP Reserve Financing	Total AMP Debt Financing	Total AMP Reserve/Debt Financing
Option 1	5,184,885	8,714,891	13,899,776
Option 2	8,150,016	5,749,760	13,899,776
Option 3	9,309,258	4,590,518	13,899,776

14.0 - 18 (2019-2028 Reserve vs Debt Financing - \$)

## 15.0 Resources

### 15.1 Information Technology Strategy

As part of the project, UEM conducted a review of the available computer technology to support Asset Management at the Township. Regulation 588/17 requires a municipality to maintain an Asset Register and keep all data related to assets updated at least every two years.

### 15.2 Possible Database/Software Solutions

Puslinch has three valid options for achieving the automation of the process:

1. Maintain and upgrade the custom database and interface that was developed in 2018 as part of the Asset Management Project and is currently utilized for all asset data.
2. Purchase a purpose build software solution from a software vendor
3. Contract a software developer for the development of a new custom build solution

A “corporate approach” to information and data management is a pre-requisite for all of the above options. This includes people, processes and technology. Functionality determination must be made by Puslinch. Basic information about the “inventory” should be freely accessible for use by any application in Puslinch or beyond. This means that the information should not be encumbered by software.

The Township of Puslinch should identify several requirements for their asset management software. They are as follows: the data should be hosted locally (if possible); the software should facilitate two-way data integration with GIS software (if possible); the ability to modify the database schema & associated attribute data; supporting multiple users with different access levels; the ability to hyperlink to site plans, as-built drawings etc.; and the creation of reports.

Additionally, UEM has identified several criteria for future asset management software. The criteria are as follows: the software must integrate PSAB management; inclusion of capital planning functionality; work order management system; GIS Integration; support multiple inventories (capital vs. non-capital); data is hosted locally; there should be two-way integration with existing databases.

### 15.3 Technology-Related Requirements

Upon review of the Townships’ existing data processes, UEM has identified some areas for improvement. The foundation of any asset management plan is the data pertaining to each asset. The entire process is reliant on solid, up to date information from the databases.

The current software environment has some associated risks, foremost being limited external database and technological support. It is recommended that the Township of Puslinch acquire software or establish a relationship with a reputable organization to provide support to facilitate the use of these new measurements.

By using Asset Management software, Puslinch will be able to produce detailed capital plans and create maintenance schedules based on the data in addition to meeting PSAB reporting requirements. A significant benefit to the procurement of asset management and maintenance management software is the ability to update asset registers and asset data to be performed directly by the programs and departments responsible for the assets. Prior to the procurement of any software, demonstrations should be arranged where software vendors demonstrate the capability of their software using Township of Puslinch data in order to ensure compatibility with Puslinch's existing IT environment.

## **15.4 Asset Management Tools**

- The Ontario Goods Roads Association makes available, at no cost, to all Municipalities in Ontario a Municipal Data Works (MDW) tool that will enable the full maintenance of the Asset Registry. This tool is provided with a set of applications that will provide full update, maintenance and reporting of asset data.
- While full accounting reporting in MDW as required by MFOA is not yet available, these reports can be obtained through the export of data to Microsoft Excel and the reports can be formatted from Excel. It should be noted that, OGRA working with the MFOA intends to build the reports to be available at MDW in the near future.
- Data in MDW should be updated at least once a year, but ideally semiannually.

## **16.0 Council Approval and Public Engagement**

### **16.1 Council Approval**

Council is responsible for approving the Township's strategic goals and priorities. The strategic planning process puts a spotlight on service delivery outcomes expected by the community. Municipalities rely heavily on their capital assets to carry out service delivery to the public. As a result, the asset management process supports the goals of service delivery and is fundamentally linked to many service delivery outcomes. This makes the asset management plan a key document that underpins Council's strategic directions. Therefore, obtaining Council approval of the asset management process and the asset management plan ensures the asset management direction aligns with Council's corporate strategic direction.

Once Council has approved the asset management process/plan, staff are able to undertake ongoing asset management actions knowing that they have council's support/direction, and that they are operating in a manner consistent with The Township's overall strategic direction. Going forward, where asset management related issues are brought to Council, the asset management process provides content for discussions between Council, staff, and the public. However, the question becomes, "How will council use this asset management process as a tool to make decisions on an ongoing basis?"

Council approves asset management reports and provides specific recommendations to include in the budget process. The recommendations are specific and include priority project identification, lifecycle cost investment levels, estimated impacts on rates, amongst others. Municipal staff would then incorporate the asset management recommendations into future budgets.

## 16.2 Public Engagement

Municipalities can benefit from seeking the public's involvement in developing, reviewing, and approving various aspects of the asset management process. The public's input may be directly sought as part of asset management plan discussions concerning levels of service, lifecycle management strategy scenarios, various financing strategy options, and/or other elements of the asset management process. In addition, feedback related to asset management plan issues can be indirectly derived from other public processes such as budget approvals or master plan approvals. Overall, ensuring some level of public engagement throughout the asset management process not only assists in gaining a level of public acceptance on asset management, but also a level of public ownership in the process.

O. Reg 588/17 outlines the following requirements with respect to AM Public Engagement:

- A Strategic Asset Management Policy (SAMP) must be developed and adopted by July 1, 2019 and reviewed and updated at least every 5 years. The SAMP outlines a requirement to include a commitment to provide opportunities for municipal residents and other interest parties to provide input into AM planning.
- Municipalities will be required to post their SAMP and asset management plan on the Township's website, if one exists, and make copies of these documents available to the public, if requested.

In reference to Puslinch, the public were invited to provide input during the development stages of asset management planning. In this manner, the public had the opportunity to shape the direction of asset management processes by having the opportunity to comment on the Asset Management Policy and on Level of Service Policies as well as impacts on the Capital Budgets.

The Public were made aware of the public meeting by posting on the Puslinch website. The public were encouraged to provide comments on asset management topics in general. Prior to the meeting, the presentation was posted at the public counter of the Puslinch municipal office. A copy of the presentation may be found in Appendix 20.5 of the Report.

The Public Open Meeting was held on February 5, 2019 in the Council Chambers of Puslinch. Sign-in-sheets indicate that \_\_\_\_ individuals attended. Verbal comments were as follows:

Issues and concerns from the comment sheets and website postings were as follows:

## 17.0 Conclusions

The Township of Puslinch has implemented an Asset Management Strategy and Plan, which assesses the Township's assets based on condition assessments, lifecycles, LOS requirements, and Risk Analysis. The decision process is executed through a model created by UEM. The model applies the Asset Management strategies to the Township's asset data. The outputs of the model are used to develop and prioritize assets for Capital Plans, which address those assets that pose the greatest risk. The Asset Management Plan is expected to achieve improved performance of the Township's services as well as:

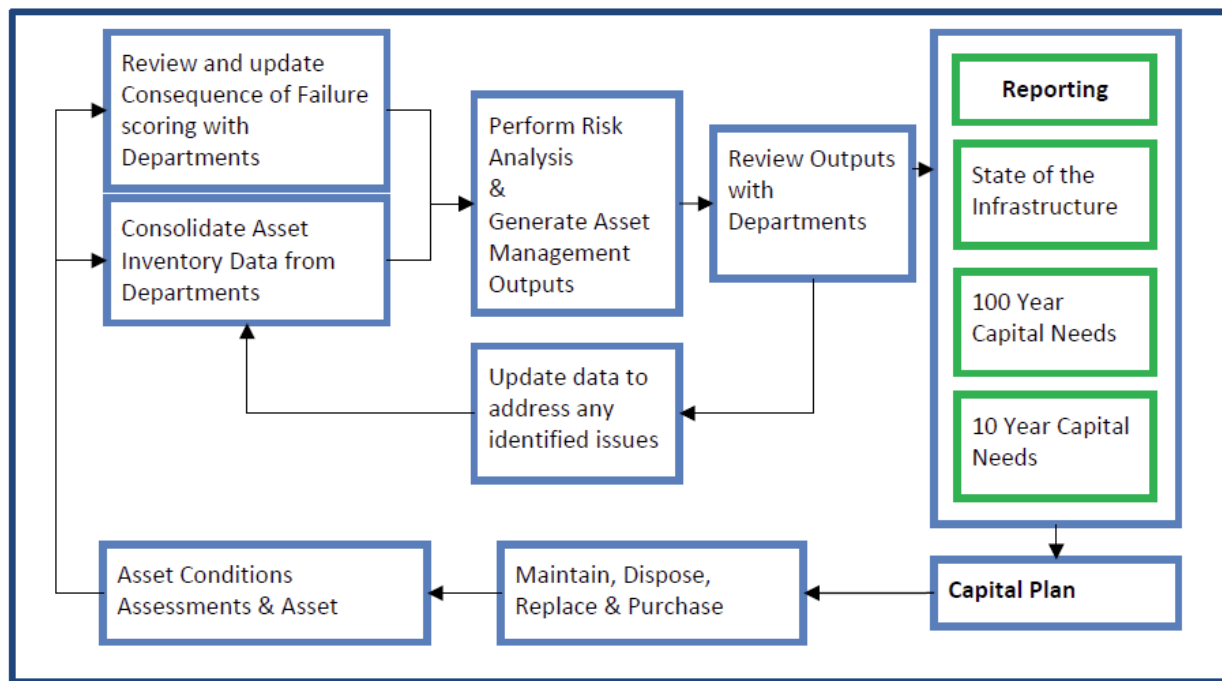
- Enhanced customer satisfaction from improved performance and control of the Level of Service (LOS);
- Improved financial planning for maintenance and replacement of key infrastructure assets;
- Improved Risk Management Strategies;
- Optimized return on investment and/or growth;
- Improved health, safety and environmental performance;
- Sustainable long-term planning and performance; and
- Improved corporate stewardship, including greater staff satisfaction

The Asset Management Program will be improved yearly through improved data collection, data confidence, data architecture, business processes, and Asset Management procedures. The Township of Puslinch is committed to Strategic Asset Management Policies and Plans that can be used to provide appropriate information to the Township's Council for decision making during the annual budget process.

Scientific evidence that human activity is resulting in climate change is documented and accepted as changes in climate are now a significant factor in the design and management of assets. However, the ability to project the impact of climate change and establish a time frame for impacts on infrastructure is very limited. Engineers and asset managers make effective use of a limited capacity in order to accurately project environmental conditions over the lifetime of assets and asset systems. If adaptation to climate change is to be effective, engineers and asset managers must learn to work with uncertain information about a future climate that will be significantly different to that of the past.

### 17.1 Ongoing Maintenance of the Asset Management Program

Asset Management requires ongoing updates to the data and reviews of the processes and assumptions used in the development of the Asset Management Plan. At a minimum, on a yearly basis the Asset Hierarchy as well as the Consequence of Failure weightings and scoring should be reviewed by the Asset Management Team and representatives from each department to ensure that the decision-making parameters inherent in the Asset Management Framework remain valid. All departments should work with the Asset Management Team on an ongoing basis to ensure that the asset inventory is up to date and reflects the most recent condition assessments and replacement costs available.



17 - 1 Asset Management Maintenance

In undertaking this assignment and observing the working relationships of staff it became apparent that there is very little if any support staff between the Direct of Finance/Treasurer and those Department Heads who are responsible for operations. Although skilled from an operations perspective the Department Heads will need assistance in the ongoing maintenance of the asset management system, especially with the updating of the asset registry.

The Township of Puslinch should consider the hiring of an individual who will assist the Direct of Finance/Treasurer with the consolidation of asset inventory into the asset registry and the generation of reports consistent with the requirements of Regulation 588/17 and Council as well as any other reports associated with the management of the physical assets of the Township.

## 17.2 Capital Program

The capital program was developed based on the replacement and or remediation of assets based on studies that have been completed by the Township, the knowledge of staff, and the knowledge and expertise of the UEM team. Based upon such knowledge that has been incorporated into the asset registry capital needs over a 10-year period were identified in the plan based upon reducing risk to the Township. Such an approach created “peaks” and “valleys” in the capital plan based upon the lifecycle of current assets and or the policies and practices adopted by the Township. Council in their wisdom may defer a capital project in order to reduce such “peaks” and “valleys” and should recognize that a consequence of doing so may be an increase in risk. However, the normal practice of municipalities is to finance a project prior to undertaking the design, tendering and construction of such a project that often leads to the reconstruction of the project a year after the funding of the project. In many cases the funding of the debt associated with the reconstruction of the project occurs after completion of the project.

### 17.3 Service Level Policy: Hard Surface Roads

The Township of Puslinch through their Pavement Condition Study accepts a Remediation Pavement Condition Index for hard surface roads of 65 for class 3 roads, 65 for class 4 roads, and 65 for class 5 roads. However, the Township takes into consideration other factors in preparing their capital budget as outlined in Section 9.3 of this report. For some projects, the projects proceed based upon such other factors rather than relying on the Remediation Pavement Condition Index. Based upon a review of previous projects Pavement Condition Index has not fallen below 60 for class 3 roads, 60 for class 4 roads and 60 for class 5 roads prior to a recommendation being formulated for inclusion into the capital budget. Therefore, the UEM team is prepared to recommend that the minimum Remediation Pavement Condition Index is 65 for class 3 roads, 60 for class 4 roads and 60 for class 5 roads. This recommendation is presented in the UEM proposed level of service policy for Hard Surface Roads.

## 18.0 Recommendations

The following is a list of recommendations for ongoing improvement of the management of the Township's assets. The identified costs are estimates only and should not be considered as quotes.

### 18.1 Proposed Level of Service Policies

**Recommendation:** That the levels of the service policies in section 5 of this report be approved.

The levels of service were developed based upon input from staff and the Council of the Township of Puslinch. These level of service policies reflect in principle the existing practices of the Township of Puslinch. The policies were presented to the public on February 5, 2019.

**Estimated Cost:** As per the budget implications table outlined in the end of this section.

### 18.2 Staff

Formalized Strategic Asset Management Policies should be developed which details roles responsibilities and procedures for the execution of the Asset Management Plan.

**Recommendation:** Identify an Asset Management champion in each Department to ensure ownership of Asset Management processes.

**Estimated Cost:** Minimal internal cost

**Recommendation:** Assign responsibility for maintaining asset data to the programs and departments responsible for the assets.

**Estimated Cost:** Minimal internal cost

**Recommendation:** Additional permanent staff member consistent with section 17.1, paragraph 2.

**Estimated Cost:** \$50,000 per year in salary & benefits

**Recommendation:** Identify the director of Finance/Treasurer as the lead responsible for asset management.



**Estimated Cost:** Minimal internal cost

### **18.3 Financial Strategy**

In considering the explanation of the three financial strategy options, it is recommended that Option 3 as detailed in Appendix 20.3 be adopted by the Township towards a 10-year financial strategy for the funding of asset management lifecycle activities as noted in this report

It is also recommended that the following Financial Policy Considerations be adopted in the implementation of the asset management financial strategy

- A lifecycle activity target funding level be set at an amount equal to 2% of estimated replacement value of the Townships Capital assets contained in the Asset Registry;
- That an upper and lower target balances of asset replacement related reserves be set at amounts of 10% and 20% of the inflated 10-year asset management lifecycle activity expenditure; and
- That a long-term debt repayment limit be established at an amount not to exceed 10% of the Township's net revenues, and that consideration be given towards development of a comprehensive debt management policy.

Finally, it is recommended that the long-term financial strategy be reviewed annually subject to any material changes that may occur.

### **18.4 Fleet**

As part of this project vehicles owned by Puslinch, both fire and works, were entered into the Asset Registry utilizing replacement costs provided in the 2017 BDO Fleet Management Report. Council in an initial review raised the question of purchasing used vehicles rather than new vehicles. The UEM team are not experts that would be capable of assessing the value of used vehicles nor the purchase price of used equipment especially when dealing with fire and works department vehicles. The Asset Registry cannot project the year in which Council may wish to purchase used vehicles. However, the Asset Registry could be modified subsequent to the purchase of use vehicles.

### **18.5 Boundary Roads – Road Structures & Bridges and Culverts**

The Township entered into boundary road agreements with adjacent municipalities the information provided to the UEM Team was that the responsibility for capital improvements to such boundary roads lies with the adjacent municipalities. However, in completing the Asset Registry capital improvements were provided in the registry based on 50% the total reconstruction costs of such boundary roads. In going forward, the Township should request a capital program for boundary roads that would include replacement costs and proposed year of improvements. Although the UEM team was not provided with the boundary road agreements it is only natural that if there are conflicts that discussions occur between municipal staff to determine accurate data to be entered into the asset registry that would impact the capital program of Puslinch.

Replacement Costs in regard to Bridge and Culverts on boundary roads were based on full replacement cost. However, remediation costs that have been entered into the asset inventory were based upon the costs

identified in the 2017 OSIM report. Pages 8,9 and 21 and 41 of Appendix D of the OSIM report relate to roadside safety improvements which were the installation of guard rails as an unfunded component of bridge rehabilitation. In reviewing the 2017 OSIM report such guard rails are to be installed on the approaches to the Bridge and or Culvert structures. It is suggested that the terms of reference for the next update of the OSIM report include direction that such guard rails deemed necessary to meet the design standards of the Province of Ontario include that guardrails are a component of either rehabilitation or replacement.

## **18.6 Capital Program**

The asset management plan and strategy are a means to support the Township's budget process as long as the asset management plan is updated annually as well as future planning and growth. Updating the capital expenditure for each asset class to incorporate the recommended studies, condition assessments and maintenance scheduled required to maintain the proposed service level policies are as follows.

### **Estimated Cost:**

- Gravel Roads: Inspection of Gravel Base \$6000 from intersection to intersection.
- Hard Surface Roads
  - Traffic Volume Study \$25,000
  - Pavement Condition Index Report \$24,500
- Street Trees: Tree Inspections \$6000
- Buildings and Facilities
  - Arc Flash Study \$7,500,
  - Building Condition Assessment \$25,000
  - Infra-Red Scanning \$3,000
- Sidewalks: Sidewalk Winter Maintenance \$20,000

## **18.7 Business Processes**

**Recommendation:** Recommendation: Update internal business processes so that significant maintenance activities are recorded, and asset data is adjusted to reflect changes to condition and replacement value. (See Recommendations: The Asset Registry).

**Estimated Cost:** Minimal internal cost

## **18.8 Technical Level of Service**

Currently the sole Technical Level of Service (TLOS) used to determine the Probability of Failure is condition or remaining service life. Condition is based on the visual or physical analysis of the asset whereas remaining service life is based on the age and condition of assets. For higher quality technical level of service tracking UEM recommends incorporating Performance-based levels of service in the future. Performance-based TLOS relate to measurements that are not directly related to condition/remaining service life such as the

accessibility of buildings for persons with disabilities. Performance TLOS may be mandated by legislation, like the Storm Water Management Planning and Design Manual, or explicitly identified by the Township in a Service Level Agreement. New business and reporting practices will need to be implemented in order to collect and maintain the data required to evaluate performance- based TLOS.

**Recommendation:** Develop & incorporate Performance TLOS

**Estimated Cost:** \$30,000 in consultant fees

## 18.9 Technology Related Requirements

As previously indicated in Section 10 of this report, the Ontario Good Roads Association makes available, at no cost, a tool identified as the Municipal Data Works (MDW) that will maintain asset data.

**Recommendation:** Negotiate with the Ontario Good Road Association for access to Municipal Data Works and allow the importation of Puslinch data into MDW.

**Estimated Cost:** minimal costs

## 18.10 Climate Change

**Recommendation:** Climate Change should be a consideration in all asset condition assessment reports in the future in order to project deterioration rates associated with such climate change.

**Estimated Cost:** Minimal internal cost

## 19.0 Asset Registry Recommendations

### 19.1 Bridges and Culverts:

**Recommendation:** The Township of Puslinch is recommended to follow the remediation schedule provided by the qualified engineer for all Bridge and Culvert structures. Any further improvements to a structure should be implemented as a sub-cost to the total remediation cost.

This recommendation is in response to the Bridge and Culvert Inspection report conducted in 2017. This report separates guardrails as a “Road Improvement Safety” Cost. UEM recommends that the next report integrate the costs for Road Improvements in the final remediation cost of each structure if it is mandated by the Roadside Safety Manual and Geometric Design Guide.

**Estimated Cost:** No Costs

### 19.2 Hard Surface Roads:

**Recommendation:** Road surfaces be inspected by a qualified engineer every 5 years. Subsequent inspections should follow the same methodologies of the one prior.

The 2016 pavement condition study used Pavement Condition Index as a condition rating methodology. Thus, every subsequent study should be consistent unless some revolutionary methodology is deemed more appropriate. Following the same condition methodologies will help the Township better update their asset registry and as well allow for the ability to conduct trend analysis. Each replacement/remediation schedule should be integrated into the Asset Registry as a separate table in order to track remediations to each road segment over time. Furthermore, the delivered report should maintain the current data structure as it’s been delivered in the asset registry and as well should be stored in a data format that allows for seamless updating of the asset registry.

To better manage the lifecycle of each road segment UEM recommends that a traffic volume survey be done every 5 years for all major road surfaces. Traffic volume data will help the Township optimize their lifecycle model for roads by increasing or decreasing the deterioration rate of two PCI points per year based on the expected traffic on that surface over time.

**Estimated Cost:** Refer to Capital Program recommendations

### 19.3 Gravel Roads:

**Recommendation:** The Township should collect condition data for each gravel road segment during routine inspections.

When and if a gravel road requires regrading it should be documented according to the proposed service level policy provided in this document. Each regrading activity should be considered as a lifecycle event. Tracking of deterioration rates will assist the Township in long-term financial planning for gravel road surfaces and as well assist in

achieving the proposed service level policy for Gravel Roads. Further, the proposed service level policy states that to qualify a gravel road surface for hard surfacing certain data be available for consideration. Such data can be collected through regular inspections of the surface, collection and storage of grading frequencies and traffic volume studies.

**Estimated Cost:** Refer to Capital Program recommendations

#### **19.4 Buildings and Facilities:**

**Recommendation:** Each Building and Facility in the Township of Puslinch should be inspected every 5 years. Subsequent inspections should follow the same methodologies of the one prior – such as the vernacular used to describe each building component and data structure that surrounds it. The remediation schedule if provided should be delivered in the same template as the previous to allow for seamless updating of the asset registry. Furthermore, each schedule should be integrated into the Asset Registry as a separate table to track remediations to each component over time. The Township should conduct Arch Flash Studies and Infra-Red Scanning of all electric equipment and wire terminations every 5 years.

**Estimated Cost:** Refer to Capital Program recommendations

#### **19.5 Storm Water Management Ponds**

**Recommendation:** Follow the remediation schedule provided by the qualified engineer. The remediation schedule should be in a tabular format that can easily distinguish each stormwater management pond component and the repairs if necessary to such component. If no applicable component can be identified, then the repair and its costs should be applied to the pond enclosure. Furthermore, each pond component should be provided a condition score that ranges from 1 (Very Poor Condition) to 5 (Excellent Condition) Subsequent inspections should follow the same methodologies as the one prior.

**Estimated Cost:** No Costs

## 19.6 Fire Reservoirs

**Recommendation:** Document each inspection of each Fire Reservoir in a tabular format and update the condition of each Fire Reservoir in the asset registry with a condition score that ranges from 1 (Very Poor Condition) to 5 (Excellent Condition) subsequent to each inspection. The condition score that was rated prior should be stored in a separate table in order to track how the lifecycle of each fire reservoir is being managed overtime.

**Estimated Cost:** No Costs

## 19.7 Fire Equipment

**Recommendation:** Standardize fire equipment assets in the asset registry for more effective management of lifecycle, lifecycle events, and condition ratings.

Implement a condition inspection table for each fire equipment asset and a lifecycle event activity table.

**Estimated Cost:** No Costs

## 19.8 Fleet: Works, Building, Parks and Fire Department Vehicles

**Recommendation:** The Township implement a condition inspection table for each vehicle and as well a lifecycle event activity table.

Each inspection should document vehicle hours (if applicable to the service level policy) and vehicle kilometers. The Lifecycle activity table should document any major vehicle servicing and any major accident or mechanical failure associated with the vehicle. These tables should become the primary methodology for establishing vehicle condition and lifecycle.

**Estimated Cost:** No Costs

## 19.9 Parks and Recreation, Sidewalks and Streetlights and Poles

**Recommendation:** Create a Condition inspection table and lifecycle event table for each park and recreation asset.

Each inspection should at the very minimum apply a condition rating to the asset. Each lifecycle event that occurs should be documented for each asset in order to track the lifecycle of the park and recreation asset.

**Estimated Cost:** No Costs

## 19.10 Street Trees

**Recommendation:** Update the asset registry in order to create a more comprehensive inventory of the current stock of street trees managed by the Township. Including a condition inspection table and lifecycle event table for each tree asset.

**Estimated Cost:** \$6,000

## 19.11 Storm Sewers

**Recommendation:** Update the GIS information for all storm sewer assets.

The Spatial structure of the storm sewer assets in the asset registry has been formulated through consultation with staff without referencing to as constructed drawings. Each storm sewer should be georeferenced according to their ground truth location.

Each storm sewer should have each cleaning event loaded into a condition assessment table to account for the condition of the asset. Furthermore, if any significant repairs occur to a storm sewer asset such repairs should be loaded into an asset lifecycle event table.

**Estimated Cost:** No Costs

## 19.12 Inspection & Lifecycle Tables

The storage of condition assessment data and lifecycle events data should be documented in separate tables than in the Asset Tables in the Asset Registry Database. By storing the data in separate tables, the historical data quality is maintained and allows for multi-step data verification and over time the ability to conduct trend analysis.

If the Township chooses to rely on only “updating” the condition column of an asset table with current condition data, historical data will be lost.

### 19.13 Budget Implications

The following table summarizes recommendations that have an associated cost

Budget Implications for this Asset Management Plan				
Major Grouping	Budget Item	Description	Frequency	Cost
Service Level Policies	Bridges and Culverts	Bridge and Culvert Inspection Reports	Every 2 Years	\$15,000.00
	Gravel Roads	Gravel Base Inspection	Subject to Review Of Gravel Road Surface Treatment	\$6,000.00
		Gravel Road surface treatment	Subject to Review Of Gravel Road Surface Treatment	\$52,000.00/km
	Hard Surface Roads	Pavement Condition Study	Every 5 Years	\$24,500.00
		Traffic Volume Study	Every 5 Years	\$25,000.00
	Storm Water Management Ponds	Pond Inspections	At Least Once Per Year	\$5,000.00
	Storm Sewer	Sewer Inspections	At Least Once Per Year	\$5,000.00
	Street Trees	Tree Inspections	On the Year of Inspection	\$6,000.00
	Buildings and Facilities	Building Condition Assessment	Every 5 Years	\$25,000.00
		Infra-Red Scanning	Every 5 Years	\$3,000.00
		Arc Flash Study	Every 5 Years	\$7,500.00
	Sidewalks	Sidewalk Winter Maintenance	Routine Maintenance of Sidewalks During Winter Periods	\$20,000.00
Asset Management Maintenance	Staffing		Permanent Staff Member	\$50,000/ Year



# 20.0 Appendices

## 20.1 Financial Strategy Option 1 (1 Percent Impact)

Township of Puslinch  
Option 1  
2019 - 2028 AMP Forecast  
Inflated \$  
Table 1

Description	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Capital Expenditures</b>										
Bridges	-	-	426,564	-	-	-	-	574,343	-	-
Culverts	-	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	10,750	110,160	10,404	21,224	3,247	287,061	-	9,189	-	194,501
Fire Equipment	24,000	345,564	6,242	-	12,989	9,937	76,016	27,568	36,321	14,341
Parks and Recreation	-	35,361	22,889	-	10,824	1,987	-	34,263	-	144,881
Asphalt Road 1 Lift	1,033,125	626,983	901,774	751,961	1,496,057	746,919	492,165	724,514	257,736	593,404
Asphalt Road 2 Lift	576,739	-	-	293,316	290,337	335,978	52,434	225,243	714,764	144,747
Asphalt Road Surface Treated	-	15,146	-	-	-	143,853	-	-	-	-
Gravel Roads	65,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Pond	-	168,300	156,060	175,099	-	-	-	-	-	-
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	18,146	1,683	-	4,368	-	1,822	-	-	-	6,618
Sidewalks	-	102,000	-	-	-	-	-	-	-	-
Work licensed vehicles	250,000	397,800	260,100	-	243,547	36,435	103,607	-	292,915	298,773
Work Unlicensed vehicles	-	-	130,050	371,423	-	-	-	9,189	-	35,853
<b>Total Capital Expenditures - Capital Program</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>
<b>Capital Financing</b>										
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
Non-Growth Related Debenture Requirements	159,887	969,880	1,350,736	617,494	1,083,618	708,203	416,775	1,424,361	610,584	1,373,353
Capital Asset Replacement Discretionary Reserve	1,108,345	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,972	202,655
<b>Total Capital Financing</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>

**Township of Puslinch**  
**Option 1**  
**Capital Asset Replacement Discretionary Reserve**  
**Table 2**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Balance	2,331,214	1,952,881	1,952,880	1,952,880	1,952,880	1,952,881	1,952,880	1,952,881	1,952,880	1,952,881
Transfer from Operating (AMP Capital Levy)	730,012	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,973	202,655
Transfer to Capital	1,108,345	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,972	202,655
Closing Balance	1,952,881	1,952,880	1,952,880	1,952,880	1,952,881	1,952,880	1,952,881	1,952,880	1,952,881	1,952,881
<b>Reserve Target Balances</b>										
Minimum Balance at 10% of 10 year Capital Plan	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881
Closing Reserve Balance	\$ 1,952,881	\$ 1,952,880	\$ 1,952,880	\$ 1,952,880	\$ 1,952,881	\$ 1,952,880	\$ 1,952,881	\$ 1,952,880	\$ 1,952,881	\$ 1,952,881
Target Balance at 20% of 10 year Capital Plan	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761

**Township of Puslinch**  
**Option 1**  
**Operating Budget Forecast - AMP Capital Related**  
**Table 3**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Capital-Related</b>										
New Non-Growth Related Debt (Principal)	-	13,629	96,780	215,306	275,478	377,488	451,069	502,382	641,380	715,876
New Non-Growth Related Debt (Interest)	-	5,596	39,065	82,953	97,030	125,315	136,890	135,690	167,959	166,881
Transfer to Capital Asset Replacement Discretionary Reserve	730,012	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,973	202,655
<b>Total AMP Capital Related Expenditures</b>	<b>730,012</b>	<b>768,012</b>	<b>806,412</b>	<b>844,912</b>	<b>883,912</b>	<b>923,412</b>	<b>963,312</b>	<b>1,003,612</b>	<b>1,044,312</b>	<b>1,085,412</b>

**Township of Puslinch**  
**Option 1**  
**AMP Capital Levy Impact**  
**Table 4**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
AMP Capital Levy (Previous Year)	692,512	730,012	768,012	806,412	844,912	883,912	923,412	963,312	1,003,612	1,044,312
AMP Capital Levy Increase	37,500	38,000	38,400	38,500	39,000	39,500	39,900	40,300	40,700	41,100
<b>Percent Tax Impact on Median Value SFD</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>1.00%</b>
AMP Capital Levy (Current Year)	730,012	768,012	806,412	844,912	883,912	923,412	963,312	1,003,612	1,044,312	1,085,412
Total Non-Growth Debt Servicing	-	19,225	135,845	298,259	372,507	502,803	587,958	638,072	809,339	882,757
Transfer to Capital Asset Replacement Discretionary Reserve	730,012	748,787	670,567	546,653	511,404	420,609	375,353	365,540	234,973	202,655

**Township of Puslinch  
Option 1  
AMP Funding Target Levels**

**Table 5**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Value of Capital Assets	79,575,151	81,166,654	82,789,987	84,445,787	86,134,703	87,857,397	89,614,545	91,406,835	93,234,972	95,099,672
Target AMP Funding Level (2% of Capital Asset Values)	1,591,503	1,623,333	1,655,800	1,688,916	1,722,694	1,757,148	1,792,291	1,828,137	1,864,699	1,901,993
AMP Capital Levy	730,012	768,012	806,412	844,912	883,912	923,412	963,312	1,003,612	1,044,312	1,085,412
Other Sources of AMP Capital Financing	709,528	681,030	522,222	522,222	532,338	532,338	532,338	532,338	532,338	532,338
Total Available AMP Funding	1,439,540	1,449,042	1,328,634	1,367,134	1,416,250	1,455,750	1,495,650	1,535,950	1,576,650	1,617,750
Above or (below) target level of AMP Funding	(151,963)	(174,291)	(327,166)	(321,782)	(306,444)	(301,398)	(296,641)	(292,187)	(288,050)	(284,244)

**Township of Puslinch  
Option 1  
AMP Debt**

**Table 6a**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Debt Balance	-	159,887	1,116,138	2,370,094	2,772,282	3,580,423	3,911,138	3,876,844	4,798,822	4,768,026
Total Debt Servicing	-	19,225	135,845	298,259	372,507	502,803	587,958	638,072	809,339	882,757
Interest on Debt	-	5,596	39,065	82,953	97,030	125,315	136,890	135,690	167,959	166,881
Principal Repayment	-	13,629	96,780	215,306	275,478	377,488	451,069	502,382	641,380	715,876
New Debt Issue	159,887	969,880	1,350,736	617,494	1,083,618	708,203	416,775	1,424,361	610,584	1,373,353
Closing Balance	159,887	1,116,138	2,370,094	2,772,282	3,580,423	3,911,138	3,876,844	4,798,822	4,768,026	5,425,503

**Township of Puslinch  
Option 1  
AMP Annual Repayment Limit - 10%**

**Table 6b**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Net Township Revenues	5,565,118	5,843,374	6,135,543	6,442,320	6,764,436	7,102,657	7,457,790	7,830,680	8,222,214	8,633,325
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Debt Limit Remaining \$	556,512	565,112	477,710	345,973	303,936	207,463	157,821	144,996	12,882	(19,424)
Percent of Limit Remaining	100%	97%	78%	54%	45%	29%	21%	19%	2%	-2%

## 20.2 Financial Strategy Option 2 (2 Percent Impact)

Township of Puslinch  
Option 2  
2019 - 2028 AMP Forecast  
Inflated \$  
Table 1

Description	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Capital Expenditures</b>										
Bridges	-	-	426,564	-	-	-	-	574,343	-	-
Culverts	-	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	10,750	110,160	10,404	21,224	3,247	287,061	-	9,189	-	194,501
Fire Equipment	24,000	345,564	6,242	-	12,989	9,937	76,016	27,568	36,321	14,341
Parks and Recreation	-	35,361	22,889	-	10,824	1,987	-	34,263	-	144,881
Asphalt Road 1 Lift	1,033,125	626,983	901,774	751,961	1,496,057	746,919	492,165	724,514	257,736	593,404
Asphalt Road 2 Lift	576,739	-	-	293,316	290,337	335,978	52,434	225,243	714,764	144,747
Asphalt Road Surface Treated	-	15,146	-	-	-	143,853	-	-	-	-
Gravel Roads	65,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Pond	-	168,300	156,060	175,099	-	-	-	-	-	-
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	18,146	1,683	-	4,368	-	1,822	-	-	-	6,618
Sidewalks	-	102,000	-	-	-	-	-	-	-	-
Work licensed vehicles	250,000	397,800	260,100	-	243,547	36,435	103,607	-	292,915	298,773
Work Unlicensed vehicles	-	-	130,050	371,423	-	-	-	9,189	-	35,853
<b>Total Capital Expenditures - Capital Program</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>
<b>Capital Financing</b>										
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
Non-Growth Related Debt Service Requirements	122,387	889,371	1,220,947	431,098	832,810	384,038	9,331	961,839	96,584	801,355
Capital Asset Replacement Discretionary Reserve	1,145,845	829,296	800,356	733,049	762,212	744,774	782,797	828,062	748,972	774,653
<b>Total Capital Financing</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>

**Township of Puslinch  
Option 2  
Capital Asset Replacement Discretionary Reserve**

**Table 2**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Balance	2,331,214	1,952,881	1,952,881	1,952,881	1,952,880	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881
Transfer from Operating (AMP Capital Levy)	767,512	829,296	800,357	733,048	762,212	744,774	782,797	828,062	748,972	774,653
Transfer to Capital	1,145,845	829,296	800,356	733,049	762,212	744,774	782,797	828,062	748,972	774,653
Closing Balance	1,952,881	1,952,881	1,952,881	1,952,880	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881	1,952,881
<b>Reserve Target Balances</b>										
Minimum Balance at 10% of 10 year Capital Plan	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881
Closing Reserve Balance	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,880	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881
Target Balance at 20% of 10 year Capital Plan	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761

**Township of Puslinch  
Option 2  
Operating Budget Forecast - AMP Capital Related**

**Table 3**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Capital-Related</b>										
New Non-Growth Related Debt (Principal)	-	10,432	86,609	193,715	237,243	316,536	360,351	373,758	468,828	493,470
New Non-Growth Related Debt (Interest)	-	4,284	35,046	74,748	83,057	103,901	106,264	93,978	114,561	101,533
Transfer to Capital Asset Replacement Discretionary Reserve	767,512	829,296	800,357	733,048	762,212	744,774	782,797	828,062	748,972	774,653
<b>Total AMP Capital Related Expenditures</b>	<b>767,512</b>	<b>844,012</b>	<b>922,012</b>	<b>1,001,512</b>	<b>1,082,512</b>	<b>1,165,212</b>	<b>1,249,412</b>	<b>1,295,799</b>	<b>1,332,362</b>	<b>1,369,656</b>

**Township of Puslinch  
Option 2  
AMP Capital Levy Impact**

**Table 4**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
AMP Capital Levy (Previous Year)	692,512	767,512	844,012	922,012	1,001,512	1,082,512	1,165,212	1,249,412	1,295,799	1,332,362
AMP Capital Levy Increase	75,000	76,500	78,000	79,500	81,000	82,700	84,200	46,387	36,563	37,294
<b>Percent Tax Impact on Median Value SFD</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>1.08%</b>	<b>0.84%</b>	<b>0.85%</b>
AMP Capital Levy (Current Year)	767,512	844,012	922,012	1,001,512	1,082,512	1,165,212	1,249,412	1,295,799	1,332,362	1,369,656
Total Non-Growth Debt Servicing	-	14,716	121,655	268,464	320,299	420,438	466,615	467,737	583,390	595,003
Transfer to Capital Asset Replacement Discretionary Reserve	767,512	829,296	800,357	733,048	762,212	744,774	782,797	828,062	748,972	774,653

**Township of Puslinch  
Option 2  
AMP Funding Target Levels  
Table 5**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Value of Capita Assets	79,575,151	81,166,654	82,789,987	84,445,787	86,134,703	87,857,397	89,614,545	91,406,835	93,234,972	95,099,672
Target AMP Funding Level (2% of Capital Asset Values)	1,591,503	1,623,333	1,655,800	1,688,916	1,722,694	1,757,148	1,792,291	1,828,137	1,864,699	1,901,993
Funding Envelop	767,512	844,012	922,012	1,001,512	1,082,512	1,165,212	1,249,412	1,295,799	1,332,362	1,369,656
Other Sources	709,528	681,030	522,222	522,222	532,338	532,338	532,338	532,338	532,338	532,338
Total Available Funding	1,477,040	1,525,042	1,444,234	1,523,734	1,614,850	1,697,550	1,781,750	1,828,137	1,864,700	1,901,994
Above or (below) target level	(114,463)	(98,291)	(211,566)	(165,182)	(107,844)	(59,598)	(10,541)	0	0	0

-

**Township of Puslinch  
Option 2  
AMP Debt  
Table 6a**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Debt Balance	-	122,387	1,001,326	2,135,664	2,373,047	2,968,614	3,036,116	2,685,096	3,273,177	2,900,932
Total Debt Servicing	-	14,716	121,655	268,464	320,299	420,438	466,615	467,737	583,390	595,003
Interest on Debt	-	4,284	35,046	74,748	83,057	103,901	106,264	93,978	114,561	101,533
Principal Repayment	-	10,432	86,609	193,715	237,243	316,536	360,351	373,758	468,828	493,470
New Debt Issue	122,387	889,371	1,220,947	431,098	832,810	384,038	9,331	961,839	96,584	801,355
Closing Balance	122,387	1,001,326	2,135,664	2,373,047	2,968,614	3,036,116	2,685,096	3,273,177	2,900,932	3,208,817

**Township of Puslinch  
Option 2  
AMP Annual Repayment Limit - 10%  
Table 6b**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Net Township Revenues	5,565,118	5,843,374	6,135,543	6,442,320	6,764,436	7,102,657	7,457,790	7,830,680	8,222,214	8,633,325
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Debt Limit Remaining \$	556,512	569,621	491,899	375,768	356,144	289,828	279,164	315,331	238,832	268,329
Percent of Limit Remaining	100%	97%	80%	58%	53%	41%	37%	40%	29%	31%

## 20.3 Financial Strategy Option 3 (3 Percent Impact)

Township of Puslinch  
Option 3  
2019 - 2028 AMP Forecast  
Inflated \$

Table 1

Description	Forecast									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Capital Expenditures</b>										
Bridges	-	-	426,564	-	-	-	-	574,343	-	-
Culverts	-	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	10,750	110,160	10,404	21,224	3,247	287,061	-	9,189	-	194,501
Fire Equipment	24,000	345,564	6,242	-	12,989	9,937	76,016	27,568	36,321	14,341
Parks and Recreation	-	35,361	22,889	-	10,824	1,987	-	34,263	-	144,881
Asphalt Road 1 Lift	1,033,125	626,983	901,774	751,961	1,496,057	746,919	492,165	724,514	257,736	593,404
Asphalt Road 2 Lift	576,739	-	-	293,316	290,337	335,978	52,434	225,243	714,764	144,747
Asphalt Road Surface Treated	-	15,146	-	-	-	143,853	-	-	-	-
Gravel Roads	65,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Pond	-	168,300	156,060	175,099	-	-	-	-	-	-
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	18,146	1,683	-	4,368	-	1,822	-	-	-	6,618
Sidewalks	-	102,000	-	-	-	-	-	-	-	-
Work licensed vehicles	250,000	397,800	260,100	-	243,547	36,435	103,607	-	292,915	298,773
Work Unlicensed vehicles	-	-	130,050	371,423	-	-	-	9,189	-	35,853
<b>Total Capital Expenditures - Capital Program</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>
<b>Capital Financing</b>										
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
Non-Growth Related Debenture Requirements	84,887	807,962	1,088,449	239,469	671,694	251,796	-	782,417	-	663,844
Capital Asset Replacement Discretionary Reserve	1,183,345	910,705	932,854	924,678	923,328	877,016	792,128	1,007,484	845,556	912,164
<b>Total Capital Financing</b>	<b>1,977,760</b>	<b>2,399,697</b>	<b>2,543,525</b>	<b>1,686,369</b>	<b>2,127,360</b>	<b>1,661,150</b>	<b>1,324,466</b>	<b>2,322,239</b>	<b>1,377,894</b>	<b>2,108,346</b>



**Township of Puslinch  
Option 3  
Capital Asset Replacement Discretionary Reserve**

**Table 2**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Balance	2,331,214	1,952,881	1,952,881	1,952,881	1,952,881	1,952,880	1,952,881	2,042,636	1,952,881	1,967,538
Transfer from Operating (AMP Capital Levy)	805,012	910,705	932,854	924,678	923,328	877,016	881,883	917,729	860,213	897,507
Transfer to Capital	1,183,345	910,705	932,854	924,678	923,328	877,016	792,128	1,007,484	845,556	912,164
Closing Balance	1,952,881	1,952,881	1,952,881	1,952,881	1,952,880	1,952,881	2,042,636	1,952,881	1,967,538	1,952,881
<b>Reserve Target Balances</b>										
Minimum Balance at 10% of 10 year Capital Plan	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881
Closing Reserve Balance	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,881	\$ 1,952,880	\$ 1,952,881	\$ 2,042,636	\$ 1,952,881	\$ 1,967,538	\$ 1,952,881
Target Balance at 20% of 10 year Capital Plan	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761	\$ 3,905,761

**Township of Puslinch  
Option 3  
Operating Budget Forecast - AMP Capital Related**

**Table 3**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Capital-Related</b>										
New Non-Growth Related Debt (Principal)	-	7,236	76,361	171,814	198,241	262,435	293,084	303,342	380,653	393,976
New Non-Growth Related Debt (Interest)	-	2,971	30,996	66,420	68,787	85,358	84,986	74,728	91,496	78,173
Transfer to Capital Asset Replacement Discretionary Reserve	805,012	910,705	932,854	924,678	923,328	877,016	881,883	917,729	860,213	897,507
<b>Total AMP Capital Related Expenditures</b>	<b>805,012</b>	<b>920,912</b>	<b>1,040,212</b>	<b>1,162,912</b>	<b>1,190,356</b>	<b>1,224,810</b>	<b>1,259,953</b>	<b>1,295,799</b>	<b>1,332,362</b>	<b>1,369,656</b>

**Township of Puslinch  
Option 3  
AMP Capital Levy Impact**

**Table 4**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
AMP Capital Levy (Previous Year)	692,512	805,012	920,912	1,040,212	1,162,912	1,190,356	1,224,810	1,259,953	1,295,799	1,332,362
AMP Capital Levy Increase	112,500	115,900	119,300	122,700	27,444	34,454	35,143	35,846	36,563	37,294
<b>Percent Tax Impact on Median Value SFD</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>0.65%</b>	<b>0.81%</b>	<b>0.82%</b>	<b>0.83%</b>	<b>0.84%</b>	<b>0.85%</b>
AMP Capital Levy (Current Year)	805,012	920,912	1,040,212	1,162,912	1,190,356	1,224,810	1,259,953	1,295,799	1,332,362	1,369,656
Total Non-Growth Debt Servicing	-	10,207	107,357	238,234	267,028	347,793	378,070	378,070	472,149	472,149
Transfer to Capital Asset Replacement Discretionary Reserve	805,012	910,705	932,854	924,678	923,328	877,016	881,883	917,729	860,213	897,507

**Township of Puslinch  
Option 3  
AMP Funding Target Levels**

**Table 5**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Value of Capita Assets	79,575,151	81,166,654	82,789,987	84,445,787	86,134,703	87,857,397	89,614,545	91,406,835	93,234,972	95,099,672
Target AMP Funding Level (2% of Capital Asset Values)	1,591,503	1,623,333	1,655,800	1,688,916	1,722,694	1,757,148	1,792,291	1,828,137	1,864,699	1,901,993
Funding Envelop	805,012	920,912	1,040,212	1,162,912	1,190,356	1,224,810	1,259,953	1,295,799	1,332,362	1,369,656
Other Sources	709,528	681,030	522,222	522,222	532,338	532,338	532,338	532,338	532,338	532,338
Total Available Funding	1,514,540	1,601,942	1,562,434	1,685,134	1,722,694	1,757,148	1,792,291	1,828,137	1,864,700	1,901,994
Above or (below) target level	(76,963)	(21,391)	(93,366)	(3,782)	(0)	(0)	(0)	0	0	0

**Township of Puslinch  
Option 3  
AMP Debt**

**Table 6a**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Debt Balance	-	84,887	885,613	1,897,701	1,965,356	2,438,809	2,428,170	2,135,086	2,614,161	2,233,508
Total Debt Servicing	-	10,207	107,357	238,234	267,028	347,793	378,070	378,070	472,149	472,149
Interest on Debt	-	2,971	30,996	66,420	68,787	85,358	84,986	74,728	91,496	78,173
Principal Repayment	-	7,236	76,361	171,814	198,241	262,435	293,084	303,342	380,653	393,976
New Debt Issue	84,887	807,962	1,088,449	239,469	671,694	251,796	-	782,417	-	663,844
Closing Balance	84,887	885,613	1,897,701	1,965,356	2,438,809	2,428,170	2,135,086	2,614,161	2,233,508	2,503,377

**Township of Puslinch  
Option 3  
AMP Annual Repayment Limit - 10%**

**Table 6b**

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Net Municipal Revenues	5,565,118	5,843,374	6,135,543	6,442,320	6,764,436	7,102,657	7,457,790	7,830,680	8,222,214	8,633,325
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Debt Limit Remaining \$	556,512	574,130	506,197	405,998	409,416	362,472	367,709	404,998	350,073	391,184
Percent of Limit Remaining	100%	98%	83%	63%	61%	51%	49%	52%	43%	45%

## **20.4 Puslinch Strategic Asset Management Policy**

### **Purpose:**

A strategic asset management policy formalizes the Township of Puslinch commitment to asset management, aligns its asset management actions with strategic goals and objectives, and provides direction to guide Council, management and staff in carrying out its business strategies, plans and activities. This policy will support the Township of Puslinch in focusing its infrastructure efforts on managing risks, addressing priorities, and meeting short and long-term needs within the bounds of possible funding.

### **Vision:**

The Township's vision is to proactively manage its assets to best serve the Municipality's objectives, including:

- Prioritizing the need for existing and future assets to effectively deliver services,
- Supporting sustainability and economic development, and
- Maintaining prudent financial planning and decision making.

### **Objectives:**

The objectives of this policy are to:

- Provide a consistent framework for implementing asset management throughout the organization to be compliant with Ontario Government Regulation 588/17.
- Provide transparency and accountability and to demonstrate to stakeholders the legitimacy of decision-making processes which combine strategic plans, budgets, service levels and risks.

### **Strategic Alignment:**

Puslinch has developed and adopted a Strategic Plan, an Official Plan, an Emergency Management Plan, a Multi-Year Accessibility Plan, a Community Improvement Plan, and an Asset Management Plan. These plans were designed to meet the legislative requirements and work together to achieve The Township's mission of providing innovation and excellence in service delivery. Spending requirements defined in the budgeting process and in long-term financial planning will reflect the objectives of these plans.

All of The Township's plans rely to some extent on the physical assets owned by the Township of Puslinch and the commitment of staff to ensure their strategic use. This includes the long-term maintenance, repair, and replacement of existing assets along with the acquisition of new assets to meet the evolving needs of the Township.

Asset management planning therefore will not occur in isolation from other municipal goals, plans and policies.

### **Stakeholder Engagement**

The Township recognizes the importance of stakeholder engagement as an integral component of a comprehensive asset management approach. The Township recognizes the residents, businesses, institutions on its territory as stakeholders and neighboring municipal bodies, provincial agencies, and regulated utilities partners in service delivery. Accordingly, the Township will foster informed dialogue with these parties using the best available information and engage with them by:

- Providing opportunities for residents and other stakeholders served by the Township to provide input in asset management planning; and
- Coordinating asset management planning with other infrastructure asset owning agencies such as municipal bodies and regulated utilities.

### **Guiding Principles**

The Infrastructure for Jobs and Prosperity Act, 2015 sets out principles to guide asset management planning in municipalities in Ontario. The Township of Puslinch will strive to incorporate the following principles whenever possible into the day to day operation of the Township:

- **Forward looking:** The Township shall take a long-term view while considering demographic and economic trends in the region.
- **Budgeting and planning:** The Township shall take into account any applicable budgets or fiscal plans, including those adopted through Ontario legislation.
- **Prioritizing:** The Township shall clearly identify infrastructure priorities which will drive investment decisions.
- **Economic development:** The Township shall promote economic competitiveness, productivity, job creation, and training opportunities.
- **Transparency:** The Township shall be evidence-based and transparent, basing decision on publicly shared information and make info available to the public.
- **Consistency:** The Township shall ensure the continued provision of core public services, such as health care and education.
- **Environmentally conscious:** The Township shall minimize the impact of infrastructure on the environment by: 1. Respecting and helping maintain ecological and biological diversity, 2. Augmenting resilience to the effects of climate change, and 3. Endeavoring to make use of acceptable recycled aggregates.

- **Health and safety:** The Township shall ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.
- **Community focused:** The Township shall 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:
  1. Local job creation and training opportunities (including for apprentices, within the meaning of section 9 of the Infrastructure for Jobs and Prosperity Act, 2015),
  2. Improvement of public space within the community, and
  3. Promoting accessibility for persons with disabilities.
- **Innovation:** The Township shall create opportunities to make use of innovative technologies, services, and practices, particularly where doing so would utilize technology, techniques, and practices developed in Ontario.
- **Integration:** The Township shall where relevant and appropriate, be mindful and consider the principles and content of non-binding provincial or municipal plans and strategies established under an Act or otherwise, in planning and making decisions surrounding the infrastructure that supports them.

## Community Planning

Asset management planning will be aligned with the Township's Official Plan and the 2014 Provincial Policy Statement of the Planning Act. The asset management plans will reflect how the community is projected to change with respect to development. The Township will achieve this by consulting with those responsible for managing the services to analyze the future costs and viability of projected changes. The combination of lifecycle analysis and financial sustainability principles will be the driver in the selection of community development or redevelopment that requires new assets, or existing asset enhancements. Methods, assumptions, and data used in the selection of projected changes should be documented to support the recommendations in the Asset Management Plan.

Cross-referencing the Township's Official Plan and the Asset Management Plan will ensure that development occurs within the Township's means through an understanding of current and future asset needs.

## **Climate Change**

Climate change will be considered as part of the Township's risk management approach embedded in local asset management planning methods. This approach will balance the potential cost of vulnerabilities to climate change impact and other risks with the cost of reducing these vulnerabilities. Bolstering resilience to climate change includes adapting to opportunities to manage vulnerabilities, anticipating possible costs to support contingency funds, and disaster planning to allow for business continuity. These actions will be taken in addition to acquiring or modifying assets based on greenhouse gas reduction targets. The Township of Puslinch will continue to work with the County of Wellington to support climate change mitigation and adaptation.

## **Scope and Capitalization Thresholds**

This policy applies to all assets owned by the Townships whose role in service delivery requires deliberate management by the Township. The Township will use a service-based (qualitative) perspective when applying this policy to municipal assets, rather than a monetary value (quantitative). The service-focus intent of this policy differentiates its requirements for identifying assets from the capitalization thresholds that are developed for the purposes of financial reporting. For this reason, the capitalization threshold developed for financial reporting will not be the guide in selecting the assets covered by the asset management planning process.

## **Financial Planning and Budgeting**

The Township will integrate asset management planning into the annual capital budget, operating budget, and its long-term financial plan. The asset management plan will be used as a resource in order to:

Identify all potential revenues and costs (including operating, maintenance, replacement and decommissioning) associated with forthcoming infrastructure asset decisions;

Evaluate the validity and need of each significant new capital asset, including considering the impact on future operating costs; and Incorporate new revenue tools and alternative funding strategies where possible.

The department level budget submission prepared by each Senior Manager will be reviewed and evaluated by the CAO and Director of Finance in the preparation of the Township's annual budget. Service area personnel will reference the asset management plan for their area in order to look up forecasted spending needs identified in the plan, verify progress made on the plan to identify potential gaps, and prioritize spending needs, across the gap identified in the plan and recent developments, for the year to be budgeted for. Finance staff will be involved in the asset management planning process to coordinate the information from the service personnel in the preparation of the budget submission.

## 11.0 Governance and Continuous Improvement

The policy requires the commitment of key stakeholders within the Township's organization to ensure the policy guides the development of a clear plan that can be implemented, reviewed and updated.

The Council is entrusted with the responsibility of overseeing, on behalf of citizens, a large range of services provided through a diverse portfolio of assets. Council, having stewardship responsibility, is the final decision maker on all matters related to asset management in the Township. The Council and senior management are committed to the success of asset management planning. The following details the responsibilities of the key stakeholders within the Township:

### **Council:**

- Approve by resolution the asset management plan and its updates every five years;
- Conduct annual reviews of the management plan implementation progress on or before July 1st of every year, that includes:
  - Progress on ongoing efforts to implement the asset management plans;
  - Consideration of the Strategic Asset Management Policy;
  - Any factors affecting the ability of the Township to implement its asset management plans;
  - Consultation with senior management;
  - A strategy to address these factors including the adoption of appropriate practices; and
  - Support ongoing efforts to continuously improve and implement the asset management plans.

### **CAO:**

- Maintain compliance with the asset management policy and provincial asset management regulations.

### **Senior Management:**

- Oversee asset management planning activities that fall within their service area and in support of others.

# Puslinch Asset Management





# Public Meeting Agenda: February 5<sup>th</sup>

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- Ontario Regulation 588/17 and Asset Management
- Service Level Policies
- Capital Budget
- Financial Strategy
- Ontario Regulation 588/17 Policy
- Questions

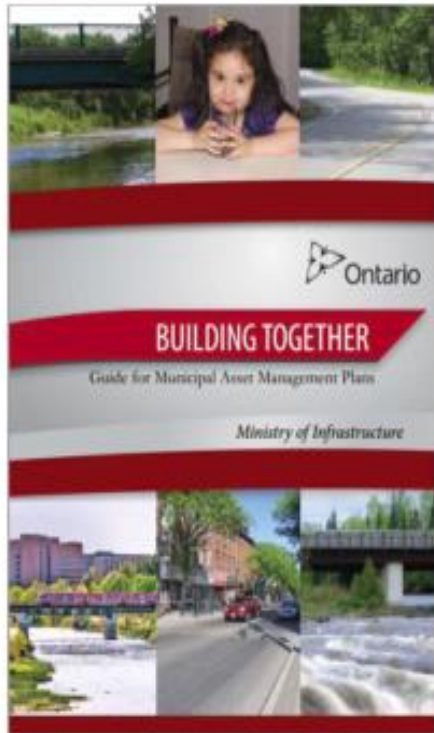
# What is Asset Management Overview of O. Reg. 588/17

In December 2017, the Province passed an asset management planning regulation under the Infrastructure for the Jobs and Prosperity Act, 2015.

This presentation provides an overview of:

- Municipal asset management planning in Ontario;
- Development of the Regulation, including incorporation of municipal feedback; and
- Regulatory requirements.

# What is Asset Management ?



3

Source: Build On Overview of Municipal Asset Management Planning Regulation O. Reg. 588/17



# Creation of an Asset Registry

- An evaluation of all assets taking into account descriptors such as:
- age,
- condition,
- remaining life,
- replacement value or remediation cost,
- Probability of failure and
- consequence of failure.

# Asset Classes in Puslinch

- Roads
  - Gravel Roads
  - Surface Treated
  - Hard Surface Roads
- Bridges
- Culverts
- Sidewalks
- Storm Sewers
- Storm Water Management Ponds
- Regulatory/Warnings Signs
- Street Lights
  - Standard Street Lights
  - Decorative Street Lights
  - Floodlights
- Public Works, Building Department, Parks and Recreation
  - Licensed Vehicles
  - Unlicensed Vehicles
- Street Trees
- Buildings and Facilities
  - Municipal Complex
  - Puslinch Community Centre
  - Optimist Recreation Centre
  - Fire Hall
  - Various Storage Buildings
  - Public Work Unlicensed Vehicles
- Parks and Recreation
  - Lights
  - Park Equipment
  - Bleachers
  - Fencing
  - Sports Fields
  - etc.
- Fire Assets
  - Vehicles, Tires
  - Fire Equipment
  - Fire Reservoirs



# Service Level Policies

- Roads are the largest Capital Expenditure
- Road rehabilitation/replacement is determined by Life Cycle and a Pavement Condition Index (PCI) PCI is a range of 1 -100
- These standards are used throughout Ontario by municipalities and supported by the Ontario Good Roads (OGRA)
- Usually hard surface roads are remediated when their condition is considered “poor”
- UEM Recommended Service Level Policies for All Asset Classes
- Service Level Policies impact of the creation of a capital plan

## UEM Proposed Level of Service Policy: Bridges and Culverts

To inspect according to the Ontario structure inspection manual and Ontario Regulation 104/97. This inspection shall occur every two years and shall adjust the BCI based on the recommendations of the qualified engineer. The inspection report shall include all repairs that exceed the capital threshold in the capital budget to the schedule recommended by the qualified engineer.

The asset registry must be updated at least once per year to reflect whether the asset was inspected or not. For those not inspected, the BCI will be maintained based upon the requirements of the Ontario Regulation 104/97.

## UEM Proposed Level of Service Policy: Buildings and Facilities

Buildings and Facilities owned by the Township of Puslinch should be inspected by a qualified structural engineer on a routine basis however not more than 5 years apart to determine necessary improvements, repairs or replacements. In addition to the qualified structural engineer an additional qualified engineer shall be retained to address electrical, HVAC and mechanical components. The cost of any needed improvements shall be integrated into the capital plan by way of updates to the asset registry.

In addition to the inspections by such qualified engineer's a qualified company or individual shall undertake an Arc-Flash study every 5 years and infrared scanning of all electrical equipment to determine the adequacy of such equipment.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).



## UEM Proposed Level of Service Policy: Fire Equipment

The service level policy for Fire Equipment shall be in accordance with the related NFPA standards: 1911, 1962, 1932, 1855, 1858, 1852, 1851 and 1971.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

## UEM Proposed Level of Service Policy: Fire Reservoirs

The Fire Department shall on an annual basis inspect all fire reservoirs owned by the Township in accordance with the Ontario Fire Code 213/07 and NFPA Standard 25 to ensure that such fire reservoirs can be easily accessible and that any components above the roof of the reservoir are in good condition. Such reservoirs shall not be obstructed by vegetation of any form such as plants, bushes and trees.

The Fire Department shall inspect the reservoirs every 5 years to ensure the integrity of the reservoir.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards)

## **UEM Proposed Level of Service Policy: Fleet - Works, Building Department, Parks & Fire Department**

Fleet shall be maintained in conformance with licensing practices of the Province of Ontario including the Ministry of Transportation and shall include a daily visual inspection of any licensed vehicle before the vehicle leaves the fleet storage facility of the Township. Inspection of fire and rescue services vehicles shall also be based on relevant NFPA standards.

Further to the proposed service level policy described above. It is recommended by UEM that the Township retain their current service level policy.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards)

## UEM Proposed Level of Service Policy: Gravel Roads

The Service level for gravel roads is the Minimum Maintenance Standard for Gravel Roads. Repair will include grading and if required an application of additional granular material. Other alternatives should be considered such as surface treatment including asphalt and/or reconstruction if all the following criteria are met:

- Full regrading is completed more than 6 times during each of two consecutive non-winter periods. The non-winter period is from May 1st to November 1st; and
- an inspection of the gravel base has been completed by a qualified engineer and confirms that the road base can support a hard-top surface, without additional construction required; and
- the average daily traffic volume exceeds 400 vehicles; and
- the Township has approved funding for the project.

For all gravel roads that have been fully graded following the half load season, the PCI will be assumed to be 90.

### **UEM Proposed Level of Service Policy: Hard Surface Roads**

Class 3 roads be rehabilitated or reconstructed at a PCI of 65

Class 4 roads be rehabilitated or reconstructed at a PCI of 60

Class 5 roads be rehabilitated or reconstructed at a PCI of 60

The pavement condition index should be renewed in 2021 and should be renewed every 5 years thereafter. A traffic volume study should be undertaken every 5 years beginning in 2020.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

## UEM Proposed Level of Service Policy: Regulatory Signs/Warning Signs

The Township shall retain a qualified company/individual that shall test the retro reflectivity of each sign once per calendar year with each inspection taking place no more than 16 months from the previous inspection. In conformance with the retro reflectivity specified in the Ontario Traffic Manual and when not meeting such requirements the Township shall replace the sign. Further, the Township shall conform with the requirement for class 3,4 and 5 highways as per the Ontario Regulation 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS.

The standard for the frequency of inspecting regulatory signs or warning signs to verify that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12 (1); O. Reg. 366/18, s. 13.

Class of Highway	Time
1	7 days
2	14 days
3	21 days
4	30 days
5	30 days

If a regulatory sign or warning sign is illegible, improperly oriented, obscured or missing, the standard is to repair or replace the sign within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 23/10, s. 8; O. Reg. 366/18, s. 13.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

## UEM Proposed Level of Service Policy: Sidewalks

In accordance with Ontario. Regulation. 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS, the standard for the frequency of inspecting sidewalks is once per year with each inspection occurring no more than 16 months from the previous inspection. Any discontinuity that exceeds 2cm shall be treated or repaired within 14 days of the inspection.

Under winter conditions sidewalks must be inspected within 48 hours of the end of snow accumulation to ensure that there is less than 8cm of snow accumulated on the sidewalk and to reduce to the level of 8cm within the same 48-hour period. The same time-period of 48 hours shall apply when ice forms on a sidewalk and shall require either removal or a treatment such as sand, salt or a combination of both to the sidewalk within the same 48-hour period.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

## **UEM Proposed Level of Service Policy: Storm Water Management Ponds**

Inspection of storm water management ponds should occur on average four times per year during the first two years of operation and then at least annually.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).



## UEM Proposed Level of Service Policy: Storm Water Management Systems

In reference to catch basin cleaning, as a general rule should be done annually but the frequency should be adjusted based upon the volume of material removed. Inspection of storm water management systems should occur on average four times per year during the first two years of operation and then at least annually.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

## UEM Proposed Level of Service Policy: Street Trees

This service level policy includes all trees that have been assumed by the Township through a development agreement. Subsequent to planting a tree the agency or company planting trees shall be responsible with all maintenance including pruning and replacement if necessary. After acceptance by the Township, the tree shall be inspected after 10 years and shall be inspected every 5 years thereafter to determine any required maintenance.

The Township would hire an arborist or potentially the services of the University of Guelph to visually inspect only the trees planted in the subdivisions within the Township.

It is recognized that there are numerous trees on public lands and road rights of way that may impact the safety of the public and maintenance activities. The Township overtime should document the location of such Trees their condition and required maintenance.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

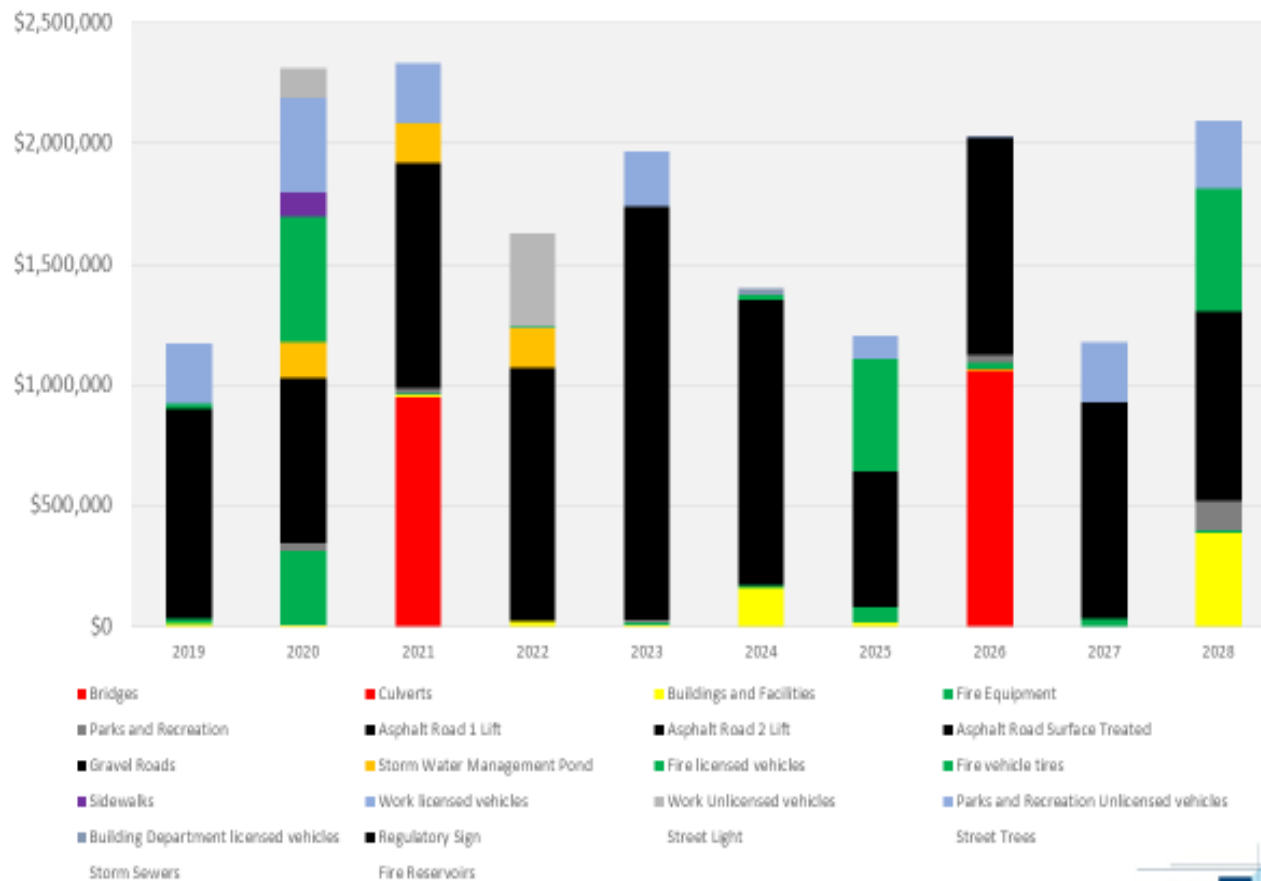
## UEM Proposed Level of Service Policy: Streetlights and Poles

All luminaires shall be inspected once per calendar year with each inspection taking place not more than 16 months from the last inspection. The standard of repair should be as outlined in Section 10 of Ontario Regulation 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS. The same standard of inspection shall apply to luminaire arms and poles and supporting luminaires that are owned by the Township.

The technology with streetlighting is evolutionary at the present time in Puslinch. The Township is in the process of modifying their streetlighting to LED fixtures while maintaining existing fixtures and poles. After the completion of the conversion to LED fixtures, the policy should be to replace fixtures in a cyclical manner every 20 years. Poles should be inspected by staff every 5 years to determine the need to replace based on a pole life of 30 years.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

## Township of Puslinch: 10 Year Capital Needs to support Existing Infrastructure



# Financial Strategy

**Ontario Regulation 588/17 requires that for the proposed level of service, a municipality prepare a 10 year financial strategy that:**

- **identifies the costs of undertaking the lifecycle activities**
- **identifies the annual funding projected to be available**
- **explains the financing options examined**
- **identifies any funding shortfall and explains how the funding shortfall and the associated risks will be addressed**

# Financial Strategy

**It has been assumed there are no “significant operating costs” (no significant increase in operating costs)**

**Financial Strategies Options are based on a combination of Pay-As-You-Go and Debt Financing (when necessary), with consideration given to reserve targets and municipal debt capacity.**

# Financial Strategy

**Financial Strategy Options considered three different levels of current funding (capital levy) increases:**

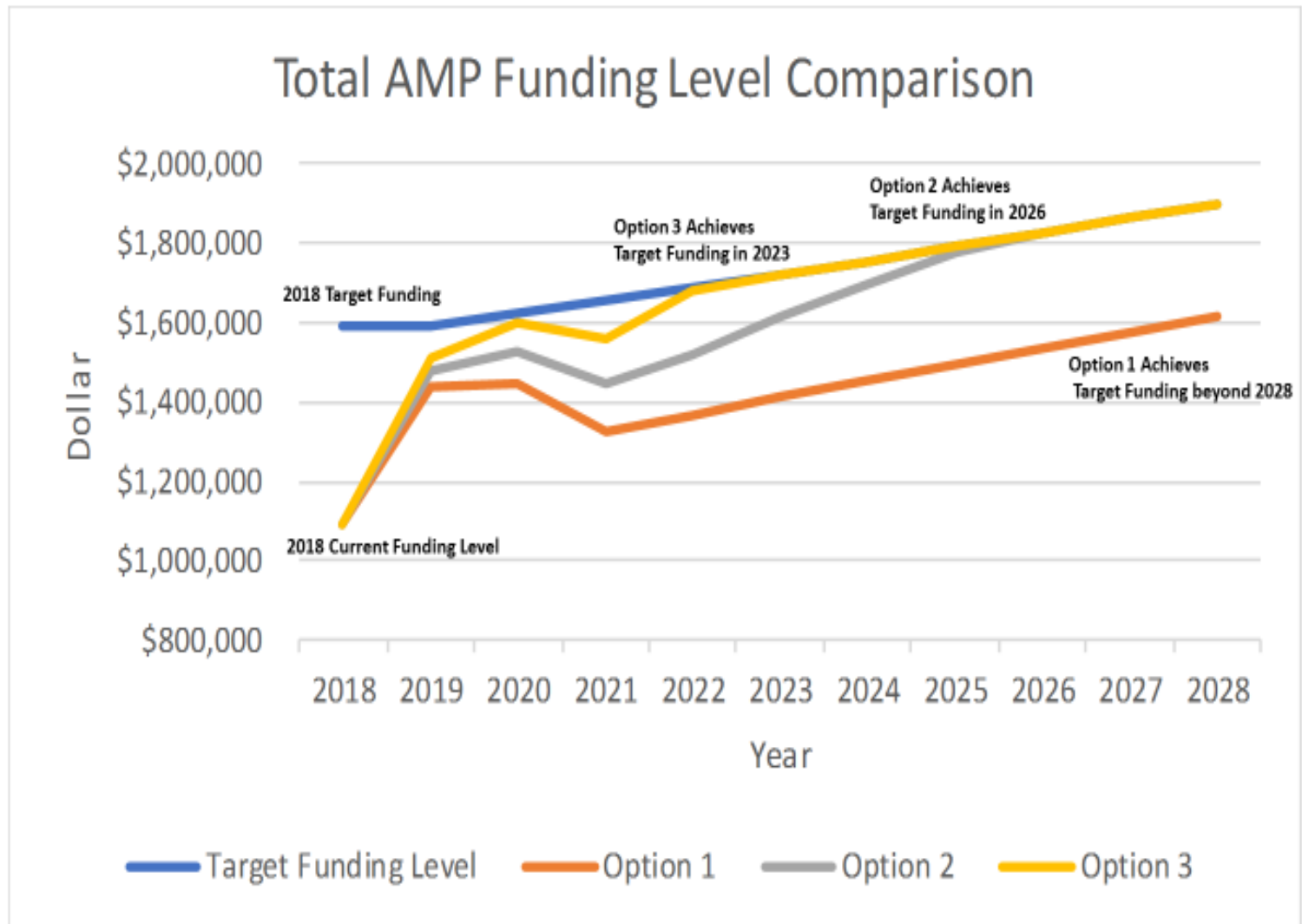
- **Option 1 – Capital Levy Increase equivalent to a 1% Tax Impact on the Typical Single Family Detached Dwelling**
- **Option 2 – Capital Levy Increase equivalent to a 2% Tax Impact on the Typical Single Family Detached Dwelling**
- **Option 3 – Capital Levy Increase equivalent to a 3% Tax Impact on the Typical Single Family Detached Dwelling (Recommended)**

**All Financial Strategy Options incorporated Financial Policy considerations regarding annual reserve funding levels, reserve balance targets, and municipal debt capacity.**

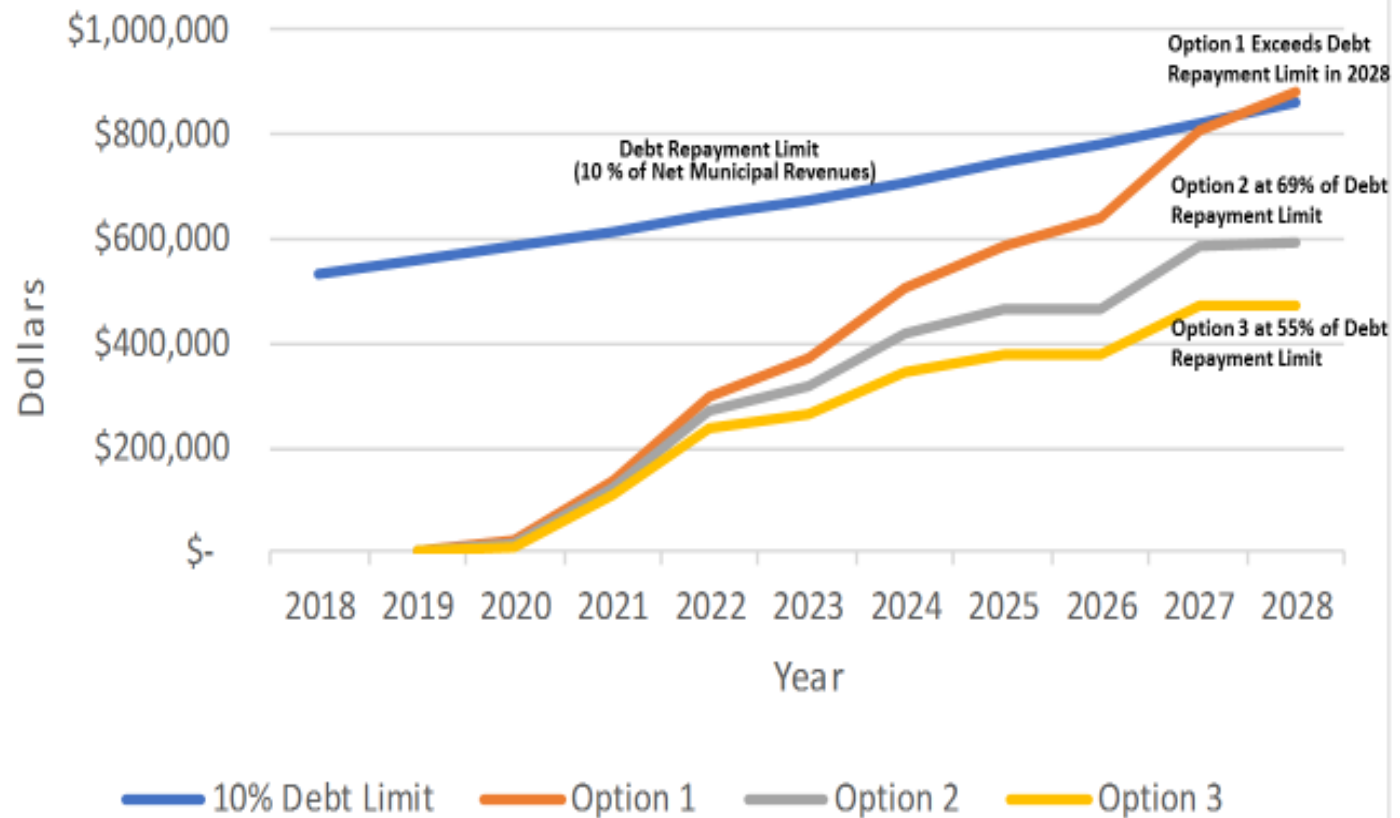
# Financial Strategy

Financial Policy Considerations	
AMP Target Funding Levels	Target Level of AMP Funding to Equal 2% of Capital Asset Replacement Values
AMP Discretionary Reserve Target Balances	Discretionary AMP Reserve Balance to Range between 10% - 20% of 10 year inflated capital plan expenditures
Debt Capacity Restrictions	Debt Servicing as a percent of own source revenues to not exceed 10%





## Debt Capacity Comparison



## Recommended Financial Strategy Option

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### **Option 3 (Capital Levy Increase to be Equivalent to a 3% Tax Impact on the Typical Single Family Detached Dwelling)**

- **Achieves the Target AMP Funding Level by 2023**
- **Results in the least debt required to fund the proposed capital plan**
- **Best positions the Township to address AMP activities beyond 2028**

# Questions ?

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## 20.6 Puslinch Asset Registry All Asset Classes (No Streetlights or Regulatory Signs) Reduced Fields

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
1001	Bridge	Cook's Mill Bridge	1	50	1992	2042	\$593,190.00	4	High
1003	Bridge	Little's Bridge	1	50	1910	2021	\$219,765.00	2	Very High
1009	Bridge	Moyer's Bridge	1	50	1931	2026	\$495,040.00	2	Very High
1005	Bridge	Leslie Road West Between Lots 35/36	1	50	1965	2015	\$445,900.00	4	High
1006	Bridge	Concession 1, Lots 9/10, West Of SR 10S	1	50	1970	2020	\$783,510.00	3	High
1007	Bridge	French's Bridge	1	50	1984	2034	\$309,140.00	3	High
1008	Bridge	Galt Creek Bridge Gore Road Lot 2	1	50	1948	2021	\$745,875.00	2	Very High
2002	Culvert	Culvert Of Cook's Mill Race	1	50	2013	2063	\$97,200.00	2	Very High
2004	Culvert	McFarlane's Culvert	1	50	2002	2052	\$126,585.00	4	High
2006	Culvert	Victoria Road Culvert Over Galt Creek	1	50	1960	2026	\$225,630.00	2	Very High
2007	Culvert	Irish Creek Culvert On Townline Road	1	50	1936	2026	\$239,400.00	2	Very High
2008	Culvert	7th Concession Culvert	1	50	2012	2062	\$55,687.50	4	High
2009	Culvert	Gilmour Rd Culvert Over Aberfoyle Creek	1	50	1930	2021	\$138,600.00	2	Very High
2010	Culvert	Ellis Road Culvert Over Puslinch Lake Irish Creek	1	50	1920	2026	\$283,500.00	2	Very High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
2011	Culvert	Ellis Road Culvert At Lot 10 Conc 2	1	50	2010	2060	\$131,670.00	3	High
2012	Culvert	Concession 2 Bridge/Culvert Over Mill Creek	1	50	1994	2044	\$560,700.00	3	High
2013	Culvert	Victoria Road Culvert North Of Leslie	1	50	1950	2026	\$177,165.00	3	High
2014	Culvert	Leslie Road Culvert West Of Victoria	1	50	1945	1995	\$171,450.00	2	Very High
2015	Culvert	Culvert Of Flamborough T/L West Of Victoria	1	50	2010	2060	\$264,735.00	4	High
2016	Culvert	Flamborough T/L Bridge/Culvert East Of Macpherson Ln	1	50	2010	2060	\$219,240.00	4	High
2017	Culvert	Gore Road Culvert	1	50	1960	2010	\$84,546.00	4	High
2018	Culvert	Gore Road Dual Culvert	1	50	1950	2000	\$63,135.00	4	High
2019	Culvert	7th Concession Culvert	1	50	1960	2010	\$194,400.00	4	High
53PCC	Buildings and Facilities	Puslinch Community Centre:Structure	1	40	1983	2050	\$3,000.00	4	Medium
67PCC	Buildings and Facilities	Puslinch Community Centre:Roof	1	40	1983	2028	\$100,000.00	5	Low
9PCC	Buildings and Facilities	Puslinch Community Centre:Walls & Windows	1	20	1983	2034	\$140,000.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
46PCC	Buildings and Facilities	Puslinch Community Centre: Interior Finishes	1	40	1983	2058	\$125,756.82	5	Low
93PCC	Buildings and Facilities	Puslinch Community Centre:Mechanical	1	40	1983	2058	\$45,000.00	5	Low
26PCC	Buildings and Facilities	Puslinch Community Centre:Electrical	1	40	1983	2058	\$61,000.00	5	Low
40PCC	Buildings and Facilities	Puslinch Community Centre:Fire, Life-Safety	1	40	1983	2058	\$5,750.00	5	Low
41PCC	Buildings and Facilities	Puslinch Community Centre: Septic Tank	1	30	1983	2036	\$15,000.00	3	Medium
95MC	Buildings and Facilities	Municipal Complex:Structure	1	40	1984	2050	\$144,921.07	4	Medium
56MC	Buildings and Facilities	Municipal Complex:Roof	1	40	1984	2028	\$42,734.10	5	Low
46MC	Buildings and Facilities	Municipal Complex:Walls & Windows	1	20	1984	2034	\$147,695.04	4	Medium
77MC	Buildings and Facilities	Municipal Complex:Interior Finishes	1	40	1984	2058	\$103,461.50	5	Low
59MC	Buildings and Facilities	Municipal Complex:Mechanical	1	40	1984	2058	\$222,667.14	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
21MC	Buildings and Facilities	Municipal Complex:Electrical	1	40	1984	2058	\$56,978.80	5	Low
1MC	Buildings and Facilities	Municipal Complex:Fire, Life-Safety	1	40	1984	2058	\$35,986.61	5	Low
15002	Buildings and Facilities	Municipal Complex:Parking Lot Municipal Complex	1	25	1984	2028	\$162,750.00	2	Medium
41MC	Buildings and Facilities	Municipal Complex: Septic Tank	1	30	1983	2036	\$15,000.00	3	Medium
64BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Structure	1	40		2042	\$38,281.53	3	Medium
71BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Roof	1	40		2028	\$8,523.62	3	Medium
66BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC: Walls & Windows	1	20		2030	\$37,384.31	3	Medium
14BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Interior Finishes	1	40		2042	\$1,794.45	3	Medium
70BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Mechanical	1	40		2042	\$23,327.81	3	Medium
89BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Electrical	1	40		2042	\$20,187.52	3	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
44BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Fire, Life-Safety	1	40		2042	\$20,037.99	3	Medium
92RSB	Buildings and Facilities	Roads Storage BuildingStructure	1	40		2050	\$64,395.00	4	Medium
95RSB	Buildings and Facilities	Roads Storage BuildingRoof	1	40		2028	\$14,337.95	4	Medium
7RSB	Buildings and Facilities	Roads Storage BuildingWalls & Windows	1	40		2050	\$62,885.74	4	Medium
24RSB	Buildings and Facilities	Roads Storage BuildingInterior Finishes	1	20		2034	\$3,018.52	4	Medium
15RSB	Buildings and Facilities	Roads Storage BuildingMechanical	1	40		2050	\$39,240.70	4	Medium
81RSB	Buildings and Facilities	Roads Storage BuildingElectrical	1	40		2050	\$33,958.30	4	Medium
86RSB	Buildings and Facilities	Roads Storage BuildingFire, Life-Safety	1	40		2050	\$33,706.76	4	Medium
33OCC	Buildings and Facilities	Optimist Community Centre:Structure	1	40	2010	2058	\$175,891.97	5	Low
66OCC	Buildings and Facilities	Optimist Community Centre:Roof	1	40	2010	2028	\$28,600.32	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
51OCC	Buildings and Facilities	Optimist Community Centre:Walls & Windows	1	40	2010	2058	\$76,505.86	5	Low
44OCC	Buildings and Facilities	Optimist Community Centre:Interior Finishes	1	20	2010	2038	\$143,001.60	5	Low
97OCC	Buildings and Facilities	Optimist Community Centre:Mechanical	1	40	2010	2058	\$148,006.66	5	Low
22OCC	Buildings and Facilities	Optimist Community Centre:Electrical	1	40	2010	2058	\$75,075.84	5	Low
18OCC	Buildings and Facilities	Optimist Community Centre:Fire, Life-Safety	1	40	2010	2050	\$26,455.30	4	Medium
39OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink::Structure	1	40	2010	2050	\$125,235.29	4	Medium
95OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink::Roof	1	40	2010	2050	\$27,884.42	4	Medium
13OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink::Walls & Windows	1	40	2010	2050	\$122,300.08	4	Medium
58OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink::Interior Finishes	1	20	2010	2034	\$5,870.40	4	Medium
17OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink::Mechanical	1	40	2010	2050	\$76,315.25	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
51OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink: Electrical	1	40	2010	2022	\$66,042.05	1	High
88OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink::Fire, Life-Safety	1	40	2010	2050	\$65,552.84	4	Medium
41OCC	Buildings and Facilities	Optimist Community Centre Ice Rink: Septic Tank	1	30	2010	2036	\$15,000.00	3	Medium
3011	Buildings and Facilities	Community Centre Complex: Concession Booth At Community Centre Ball Diamond, C Road 46	1	40	1992	2032	\$20,000.00	3	Medium
3035	Buildings and Facilities	Community Centre Complex: Storage Building at Horse Paddock	1	30		2036	\$20,000.00	3	Medium
3009MM	Buildings and Facilities	Morrison Meadows: Booth/Washroom Building, Old Morrison Park	1	40	1988	2042	\$20,000.00	3	Medium
41MM	Buildings and Facilities	Morrison Meadows: Septic Tank	1	30		2048	\$15,000.00	5	Low
41OMM	Buildings and Facilities	Old Morrison: Septic Tank	1	30		2048	\$15,000.00	5	Low
1_26FE	Fire Equipment	Air Cylinder Compressor	1	20	2014	2034	\$29,490.00	5	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
2_46FE	Fire Equipment	Portable Radios	30				\$45,000.00	4	Medium
3_18FE	Fire Equipment	Mobile/Truck Radios	8				\$40,000.00	4	Medium
4_35FE	Fire Equipment	Pagers	44				\$22,000.00	3	High
5_44FE	Fire Equipment	Vehicle Extrication Equipment	1				\$25,000.00	4	Medium
6_70FE	Fire Equipment	Power Hydraulic Tool set	1	20	2000	2020	\$52,500.00	1	Very High
7_82FE	Fire Equipment	Edraulic Combination Tool	1	20		2034	\$15,000.00	4	Medium
8_93FE	Fire Equipment	Thermal Imaging Camera	1	10	2009	2019	\$6,000.00	1	Very High
9_104FE	Fire Equipment	Washer/Extractor	1	10	2017	2027	\$10,000.00	4	Medium
10_2FE	Fire Equipment	Gear Dryer	1	10	2017	2027	\$6,000.00	4	Medium
11_103FE	Fire Equipment	Rapid Deployment Water Craft	1	10	2010	2020	\$6,000.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12_41FE	Fire Equipment	Defibrillators Fire & Rescue Service Trucks	3	8	2017	2025	\$15,000.00	3	High
1212_41FE	Fire Equipment	Defibrillators - Municipal Buildings	3	8	2017	2025	\$4,500.00	5	Medium
13_89FE	Fire Equipment	Portable Pumps	2	20	2006	2026	\$15,000.00	4	Medium
14_25FE	Fire Equipment	Air Cylinder:84	1	15	2005	2020	\$1,500.00	3	High
15_87FE	Fire Equipment	Air Cylinder:85	1	15	2006	2020	\$1,500.00	3	High
16_87FE	Fire Equipment	Air Cylinder:87	1	15	2007	2020	\$1,500.00	3	High
17_76FE	Fire Equipment	Air Cylinder:88	1	15	2008	2020	\$1,500.00	3	High
18_90FE	Fire Equipment	Air Cylinder:100	1	15	2004	2020	\$1,500.00	3	High
19_90FE	Fire Equipment	Air Cylinder:101	1	15	2005	2020	\$1,500.00	3	High
20_85FE	Fire Equipment	Air Cylinder:102	1	15	2006	2020	\$1,500.00	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
21_85FE	Fire Equipment	Air Cylinder:103	1	15	2007	2020	\$1,500.00	3	High
22_9FE	Fire Equipment	Air Cylinder:104	1	15	2006	2020	\$1,500.00	3	High
23_42FE	Fire Equipment	Air Cylinder:105	1	15	2005	2020	\$1,500.00	3	High
24_94FE	Fire Equipment	Air Cylinder:106	1	15	2006	2020	\$1,500.00	3	High
25_35FE	Fire Equipment	Air Cylinder:107	1	15	2005	2020	\$1,500.00	3	High
26_23FE	Fire Equipment	Air Cylinder:108	1	15	2005	2020	\$1,500.00	3	High
27_67FE	Fire Equipment	Air Cylinder:109	1	15	2005	2020	\$1,500.00	3	High
28_48FE	Fire Equipment	Air Cylinder:310	1	15	2008	2020	\$1,500.00	3	High
29_64FE	Fire Equipment	Air Cylinder:311	1	15	2008	2020	\$1,500.00	3	High
30_89FE	Fire Equipment	Air Cylinder:312	1	15	2005	2020	\$1,500.00	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
31_89FE	Fire Equipment	Air Cylinder:313	1	15	2005	2020	\$1,500.00	3	High
32_104FE	Fire Equipment	Air Cylinder:314	1	15	2008	2020	\$1,500.00	3	High
33_34FE	Fire Equipment	Air Cylinder:315	1	15	2008	2020	\$1,500.00	3	High
34_30FE	Fire Equipment	Air Cylinder:316	1	15	2010	2020	\$1,500.00	3	High
35_104FE	Fire Equipment	Air Cylinder:317	1	15	2011	2020	\$1,500.00	3	High
36_48FE	Fire Equipment	Air Cylinder:318	1	15	2012	2020	\$1,500.00	3	High
37_107FE	Fire Equipment	Air Cylinder:319	1	15	2013	2020	\$1,500.00	3	High
38_15FE	Fire Equipment	Air Cylinder:320	1	15	2007	2020	\$1,500.00	3	High
39_99FE	Fire Equipment	Air Cylinder:323	1	15	2007	2020	\$1,500.00	3	High
40_31FE	Fire Equipment	Air Cylinder:334	1	15	2007	2020	\$1,500.00	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
41_37FE	Fire Equipment	Air Cylinder:335	1	15	2005	2020	\$1,500.00	3	High
42_79FE	Fire Equipment	Air Cylinder:336	1	15	2007	2020	\$1,500.00	3	High
43_107FE	Fire Equipment	Air Cylinder:337	1	15	2006	2020	\$1,500.00	3	High
44_55FE	Fire Equipment	Air Cylinder:339	1	15	2006	2020	\$1,500.00	3	High
45_27FE	Fire Equipment	Air Cylinder:340	1	15	2007	2020	\$1,500.00	3	High
46_91FE	Fire Equipment	Air Cylinder:341	1	15	2008	2020	\$1,500.00	3	High
47_55FE	Fire Equipment	Air Cylinder:342	1	15	2009	2020	\$1,500.00	3	High
48_109FE	Fire Equipment	Air Cylinder:343	1	15	2010	2020	\$1,500.00	3	High
49_104FE	Fire Equipment	Air Cylinder:344	1	15	2011	2020	\$1,500.00	3	High
50_57FE	Fire Equipment	Air Cylinder:345	1	15	2012	2020	\$1,500.00	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
51_94FE	Fire Equipment	Air Cylinder:346	1	15	2013	2020	\$1,500.00	3	High
52_95FE	Fire Equipment	Air Cylinder:347	1	15	2014	2020	\$1,500.00	3	High
53_40FE	Fire Equipment	Air Cylinder:348	1	15	2015	2020	\$1,500.00	3	High
54_31FE	Fire Equipment	Air Cylinder:349	1	15	2011	2020	\$1,500.00	3	High
55_41FE	Fire Equipment	Air Cylinder:350	1	15	2011	2020	\$1,500.00	3	High
56_58FE	Fire Equipment	Air Cylinder:351	1	15	2010	2020	\$1,500.00	3	High
57_105FE	Fire Equipment	Air Cylinder:352	1	15	2011	2020	\$1,500.00	3	High
58_88FE	Fire Equipment	Air Cylinder:353	1	15	2012	2020	\$1,500.00	3	High
59_35FE	Fire Equipment	Air Cylinder:354	1	15	2012	2020	\$1,500.00	3	High
60_57FE	Fire Equipment	Air Cylinder:355	1	15	2013	2020	\$1,500.00	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
61_17FE	Fire Equipment	Air Cylinder:356	1	15	2014	2020	\$1,500.00	3	High
62_96FE	Fire Equipment	Air Cylinder:357	1	15	2015	2020	\$1,500.00	3	High
63_48FE	Fire Equipment	Air Cylinder:358	1	15	2016	2020	\$1,500.00	3	High
64_106FE	Fire Equipment	Air Cylinder:359	1	15	2017	2020	\$1,500.00	3	High
65_4FE	Fire Equipment	Air Cylinder:360	1	15	2018	2020	\$1,500.00	3	High
66_21FE	Fire Equipment	Bunker Gear #317 907001148 907001150	1	10	2009	2019	\$3,000.00	1	Very High
67_60FE	Fire Equipment	Bunker Gear #395 1307006351 1104007407	1	10	2009	2019	\$3,000.00	1	Very High
68_80FE	Fire Equipment	Bunker Gear #376 1104007399 3707960	1	10	2009	2019	\$3,000.00	1	Very High
69_51FE	Fire Equipment	Bunker Gear #386 1104007401 907001149	1	10	2009	2019	\$3,000.00	1	Very High
70_80FE	Fire Equipment	Bunker Gear #351 907001154 1307008352	1	10	2009	2019	\$3,000.00	1	Very High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
71_102FE	Fire Equipment	Bunker Gear #308	1	10	2011	2021	\$3,000.00	3	High
72_58FE	Fire Equipment	Bunker Gear #378 1104007403 1104007408	1	10	2011	2021	\$3,000.00	3	High
73_67FE	Fire Equipment	Bunker Gear #301 1301002761 1301002766	1	10	2013	2023	\$3,000.00	3	High
74_22FE	Fire Equipment	Bunker Gear #336 1301002757 1301002762	1	10	2013	2023	\$3,000.00	3	High
75_67FE	Fire Equipment	Bunker Gear #392 1301002758 1301002763	1	10	2013	2023	\$3,000.00	4	Medium
76_55FE	Fire Equipment	Bunker Gear #337 1301002760 1301002765	1	10	2013	2023	\$3,000.00	4	Medium
77_100FE	Fire Equipment	Bunker Gear #388 4748801 4749620	1	10	2014	2024	\$3,000.00	4	Medium
78_9FE	Fire Equipment	Bunker Gear #318	1	10	2014	2024	\$3,000.00	4	Medium
79_75FE	Fire Equipment	Bunker Gear #310 4748800 4749619	1	10	2014	2024	\$3,000.00	4	Medium
80_57FE	Fire Equipment	Bunker Gear #333 4924090 4924085	1	10	2015	2025	\$3,000.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
81_37FE	Fire Equipment	Bunker Gear #387 4924092 4924080	1	10	2015	2025	\$3,000.00	4	Medium
83_94FE	Fire Equipment	Bunker Gear #326 4924091 4924082	1	10	2015	2025	\$3,000.00	4	Medium
84_89FE	Fire Equipment	Bunker Gear #321 4992302 4924081	1	10	2015	2025	\$3,000.00	4	Medium
85_11FE	Fire Equipment	Bunker Gear #370 4924095 4924083	1	10	2015	2025	\$3,000.00	4	Medium
86_72FE	Fire Equipment	Bunker Gear #381 4924093 4924086	1	10	2015	2025	\$3,000.00	4	Medium
87_51FE	Fire Equipment	Bunker Gear #306 4992301 4992304	1	10	2015	2025	\$3,000.00	4	Medium
88_35FE	Fire Equipment	Bunker Gear #309 4924096 4924084	1	10	2015	2025	\$3,000.00	4	Medium
89_97FE	Fire Equipment	Bunker Gear #307 4924089 4924079	1	10	2015	2025	\$3,000.00	4	Medium
90_29FE	Fire Equipment	Bunker Gear #380 4992303 4992306	1	10	2015	2025	\$3,000.00	4	Medium
91_44FE	Fire Equipment	Bunker Gear #375 4924077 4992305	1	10	2015	2025	\$3,000.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
92_20FE	Fire Equipment	Bunker Gear #303 5017234 5017235	1	10	2015	2025	\$3,000.00	4	Medium
93_73FE	Fire Equipment	Bunker Gear #320 4924094 4924087	1	10	2015	2025	\$3,000.00	4	Medium
94_89FE	Fire Equipment	Bunker Gear #355 4924088 4924078	1	10	2015	2025	\$3,000.00	4	Medium
95_47FE	Fire Equipment	Bunker Gear #315 5085806 5085940	1	10	2016	2026	\$3,000.00	5	Medium
96_14FE	Fire Equipment	Bunker Gear #319 5122954 5085938	1	10	2016	2026	\$3,000.00	5	Medium
97_58FE	Fire Equipment	Bunker Gear #391 5085805 5085939	1	10	2016	2026	\$3,000.00	5	Medium
98_23FE	Fire Equipment	Bunker Gear #379 5312492 5312493	1	10	2017	2027	\$3,000.00	5	Medium
99_1FE	Fire Equipment	Bunker Gear #382 5310558 5310560	1	10	2017	2027	\$3,000.00	5	Medium
100_87FE	Fire Equipment	Bunker Gear #323 5310555 5310559	1	10	2017	2027	\$3,000.00	5	Medium
101_49FE	Fire Equipment	Bunker Gear #385 5310557 5310562	1	10	2017	2027	\$3,000.00	5	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
102_20FE	Fire Equipment	Bunker Gear #322 5310556 5310561	1	10	2017	2027	\$3,000.00	5	Medium
103_101FE	Fire Equipment	Bunker Gear #350 5483616 5483622	1	10	2018	2028	\$3,000.00	5	Medium
104_60FE	Fire Equipment	Bunker Gear #335 5483615 5483621	1	10	2018	2028	\$3,000.00	5	Medium
105_24FE	Fire Equipment	Bunker Gear #302 5483614 5483619	1	10	2018	2028	\$3,000.00	5	Medium
106_92FE	Fire Equipment	Bunker Gear #305 5483613 5483618	1	10	2018	2028	\$3,000.00	5	Medium
FE_122_1	Fire Equipment	Bunker Gear #351	1	10	2009	2019	\$3,000.00	1	Very High
77_9FVT	Fire Equipment	Ultralight MMR 2000	1	15	2004	2020	\$7,450.00	3	High
78_16FVT	Fire Equipment	Ultralight MMR 2000	1	15	2004	2020	\$7,450.00	3	High
79_57FVT	Fire Equipment	Ultralight MMR 2000	1	15	2004	2020	\$7,450.00	3	High
80_30FVT	Fire Equipment	Ultralight MMR 2000	1	15	2004	2020	\$7,450.00	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
69_41FVT	Fire Equipment	Ultralight MMR 2000	1	15	2005	2020	\$7,450.00	4	Medium
74_27FVT	Fire Equipment	Fire Hawk 2002	1	15	2005	2020	\$7,450.00	4	Medium
75_43FVT	Fire Equipment	Ultralight MMR 2000	1	15	2005	2020	\$7,450.00	4	Medium
76_67FVT	Fire Equipment	Ultralight MMR 2000	1	15	2005	2020	\$7,450.00	4	Medium
59_56FVT	Fire Equipment	Fire Hawk 2002	1	15	2006	2020	\$7,450.00	4	Medium
62_23FVT	Fire Equipment	Fire Hawk 2002	1	15	2006	2020	\$7,450.00	4	Medium
67_99FVT	Fire Equipment	Fire Hawk 2002	1	15	2006	2020	\$7,450.00	4	Medium
60_51FVT	Fire Equipment	Fire Hawk 2002	1	15	2007	2020	\$7,450.00	4	Medium
61_92FVT	Fire Equipment	Fire Hawk 2002	1	15	2007	2020	\$7,450.00	4	Medium
68_20FVT	Fire Equipment	Ultralight MMR 2000	1	15	2007	2020	\$7,450.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
70_84FVT	Fire Equipment	Fire Hawk 2002	1	15	2007	2020	\$7,450.00	4	Medium
71_45FVT	Fire Equipment	Fire Hawk 2002	1	15	2007	2020	\$7,450.00	4	Medium
72_79FVT	Fire Equipment	Fire Hawk 2002	1	15	2007	2020	\$7,450.00	4	Medium
73_30FVT	Fire Equipment	Fire Hawk 2002	1	15	2007	2020	\$7,450.00	4	Medium
63_86FVT	Fire Equipment	Fire Hawk M7	1	15	2013	2020	\$7,450.00	4	Medium
64_69FVT	Fire Equipment	Fire Hawk M7	1	15	2013	2020	\$7,450.00	4	Medium
65_29FVT	Fire Equipment	Fire Hawk M7	1	15	2013	2020	\$7,450.00	4	Medium
66_17FVT	Fire Equipment	Fire Hawk M7	1	15	2013	2020	\$7,450.00	4	Medium
67_17FVT	Fire Equipment	SCBA Masks	28	15	2005	2020	\$8,250.00	4	Medium
FR_1	Fire Reservoir	Tank: (Arkell) #30 Boreham Dr	1	50	1999	2049	\$50,000.00	3	High
FR_2	Fire Reservoir	Tank: (Arkell) #38 Boreham Dr	1	50	1999	2049	\$50,000.00	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
FR_3	Fire Reservoir	Tank: (Audrey Meadows) Catherine Ct	1	50	2011	2061	\$50,000.00	3	Medium
FR_4	Fire Reservoir	Tank: (Audrey Meadows) Old Ruby	1	50	2011	2061	\$50,000.00	3	Medium
FR_5	Fire Reservoir	Tank: (Audrey Meadows) Old Ruby	1	50	2011	2061	\$50,000.00	3	Medium
FR_6	Fire Reservoir	Tank: (Community Center) #23 Brock Rd	1	50	2010	2060	\$50,000.00	3	Medium
FR_7	Fire Reservoir	Tank: (Estate Homes) #33 Carriage Ln	1	50	2000	2050	\$50,000.00	3	High
FR_8	Fire Reservoir	Tank: (Estate Homes) 65 Carriage Ln	1	50	2000	2050	\$50,000.00	3	High
FR_9	Fire Reservoir	Tank: (Estate Subdivision) #32 Daymond Dr	1	50	2009	2059	\$50,000.00	3	Medium
FR_10	Fire Reservoir	Tank: (Hammersley) #7480 Hammersley Dr	1	50	1999	2049	\$50,000.00	3	High
FR_11	Fire Reservoir	Tank: (Puslinch Fire) 7404 Well Rd 34	1	50	2002	2052	\$50,000.00	3	High
FR_12	Fire Reservoir	Tank: (Puslinch Fire) 6495 Roszell Rd	1	50			\$50,000.00	3	High
FR_13	Fire Reservoir	Tank: ( Estate Homes) #37 Fox Run Dr	1	50	1989	2039	\$50,000.00	3	High
FR_14	Fire Reservoir	Tank: (1719303 Ontario Inc.) Morriston Estates Subdivision	1	50			\$50,000.00	3	Medium
FR_15	Fire Reservoir	Tank: DRS Developments	1	50			\$50,000.00	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3087	Parks and Recreation	Community Centre Complex: Fencing Around Community Centre	1	20		2038	\$65,500.00	5	Medium
3082	Parks and Recreation	Community Centre Complex: Parking Lot Community Centre Complex	1	25		2028	\$91,875.00	2	High
3078	Parks and Recreation	Community Centre Complex: Puslinch Community Centre Sidewalks	1	20		2034	\$1,500.00	4	Medium
3079	Parks and Recreation	Community Centre Complex: Swing Gates	3	30		2042	\$9,000.00	4	Medium
3080	Parks and Recreation	Community Centre Complex: Soccer Field	1	25		2043	\$575,000.00	5	Medium
3013	Parks and Recreation	Community Centre Complex: Light Poles	7	40		2058	\$161,385.00	5	Medium
3014	Parks and Recreation	Community Centre Complex: Wooden Bleacher	1	20		2030	\$5,000.00	3	Medium
3015	Parks and Recreation	Community Centre Complex: Metal Bleacher	1	30		2048	\$13,725.00	5	Medium
3016	Parks and Recreation	Community Centre Complex: Fencing Outfield	1	20		2034	\$28,689.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3017	Parks and Recreation	Community Centre Complex: Fencing Backstop	1	20		2034	\$1,572.00	4	Medium
3019	Parks and Recreation	Community Centre Complex: Netting Backstop	1	20		2034	\$250.00	4	Medium
3020	Parks and Recreation	Community Centre Complex: Fencing Infield	1	20		2034	\$6,550.00	4	Medium
3024	Parks and Recreation	Community Centre Complex: Batting Cages	1	20		2030	\$9,000.00	3	Medium
3025	Parks and Recreation	Community Centre Complex: Wooden Fences Beside Batting Cages	1	15		2024	\$1,800.00	2	High
3026	Parks and Recreation	Community Centre Complex: Concrete Hydropole	2	20		2038	\$4,000.00	5	Medium
3028	Parks and Recreation	Community Centre Complex: Light Poles	2	20		2026	\$5,200.00	2	High
3081	Parks and Recreation	Community Centre Complex: Light Fixtures	1	20		2038	\$3,500.00	5	Medium
3029	Parks and Recreation	Community Centre Complex: Fencing	1	20		2026	\$9,694.00	2	High
3031	Parks and Recreation	Community Centre Complex: Aberfoyle Playground	1	25		2038	\$25,000.00	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3032	Parks and Recreation	Community Centre Complex: Fencing Outside Aberfoyle Playground	1	20		2030	\$3,930.00	3	Medium
14003	Parks and Recreation	Community Centre Complex: Tennis Court Fencing	1	40	1988	2028	\$21,615.00	5	Medium
14005	Parks and Recreation	Community Centre Complex: Paving Tennis Court	1	40	2009	2049	\$44,625.00	3	Medium
3033	Parks and Recreation	Community Centre Complex: Aerial Transformers	2					4	Medium
14004	Parks and Recreation	Community Centre Complex: Horse Run Fencing	1	40	2010	2050	5030	2	High
14006	Parks and Recreation	Community Centre Complex: Light Poles at Horse Paddock	2	40	2009	2049	15510	4	Medium
3036	Parks and Recreation	Community Centre Complex: Horse Paddock Bleachers	6	20		2020	30000	1	High
3037	Parks and Recreation	Community Centre Complex: Light Poles at Back Field	6	20		2038	15600	5	Medium
3039	Parks and Recreation	Community Centre Complex: Gravel Parking Lot & Road	1	50		2068	86000	5	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3822	Parks and Recreation	Community Centre Complex: Puslinch Community Gardens Cobblestone Walkways	1	20		2038	2520	5	Medium
3823	Parks and Recreation	Community Centre Complex: Puslinch Community Gardens Benches	2	20		2038	500	5	Medium
3041	Parks and Recreation	Morrison Meadows: Morrison Playground	1	25		2038	25000	4	Medium
3042	Parks and Recreation	Morrison Meadows: Gravel Parking Lot	1	25		2038	47300	4	Medium
3010	Parks and Recreation	Morrison Meadows: Picnic Pavillion, Morrison Meadows Park	1	40	1993	2058	30000	5	Medium
3043	Parks and Recreation	Morrison Meadows: Picnic Tables	7	20		2038	3500	5	Medium
3044	Parks and Recreation	Morrison Meadows: Basketball Court	1	20		2034	22425	4	Medium
3279	Parks and Recreation	Morrison Meadows: Basketball Court Post and Hoops	1	20		2034	1000	4	Medium
3046	Parks and Recreation	Morrison Meadows: Bleachers	2	25		2021	10000	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3047	Parks and Recreation	Morrison Meadows: Benches	2	20		2020	1000	1	High
3048	Parks and Recreation	Morrison Meadows: Fencing Backstop	1	20		2034	1637.5	4	Medium
3049	Parks and Recreation	Morrison Meadows: Fencing Outfield	1	20		2034	29344	4	Medium
3050	Parks and Recreation	Morrison Meadows: Fencing Backstop	1	20		2034	1965	4	Medium
3051	Parks and Recreation	Morrison Meadows: Fencing Infield	1	20		2034	3930	4	Medium
3052	Parks and Recreation	Morrison Meadows: 6 Seat High Bleachers	1	25		2021	5000	1	High
3053	Parks and Recreation	Morrison Meadows: 6 Seat High Bleachers	1	25		2021	5000	1	High
3054	Parks and Recreation	Morrison Meadows: Fencing Around Park	1	20		2038	26200	5	Medium
3055	Parks and Recreation	Morrison Meadows: Fencing Behind Large Baseball Diamond	1	20		2038	13100	5	Medium
3056	Parks and Recreation	Old Morrison : Gravel Road	1	25		2028	7740	2	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3057	Parks and Recreation	Old Morriston : Fencing Outfield	1	20		2030	28820	3	Medium
3058	Parks and Recreation	Old Morriston : Fencing Infield	1	20		2034	1834	4	Medium
3059	Parks and Recreation	Old Morriston : Fencing Backstop	1	20		2020	3668	1	High
3060	Parks and Recreation	Old Morriston : 6 seat Concrete Bleachers	2	50		2023	10000	1	High
3061	Parks and Recreation	Old Morriston : Ball Park Benches	1	20		2030	500	3	Medium
3063	Parks and Recreation	Old Morriston : Light Towers	7	40			161385	1	High
3064	Parks and Recreation	Old Morriston : Light Fixtures	7	20			24500	3	Medium
3065	Parks and Recreation	Old Morriston : Batting Cages	1	20		2030	13100	3	Medium
3066	Parks and Recreation	Old Morriston : Equipment Storage Room	1	40		2042	400	3	Medium
3281	Parks and Recreation	Old Morriston : Equipment Storage Room, Panel	1	20		2030	10000	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3067	Parks and Recreation	Badenoch Soccer Field: Storage Shed	1	40		2050	20000	4	Medium
3068	Parks and Recreation	Badenoch Soccer Field: 3 Seat Bleacher	2	25		2021	2000	1	High
3070	Parks and Recreation	Badenoch Soccer Field: Fencing (East Side)	1	20		2026	14934	2	High
3071	Parks and Recreation	Badenoch Soccer Field: Fencing (North and West Side)	1	20		2038	27641	5	Medium
3072	Parks and Recreation	Badenoch Soccer Field: Septic Tank	1	30		2036	15000	3	Medium
3074	Parks and Recreation	Boreham Drive Park: Basketball Court	1	25		2043	22425	5	Medium
3260	Parks and Recreation	Boreham Drive: Basketball Court Post and Hoops	1	20		2034	1000	4	Medium
3075	Parks and Recreation	Boreham Drive Park: Arkell Playground	1	25		2043	25000	5	Medium
3076	Parks and Recreation	Boreham Drive Park: Sign	1	20		2038	1500	5	Medium
3077	Parks and Recreation	Telfer Glen Park Trail	1	50				5	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
307989	Parks and Recreation	Wayne Stokley Trail	1		2016			5	Medium
124	Asphalt Road 1 Lift	Victoria Road South	1	25	2012	2019	925639.6484	1	Very High
125A	Asphalt Road 1 Lift	Victoria Road South	1	25	2000	2019	193534.9653	1	Very High
137	Asphalt Road 1 Lift	Watson Road South	1	25	1996	2019	1320707.681	1	Very High
1	Asphalt Road 1 Lift	Gore Road	1	25	2015	2020	1318518.609	1	Very High
6	Asphalt Road 1 Lift	Gore Road	1	25	2002	2020	305619.554	1	Very High
56	Asphalt Road 1 Lift	Concession 4	1	25	2012	2020	660207.2493	1	Very High
58	Asphalt Road 1 Lift	Concession 4	1	25	2003	2020	393744.7194	1	Very High
134	Asphalt Road 1 Lift	Watson Road South	1	25	1996	2021	197036.5788	2	Very High
135	Asphalt Road 1 Lift	Watson Road South	1	25	1990	2021	182905.3348	2	Very High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
136	Asphalt Road 1 Lift	Watson Road South	1	25	1998	2021	271867.2791	2	Very High
140	Asphalt Road 1 Lift	Watson Road South	1	25	2001	2021	524575.169	2	Very High
139	Asphalt Road 1 Lift	Watson Road South	1	25	2001	2021	650584.2604	2	Very High
133	Asphalt Road 1 Lift	Watson Road South	1	25	1997	2021	315091.8262	2	Very High
52	Asphalt Road 1 Lift	Maple Leaf Lane	1	25	2000	2021	226826.7782	2	Very High
57	Asphalt Road 1 Lift	Concession 4	1	25	2004	2021	262338.0776	2	Very High
88	Asphalt Road 1 Lift	Townline Road	1	25	1990	2022	464824.1807	2	Very High
40_SURFACE	Asphalt Road 2 Lift	McLean Road West	1	25	1995	2022	912914.3416	2	Very High
59	Asphalt Road 1 Lift	Concession 4	1	25	2003	2022	659044.1707	2	Very High
158	Asphalt Road 1 Lift	McLean Road East	1	25	1996	2022	207798.7779	2	Very High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
121A	Asphalt Road 1 Lift	Maddaugh Road	1	25	2004	2022	155389.5573	2	Very High
121B	Asphalt Road 1 Lift	Maddaugh Road	1	25	2003	2022	161850.7598	2	Very High
15	Asphalt Road 1 Lift	Concession 1	1	25	1996	2022	660787.8496	2	Very High
204_SURFACE	Asphalt Road 2 Lift	Bridle Path	1	25	1990	2023	514570.7015	2	Very High
185_SURFACE	Asphalt Road 2 Lift	Bridle Path	1	25	1990	2023	205657.2729	2	Very High
212A	Asphalt Road 1 Lift	Winer Road	1	25	2000	2023	189389.6534	2	Very High
212B_SURFACE	Asphalt Road 2 Lift	Winer Road	1	25	2007	2023	165696.171	2	Very High
63B	Asphalt Road 1 Lift	Maltby Road East	1	25	2012	2023	321928.6552	2	Very High
63A	Asphalt Road 1 Lift	Maltby Road East	1	25	2011	2023	324700.4816	2	Very High
17	Asphalt Road 1 Lift	Concession 1	1	25	1997	2023	658028.0062	2	Very High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
97	Asphalt Road 1 Lift	Sideroad 10 North	1	25	1998	2023	330653.9747	2	Very High
108	Asphalt Road 1 Lift	Sideroad 20 North	1	25	2004	2023	651901.1058	2	Very High
148	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	1	25	2003	2023	96035.6099	2	Very High
22	Asphalt Road 1 Lift	Leslie Road West	1	25	2003	2023	171807.1654	2	Very High
23	Asphalt Road 1 Lift	Leslie Road West	1	25	2003	2023	389820.1854	2	Very High
25	Asphalt Road 1 Lift	Leslie Road West	1	25	2004	2023	323908.7674	2	Very High
54A	Asphalt Road 1 Lift	Roszell Road 2013	1	25	2012	2023	420896.3745	2	Very High
90	Asphalt Road 1 Lift	Roszell Road	1	25	1990	2023	316668.6617	2	Very High
166	Asphalt Road 1 Lift	Sideroad 20 North	1	25	2003	2024	354891.1517	2	Very High
164_SURFACE	Asphalt Road 2 Lift	McLean Road/Concession 7	1	25	2004	2024	492284.6919	2	Very High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
<b>165_SURFACE</b>	Asphalt Road 2 Lift	McLean Road/Concession 7	1	25	2004	2024	382469.6338	2	Very High
<b>18</b>	Asphalt Road 1 Lift	Concession 1/Leslie Rd W	1	25	1999	2024	776118.731	2	Very High
<b>19</b>	Asphalt Road 1 Lift	Concession 1	1	25	2001	2024	147053.3411	2	Very High
<b>4</b>	Asphalt Road 1 Lift	Gore Road	1	25	2004	2024	830575.9188	2	Very High
<b>28_SURFACE</b>	Asphalt Road 2 Lift	Victoria Street And Church Street	1	25	2000	2024	130335.9885	2	Very High
<b>5</b>	Asphalt Road 1 Lift	Gore Road	1	25	1990	2024	486434.1882	2	Very High
<b>153</b>	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	1	7	2017	2024	54920.7768	5	Medium
<b>154</b>	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	1	7	2017	2024	28974.0394	5	Medium
<b>155</b>	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	1	7	2017	2024	21612.5881	5	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
120	Asphalt Road Surface Treated	Maddaugh Road	1	7	1997	2024	24784.5663	2	Very High
71	Asphalt Road 1 Lift	Laird Road West	1	50		2024	71000	2	Very High
7	Asphalt Road Surface Treated	Gore Road	1	7	1999	2025	64964.9819	1	Very High
32	Asphalt Road 1 Lift	Concession 2	1	25	2014	2025	669540.6398	2	Very High
51_SURFACE	Asphalt Road 2 Lift	Old Brock Road	1	25	2000	2025	153783.0344	2	Very High
16	Asphalt Road 1 Lift	Concession 1	1	25	1999	2025	657152.1545	2	Very High
195	Asphalt Road 2 Lift	Deer View Ridge	1	25	2004	2026	306894.6629	3	High
48	Asphalt Road 1 Lift	Smith Road	1	25	1990	2026	105773.6999	3	High
21	Asphalt Road 1 Lift	Leslie Road West	1	25	2003	2026	642265.5239	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
115	Asphalt Road 2 Lift	Concession 7	1	25	2013	2026	197427.7585	3	High
116	Asphalt Road 2 Lift	Concession 7	1	25	2000	2026	143334.2878	3	High
14	Asphalt Road 1 Lift	Concession 1	1	25	2013	2026	659171.1501	3	High
46_SURFACE	Asphalt Road 2 Lift	Gilmour Road	1	25	2007	2026	79051.2471	2	Very High
160	Asphalt Road 1 Lift	Concession 4	1	25	2004	2026	142387.1977	2	Very High
161	Asphalt Road 1 Lift	Concession 4	1	25	2004	2026	107681.5725	2	Very High
132	Asphalt Road 1 Lift	McRae Station Road	1	25	1996	2026	214908.7137	2	Very High
38	Asphalt Road 1 Lift	Mason Road	1	25	2000	2026	70940.8772	2	Very High
34	Asphalt Road 1 Lift	Concession 2	1	25	2010	2027	667781.25	3	High
35	Asphalt Road 2 Lift	Concession 2	1	25	2013	2027	945358.5435	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
36	Asphalt Road 2 Lift	Concession 2/2A	1	25	1999	2027	411923.3383	3	High
205	Asphalt Road 2 Lift	Fox Run Drive	1	25	2000	2027	108410.0493	3	High
206	Asphalt Road 2 Lift	Fox Run Drive	1	25	2000	2027	57510.8483	3	High
207	Asphalt Road 2 Lift	Fox Run Drive	1	25	2000	2027	301633.7176	3	High
196	Asphalt Road 2 Lift	Fox Run Drive	1	25	2004	2027	190078.0961	3	High
30	Asphalt Road 1 Lift	Main St And Back	1	25	2011	2028	110087.2862	3	High
190	Asphalt Road 2 Lift	Telfer Glen	1	25	1996	2028	321772.2166	3	High
9	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	1	25	2003	2028	344543.9052	3	High
10	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	1	25	2002	2028	423818.6188	3	High
214	Asphalt Road 2 Lift	Beiber Road	1	25	2004	2028	78268.645	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
13A	Asphalt Road 1 Lift	Concession 1	1	25	2007	2028	1013066.684	3	High
96	Asphalt Road 1 Lift	Sideroad 10 North	1	25		2028	177500	3	High
45A	Asphalt Road 1 Lift	Ellis Road	1	25	2010	2029	162927.3973	3	High
45B	Asphalt Road 1 Lift	Ellis Road	1	25	1995	2029	574748.7397	3	High
77	Asphalt Road 1 Lift	Hume Road	1	25	2010	2029	747036.8349	3	High
208_SURFACE	Asphalt Road 2 Lift	Boreham Drive	1	25	1999	2029	140929.7172	3	High
29	Asphalt Road 1 Lift	Main Street	1	25	2001	2029	155895.3207	3	High
55	Asphalt Road 1 Lift	Concession 4	1	25	2010	2030	394784.7075	3	High
82	Asphalt Road 1 Lift	Cooks Mill Road	1	25	2013	2030	136438.2526	3	High
162_SURFACE	Asphalt Road 2 Lift	Nicholas Beaver Road	1	25	2007	2030	441761.0649	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
191	Asphalt Road 2 Lift	Settler's Road	1	25	1995	2031	147055.9598	4	High
78	Asphalt Road 1 Lift	Niska Road	1	25	2012	2031	193509.8965	3	High
126	Asphalt Road 1 Lift	Victoria Road South	1	25	2013	2031	660891.3759	3	High
50_SURFACE	Asphalt Road 2 Lift	Cockburn Street	1	25	2000	2031	56931.6294	3	High
203_SURFACE	Asphalt Road 2 Lift	Daymond Drive	1	25	2007	2032	150294.9495	4	High
198	Asphalt Road 2 Lift	Kerr Crescent	1	25	1995	2032	384857.2285	4	High
201_SURFACE	Asphalt Road 2 Lift	Carriage Lane	1	25	2000	2032	340271.079	4	High
202_SURFACE	Asphalt Road 2 Lift	Cassin Court	1	25	2007	2032	130865.9132	4	High
122	Asphalt Road 1 Lift	Victoria Road South	1	25	2014	2033	225460.0373	4	High
123	Asphalt Road 1 Lift	Victoria Road South	1	25	2014	2033	711618.2378	4	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
<b>213_SURFACE</b>	Asphalt Road 2 Lift	Tawse Place	1	25	1990	2033	71054.3383	4	High
<b>3</b>	Asphalt Road 1 Lift	Gore Road	1	25	2013	2034	658618.4213	4	High
<b>12</b>	Asphalt Road 1 Lift	Concession 1	1	25	2013	2034	182643.2474	4	High
<b>13B</b>	Asphalt Road 1 Lift	Concession 1	1	25	1999	2034	115751.8125	4	High
<b>33</b>	Asphalt Road 1 Lift	Concession 2	1	25	2014	2034	657503.3119	4	High
<b>94</b>	Asphalt Road 1 Lift	Sideroad 10 North	1	25	2000	2034	637500	4	High
<b>180</b>	Asphalt Road 1 Lift	Currie Drive	1	25	2015	2035	196555.2704	4	High
<b>210</b>	Asphalt Road 1 Lift	Lang Court	1	25	2015	2035	34266.7601	4	High
<b>209</b>	Asphalt Road 2 Lift	Winer Court	1	25	2015	2035	41238.4436	4	High
<b>2</b>	Asphalt Road 1 Lift	Gore Road	1	25	2015	2035	487414.817	4	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
181	Asphalt Road 1 Lift	Ochs Drive	1	25	2015	2035	183331.9546	4	High
99A	Asphalt Road 1 Lift	SR 10	1	25	2011	2035	95747.7394	4	High
27B	Asphalt Road 2 Lift	Calfass Road	1	25	2016	2036	44715.6156	5	Medium
20	Asphalt Road 1 Lift	Leslie Road W	1	25	2016	2036	600991.7371	5	Medium
125B	Asphalt Road 1 Lift	Victoria Road South	1	25	2016	2036	164074.3098	5	Medium
138	Asphalt Road 1 Lift	Watson Road South	1	25	2016	2036	678844.6872	5	Medium
72_SURFACE	Asphalt Road 2 Lift	Laird Road West	1	25	2017	2037	951589.9499	5	Medium
73_SURFACE	Asphalt Road 2 Lift	Laird Road West	1	25	2017	2037	381986.9376	5	Medium
74_SURFACE	Asphalt Road 2 Lift	Laird Road West	1	25	2017	2037	571335.3517	5	Medium
44	Asphalt Road 1 Lift	Ellis Road	1	25	2017	2038	696390.5957	5	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
68	Asphalt Road 1 Lift	Forestell Road	1	25	2018	2038	261685.7451	5	Medium
69	Asphalt Road 1 Lift	Forestell Road	1	25	2018	2038	395008.5789	5	Medium
66	Asphalt Road 1 Lift	Forestell Road	1	25	2018	2038	388958.245	5	Medium
67	Asphalt Road 1 Lift	Forestell Road	1	25	2017	2038	662721.8823	5	Medium
95b	Asphalt Road 1 Lift	Side Road 10 North	1	25		2038	13667.5	5	Medium
81	Gravel Road	Cooks Mill Road	1	50	2003	2034	107487.5086	4	High
79	Gravel Road	Farnham Road	1	50	2003	2034	170773.298	4	High
98	Gravel Road	Sideroad 10 North	1	50	2007	2034	84074.4108	4	High
200	Gravel Road	Boyce Drive	1	50	2003	2034	44972.59	4	High
129	Gravel Road	Carter Road	1	50	2003	2034	328113.2899	4	High
211	Gravel Road	Anne Street	1	50	2003	2034	11201.2117	4	High
31	Gravel Road	Little Road	1	50	2001	2034	69183.0271	4	High
100	Gravel Road	Sideroad 12 North	1	50	2002	2034	59579.9012	4	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
142	Gravel Road	Concession 11	1	50	2002	2034	366533.0746	4	High
146	Gravel Road	Concession 11	1	50	2002	2034	364389.9835	4	High
53	Gravel Road	Hammersley Road	1	50	2002	2034	177890.8634	4	High
92	Gravel Road	Sideroad 10 South	1	50	2001	2034	370103.2635	4	High
101	Gravel Road	Sideroad 12 N	1	50	2001	2034	184577.1256	4	High
150	Gravel Road	Nassagaweya-Puslinch Townline	1	50	2001	2034	366033.9807	4	High
26	Gravel Road	Small Road	1	50	2001	2034	76786.322	4	High
64	Gravel Road	Maltby Road East	1	50	2001	2034	367342.6276	4	High
91	Gravel Road	Sideroad 10 South	1	50	2000	2034	333430.9182	4	High
103	Gravel Road	Pioneer Trail	1	50	2000	2034	301750	4	High
43	Gravel Road	Sideroad 17	1	50	2000	2034	66803.9809	4	High
104	Gravel Road	Sideroad 20 South	1	50	2000	2034	335434.9717	4	High
8	Gravel Road	MacPherson's Lane	1	50	2000	2034	155895.3207	4	High
106	Gravel Road	Sideroad 20 North	1	50	2000	2034	185237.5536	4	High
105	Gravel Road	Sideroad 20 South	1	50	2000	2034	371540.1563	4	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110	Gravel Road	Sideroad 25 South	1	50	2000	2034	336664.0695	4	High
144	Gravel Road	Concession 11	1	50	2000	2034	347849.0954	4	High
93	Gravel Road	Sideroad 10 South	1	50	2000	2034	131053.2935	4	High
27	Gravel Road	Calfass Road	1	50	2000	2034	368608.2382	4	High
111	Gravel Road	Sideroad 25 South	1	50	2000	2034	371176.378	4	High
112	Gravel Road	Sideroad 25 North	1	50	2000	2034	100564.3003	4	High
99B	Gravel Road	Sideroad 10 North	1	50	2000	2034	70389.0528	4	High
145	Gravel Road	Concession 11	1	50	2000	2034	364394.4669	4	High
65	Gravel Road	Maltby Road East	1	50	1990	2034	54652.0288	4	High
143	Gravel Road	Concession 11	1	50	2000	2034	234387.0121	4	High
118	Gravel Road	Concession 7	1	50	1990	2034	364220.4786	4	High
37	Gravel Road	Concession 2	1	50	2000	2034	42245	4	High
152	Gravel Road	Midway Lane	1	50	2001	2034	146615	4	High
113	Gravel Road	Concession 7	1	50	1990	2034	340977.5	4	High
95A	Gravel Road	Sideroad 10 North	1	25	2000	2018	337250	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
159	Gravel Road	McLean Road East	1	50	2004	2034	64191.5747	4	High
47	Gravel Road	Gilmour Road	1	50	2002	2034	306804.605	4	High
114	Gravel Road	Concession 7	1	50	1990	2034	470197.5	4	High
149	Gravel Road	Darkwood	1	50	1997	2034	25027.5	4	High
157	Gravel Road	Jones Baseline	1	50	2003	2034	76147.5	4	High
300	Sidewalk	Watson Road Sidewalk	1	20	1990	2038	64350	5	Low
301	Sidewalk	Arkell Road Sidewalk	1	20	1990	2030	39325	3	Medium
303	Sidewalk	Church Street	1	20	2000	2038	12012	5	Low
307	Sidewalk	Victoria Street	1	20	2000	2038	25311	5	Low
304	Sidewalk	Brock Road Sidewalk	1	20	2001	2020	131131	4	Medium
305	Sidewalk	Badenoch Rd Sidewalk	1	20	2001	2038	58773	5	Low
306	Sidewalk	Watson Road Sidewalk 2013	1	20	2012	2038	64922	5	Low
308	Sidewalk	Calfass Road	1	20		2038	11440	5	Low
309	Sidewalk	Queen Street	1	20		2038	128700	5	Low
310	Sidewalk	Main Street	1	20		2030	9295	3	Low
12001	Storm Water Pond	Boreham Drive SWM	1	50	1999	2049	13859.64706	4	Medium
12001 - 1	Storm Water Pond	Boreham Drive SWM Tail Wall	1	50	1999	2049	2000	4	Medium
12001 - 2	Storm Water Pond	Boreham Drive SWM Pond Enclosure	1	50	1999	2049	7859.647059	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12001 - 3	Storm Water Pond	Boreham Drive SWM Outlet Device (Hicken Bottom)	1	20	1999	2019	2000	4	Medium
12001 - 4	Storm Water Pond	Boreham Drive SWM Headwall	1	50	1999	2049	2000	4	Medium
12002	Storm Water Pond	Daymond Drive SWM	1	50	2005	2021	165756.2856	4	Medium
12002 - 1	Storm Water Pond	Daymond Drive SWM Tail Wall	1	50	2005	2055	2000	4	Medium
12002 - 2	Storm Water Pond	Daymond Drive SWM Pond Enclosure	1	50	2005	2055	159756.2856	4	Medium
12002 - 3	Storm Water Pond	Daymond Drive SWM Outlet Device (Hicken Bottom)	1	20	2005	2025	2000	4	Medium
12002 - 4	Storm Water Pond	Daymond Drive SWM Headwall	1	50	2005	2055	2000	4	Medium
12003	Storm Water Pond	Aberfoyle Business Park SWM Block 6	1	50	2007	2057	258419.7457	4	Medium
12003 - 1	Storm Water Pond	Aberfoyle Business Park SWM Block 6 Tail Wall	1	50	2007	2057	2000	4	Medium
12003 - 2	Storm Water Pond	Aberfoyle Business Park SWM Block 6 Pond Enclosure	1	50	2007	2057	252419.7457	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12003 - 3	Storm Water Pond	Aberfoyle Business Park SWM Block 6 Outlet Device (Hicken Bottom)	1	20	2007	2027	2000	4	Medium
12003 - 4	Storm Water Pond	Aberfoyle Business Park SWM Block 6 Headwall	1	50	2007	2057	2000	4	Medium
12004	Storm Water Pond	Kerr Crescent SWM	1	50	1988	2020	150000	1	High
12004 - 1	Storm Water Pond	Kerr Crescent SWM Tail Wall	1	50	1988	2038	2000	4	Medium
12004 - 2	Storm Water Pond	Kerr Crescent SWM Pond Enclosure	1	50	1988	2038	144000	4	Medium
12004 - 3	Storm Water Pond	Kerr Crescent SWM Outlet Device (Hicken Bottom)	1	20	1988	2008	2000	4	Medium
12004 - 4	Storm Water Pond	Kerr Crescent SWM Headwall	1	50	1988	2038	2000	4	Medium
12005	Storm Water Pond	Telfer Glen SWM Pond	1	50	1990	2040	32644.20387	4	Medium
12005 - 1	Storm Water Pond	Telfer Glen SWM Pond Tail Wall	1	50	1990	2040	2000	4	Medium
12005 - 2	Storm Water Pond	Telfer Glen SWM Pond Pond Enclosure	1	50	1990	2040	26644.20387	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12005 - 3	Storm Water Pond	Telfer Glen SWM Pond Outlet Device (Hicken Bottom)	1	20	1990	2010	2000	4	Medium
12005 - 4	Storm Water Pond	Telfer Glen SWM Pond Headwall	1	50	1990	2040	2000	4	Medium
12006	Storm Water Pond	Bridle Path SWM Ponds	1	50	1990	2040	134145.9151	4	Medium
12006 - 1	Storm Water Pond	Bridle Path SWM Ponds Tail Wall	1	50	1990	2040	2000	4	Medium
12006 - 2	Storm Water Pond	Bridle Path SWM Ponds Pond Enclosure	1	50	1990	2040	128145.9151	4	Medium
12006 - 3	Storm Water Pond	Bridle Path SWM Ponds Outlet Device (Hicken Bottom)	1	20	1990	2010	2000	4	Medium
12006 - 4	Storm Water Pond	Bridle Path SWM Ponds Headwall	1	50	1990	2040	2000	4	Medium
12007	Storm Water Pond	Carriage Lane SWM	1	50	2000	2022	85487.67915	1	High
12007 - 1	Storm Water Pond	Carriage Lane SWM Tail Wall	1	50	2000	2050	2000	4	Medium
12007 - 2	Storm Water Pond	Carriage Lane SWM Pond Enclosure	1	50	2000	2050	79487.67915	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12007 - 3	Storm Water Pond	Carriage Lane SWM Outlet Device (Hicken Bottom)	1	20	2000	2020	2000	4	Medium
12007 - 4	Storm Water Pond	Carriage Lane SWM Headwall	1	50	2000	2050	2000	4	Medium
12008	Storm Water Pond	Aberfoyle Business Park SWM Block 3	1	50	1995	2045	73226.95997	5	Medium
12008 - 1	Storm Water Pond	Aberfoyle Business Park SWM Block 3 Tail Wall	1	50	1995	2045	2000	5	Medium
12008 - 2	Storm Water Pond	Aberfoyle Business Park SWM Block 3 Pond Enclosure	1	50	1995	2045	67226.95997	5	Medium
12008 - 3	Storm Water Pond	Aberfoyle Business Park SWM Block 3 Outlet Device (Hicken Bottom)	1	20	1995	2015	2000	5	Medium
12008 - 4	Storm Water Pond	Aberfoyle Business Park SWM Block 3 Headwall	1	50	1995	2045	2000	5	Medium
12009	Storm Water Pond	Carroll Pond Cell 1	1	50	2011	2061	9262.380934	4	Medium
12009 - 1	Storm Water Pond	Carroll Pond Cell 1 Tail Wall	1	50	2011	2061	2000	4	Medium
12009 - 2	Storm Water Pond	Carroll Pond Cell 1 Pond Enclosure	1	50	2011	2061	3262.380934	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12009 - 3	Storm Water Pond	Carroll Pond Cell 1 Outlet Device (Hicken Bottom)	1	20	2011	2031	2000	4	Medium
12009 - 4	Storm Water Pond	Carroll Pond Cell 1 Headwall	1	50	2011	2061	2000	4	Medium
12010	Storm Water Pond	Carroll Pond Cell 2	1	50	2010	2060	8869.806	4	Medium
12010 - 1	Storm Water Pond	Carroll Pond Cell 2 Tail Wall	1	50	2010	2060	2000	4	Medium
12010 - 2	Storm Water Pond	Carroll Pond Cell 2 Pond Enclosure	1	50	2010	2060	2869.806	4	Medium
12010 - 3	Storm Water Pond	Carroll Pond Cell 2 Outlet Device (Hicken Bottom)	1	20	2010	2030	2000	4	Medium
12010 - 4	Storm Water Pond	Carroll Pond Cell 2 Headwall	1	50	2010	2060	2000	4	Medium
12011	Storm Water Pond	Carroll Pond Cell 3	1	50	2010	2060	4434.903	4	Medium
12011 - 1	Storm Water Pond	Carroll Pond Cell 3 Tail Wall	1	50	2010	2060	2000	4	Medium
12011 - 2	Storm Water Pond	Carroll Pond Cell 3 Pond Enclosure	1	50	2010	2060	-1565.097	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12011 - 3	Storm Water Pond	Carroll Pond Cell 3 Outlet Device (Hicken Bottom)	1	20	2010	2030	2000	4	Medium
12011 - 4	Storm Water Pond	Carroll Pond Cell 3 Headwall	1	50	2010	2060	2000	4	Medium
12012	Storm Water Pond	Fox Run Drive SWM 2	1	50			165756.2856	3	Medium
12012 - 1	Storm Water Pond	Fox Run Drive SWM 2 Tail Wall	1	50			2000	3	Medium
12012 - 2	Storm Water Pond	Fox Run Drive SWM 2 Pond Enclosure	1	50			159756.2856	3	Medium
12012 - 3	Storm Water Pond	Fox Run Drive SWM 2 Outlet Device (Hicken Bottom)	1	20			2000	3	Medium
12012 - 4	Storm Water Pond	Fox Run Drive SWM 2 Headwall	1	50			2000	3	Medium
12013	Storm Water Pond	Fox Run Drive SWM 1	1	50			165000	1	High
12013 - 1	Storm Water Pond	Fox Run Drive SWM 1 Tail Wall	1	50			2000	1	High
12013 - 2	Storm Water Pond	Fox Run Drive SWM 1 Pond Enclosure	1	50			159000	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12013 - 3	Storm Water Pond	Fox Run Drive SWM 1 Outlet Device (Hicken Bottom)	1	20			2000	1	High
12013 - 4	Storm Water Pond	Fox Run Drive SWM 1 Headwall	1	50			2000	1	High
12014	Storm Water Pond	Morrison Pond	1	50			12417.7284	3	Medium
12014 - 1	Storm Water Pond	Morrison Pond Tail Wall	1	50			2000	3	Medium
12014 - 2	Storm Water Pond	Morrison Pond Pond Enclosure	1	50			6417.7284	3	Medium
12014 - 3	Storm Water Pond	Morrison Pond Outlet Device (Hicken Bottom)	1	20			2000	3	Medium
12014 - 4	Storm Water Pond	Morrison Pond Headwall	1	50			2000	3	Medium
12015	Storm Water Pond	Morrison Park Pond	1	50			165756.2856	3	Medium
12015 - 1	Storm Water Pond	Morrison Park Pond Tail Wall	1	50			2000	3	Medium
12015 - 2	Storm Water Pond	Morrison Park Pond Pond Enclosure	1	50			159756.2856	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
12015 - 3	Storm Water Pond	Morrison Park Pond Outlet Device (Hicken Bottom)	1	20			2000	3	Medium
12015 - 4	Storm Water Pond	Morrison Park Pond Headwall	1	50			2000	3	Medium
101500	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101501	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101502	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101503	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101504	Regulatory Sign	Gore Road Regulatory LOAD RESTRICTION 5 TONNES PER AXLE	1	15			150	4	Medium
101505	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101506	Regulatory Sign	Gore Road Warning Hidden Driveway	1	15			150	4	Medium
101507	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101508	Regulatory Sign	Gore Road Warning SCHOOL BUS STOP AHEAD	1	15			150	4	Medium
101509	Regulatory Sign	Gore Road Warning SCHOOL BUS STOP AHEAD Tab Sign	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101510	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101511	Regulatory Sign	Gore Road Warning INTERSECTION Sign (Controlled) - Left	1	15			150	4	Medium
101512	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101513	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101514	Regulatory Sign	Sideroad 10 South Priority STOP	1	15			150	4	Medium
101515	Regulatory Sign	Sideroad 10 South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
101516	Regulatory Sign	Sideroad 10 South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
101517	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101518	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101519	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101520	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101521	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101522	Regulatory Sign	Sideroad 10 South Priority STOP	1	15			150	4	Medium
101523	Regulatory Sign	Sideroad 10 South Priority STOP (Oversized)	1	15			150	4	Medium
101524	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101525	Regulatory Sign	Sideroad 10 South Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101526	Regulatory Sign	Sideroad 10 South Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101527	Regulatory Sign	Sideroad 10 South Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
101528	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101529	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101530	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101531	Regulatory Sign	Sideroad 10 South Warning Hidden Driveway	1	15			150	4	Medium
101532	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101533	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101534	Regulatory Sign	Sideroad 10 South Priority STOP	1	15			150	4	Medium
101535	Regulatory Sign	Sideroad 10 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
110626	Regulatory Sign	Sideroad 10 South Warning NO EXIT	1	15			150	4	Medium
101537	Regulatory Sign	Sideroad 10 South Priority STOP	1	15			150	4	Medium
101538	Regulatory Sign	Sideroad 10 South Priority CHECKERBOARD (Dead End)	1	15			150	4	Medium
101539	Regulatory Sign	Concession Road 2 Warning Slow Winding Road	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101541	Regulatory Sign	Concession Road 2 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101542	Regulatory Sign	Concession Road 2 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101543	Regulatory Sign	Concession Road 2 Warning Winding Road After Intersection (Symbol)	1	15			150	4	Medium
101544	Regulatory Sign	Concession Road 2 Warning Hidden Driveway	1	15			150	4	Medium
101545	Regulatory Sign	Concession Road 2 Warning Slow Winding Road	1	15			150	4	Medium
101546	Regulatory Sign	Concession Road 2 Warning HORSE WITH RIDER	1	15			150	4	Medium
101547	Regulatory Sign	Concession Road 2 Warning HORSE WITH RIDER	1	15			150	2	High
101548	Regulatory Sign	Concession Road 2 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101549	Regulatory Sign	Concession Road 2 Warning SHARP REVERSE CURVE (Right)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101550	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101551	Regulatory Sign	Concession Road 2 Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
101552	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101553	Regulatory Sign	Concession Road 1 Warning Caution Slow Moving Vehicles	1	15			150	4	Medium
101554	Regulatory Sign	Concession Road 1 Warning Hidden Driveway	1	15			150	4	Medium
101555	Regulatory Sign	Concession Road 1 Warning School Bus Stop Ahead	1	15			150	4	Medium
101556	Regulatory Sign	Concession Road 1 Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101557	Regulatory Sign	Concession Road 1 Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101558	Regulatory Sign	Concession Road 1 Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101559	Regulatory Sign	Concession Road 1 Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101560	Regulatory Sign	Concession Road 1 Warning Caution Slow Moving Vehicles	1	15			150	4	Medium
101561	Regulatory Sign	Ellis Road Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101562	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
101563	Regulatory Sign	Ellis Road Warning WINDING ROAD (Right)	1	15			150	4	Medium
101564	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101565	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101566	Regulatory Sign	Ellis Road Warning WINDING ROAD (Right)	1	15			150	4	Medium
101567	Regulatory Sign	Ellis Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101568	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101569	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101570	Regulatory Sign	Ellis Road Warning SHARP CURVE (Left)	1	15			150	4	Medium
101571	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101566	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101573	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101574	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101575	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101578	Regulatory Sign	Ellis Road Warning SHARP CURVE (Left)	1	15			150	4	Medium
101579	Regulatory Sign	Ellis Road Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
101581	Regulatory Sign	Ellis Road Warning Caution Winding Road	1	15			150	4	Medium
101582	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101583	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101584	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101585	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101586	Regulatory Sign	Ellis Road Warning OBJECT MARKER (Both Directions)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101588	Regulatory Sign	Ellis Road Warning SHARP CURVE (Left)	1	15			150	4	Medium
101589	Regulatory Sign	Ellis Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101590	Regulatory Sign	Ellis Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
101591	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101592	Regulatory Sign	Ellis Road Priority CHECKERBOARD (Right Arrow)	1	15			150	4	Medium
101593	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101594	Regulatory Sign	Ellis Road Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
101595	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101596	Regulatory Sign	Ellis Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101597	Regulatory Sign	Sideroad 10 North Warning SHARP CURVE (Right)	1	15			150	4	Medium
101598	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101599	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101600	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101601	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101602	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101603	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101604	Regulatory Sign	Sideroad 10 North Priority STOP	1	15			150	4	Medium
101605	Regulatory Sign	Sideroad 10 North Priority STOP	1	15			150	4	Medium
101606	Regulatory Sign	Sideroad 10 North Priority STOP	1	15			150	4	Medium
101607	Regulatory Sign	Sideroad 10 North Priority STOP	1	15			150	4	Medium
101608	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
101609	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101610	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101611	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101612	Regulatory Sign	Sideroad 10 North Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101613	Regulatory Sign	Sideroad 10 North Priority STOP	1	15			150	4	Medium
101614	Regulatory Sign	Sideroad 10 North Warning NO EXIT	1	15			150	4	Medium
101615	Regulatory Sign	Sideroad 10 North Priority STOP	1	15			150	4	Medium
101616	Regulatory Sign	Sideroad 10 North Warning Checkerboard (Custom)	1	15			150	4	Medium
101617	Regulatory Sign	Sideroad 10 North Warning Checkerboard (Custom)	1	15			150	4	Medium
101618	Regulatory Sign	Sideroad 10 North Warning Checkerboard (Custom)	1	15			150	4	Medium
101619	Regulatory Sign	Sideroad 10 North Warning Checkerboard (Custom)	1	15			150	4	Medium
101620	Regulatory Sign	Laird Road West Regulatory TRUCK ROUTE	1	15			150	4	Medium
101621	Regulatory Sign	Laird Road West Regulatory MOVEMENTS	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		PERMITTED - THROUGH Tab Sign							
101622	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101623	Regulatory Sign	Laird Road West Warning Trucks 4500 Kg Or Over Must Follow These Signs	1	15			150	4	Medium
101624	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101625	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101626	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101627	Regulatory Sign	Pioneer Trail Priority STOP	1	15			150	4	Medium
101628	Regulatory Sign	Pioneer Trail Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101629	Regulatory Sign	Pioneer Trail Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101630	Regulatory Sign	Pioneer Trail Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101631	Regulatory Sign	Pioneer Trail Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101632	Regulatory Sign	Pioneer Trail Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101633	Regulatory Sign	Pioneer Trail Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101634	Regulatory Sign	Pioneer Trail Warning Trucks 4500 Kg Or Over Must Follow These Signs	1	15			150	4	Medium
101635	Regulatory Sign	Pioneer Trail Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101636	Regulatory Sign	Pioneer Trail Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101637	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101638	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101639	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101640	Regulatory Sign	Laird Road West Warning Please Avoid Use Of Engine Brakes	1	15			150	4	Medium
101641	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101642	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101643	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101644	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
101645	Regulatory Sign	Laird Road West Warning Hidden Driveway	1	15			150	2	High
101646	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101647	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101648	Regulatory Sign	Laird Road West Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101649	Regulatory Sign	Laird Road West Warning NO EXIT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110627	Regulatory Sign	Forestell Road Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101651	Regulatory Sign	Forestell Road Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
101652	Regulatory Sign	Forestell Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
101653	Regulatory Sign	Forestell Road Warning Caution Slow Moving Vehicles	1	15			150	4	Medium
101654	Regulatory Sign	Forestell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101655	Regulatory Sign	Forestell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101656	Regulatory Sign	Forestell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
101657	Regulatory Sign	Forestell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110635	Regulatory Sign	Forestell Road Priority ADVISORY SPEED Tab	1	15			150	4	Medium
101660	Regulatory Sign	Forestell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
101661	Regulatory Sign	Forestell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
101662	Regulatory Sign	Forestell Road Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
103500	Regulatory Sign	Tawse Place Priority STOP	1	15			150	3	High
103501	Regulatory Sign	Bieber Rd Warning NO EXIT	1	15			150	4	Medium
103503	Regulatory Sign	Bieber Road Priority STOP	1	15			150	4	Medium
103504	Regulatory Sign	Bieber Rd Warning NO EXIT	1	15			150	3	High
103505	Regulatory Sign	Nicholas Beaver Road Priority STOP	1	15			150	3	High
103506	Regulatory Sign	Winer Road Priority STOP	1	15			150	4	Medium
103507	Regulatory Sign	McLean Road Priority CHECKERBOARD (Dead End)	1	15			150	3	High
103508	Regulatory Sign	Gilmour Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103509	Regulatory Sign	Gilmour Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103510	Regulatory Sign	Gilmour Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103511	Regulatory Sign	Gilmour Road Warning Hidden Driveway	1	15			150	3	High
103512	Regulatory Sign	Gilmour Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
103513	Regulatory Sign	Gilmour Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103514	Regulatory Sign	Gilmour Road Warning T-INTERSECTION (Uncontrolled)	1	15			150	3	High
103515	Regulatory Sign	Gilmour Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
103516	Regulatory Sign	Gilmour Road Priority STOP (Oversized)	1	15			150	4	Medium
103517	Regulatory Sign	Victoria Road South Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
103518	Regulatory Sign	Victoria Road South Regulatory Maximum 60 Ends	1	15			150	3	High
103519	Regulatory Sign	Victoria Road South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103520	Regulatory Sign	Victoria Road South Warning	1	15			150	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		INTERSECTION Sign (Controlled) - Left							
103521	Regulatory Sign	Victoria Road South Regulatory MAXIMUM SPEED AHEAD	1	15			150	3	High
103522	Regulatory Sign	McLean Road Warning NO EXIT	1	15			150	4	Medium
103523	Regulatory Sign	McLean Road Priority STOP	1	15			150	4	Medium
103524	Regulatory Sign	McLean Road Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
103525	Regulatory Sign	McLean Road Warning Road Closed	1	15			150	3	High
285270	Regulatory Sign	McLean Road Warning Object Marker (Both Directions)	1	15			150	2	High
103527	Regulatory Sign	Victoria Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High
103528	Regulatory Sign	Victoria Road South Priority CHECKERBOARD (Right Arrow)	1	15			150	4	Medium
103529	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103530	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103531	Regulatory Sign	Victoria Road South Warning SHARP CURVE (Right)	1	15			150	3	High
103532	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103533	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103534	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103535	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103536	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103537	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103538	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103539	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103540	Regulatory Sign	Leslie Road West Priority STOP AHEAD	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103541	Regulatory Sign	Leslie Road West Warning Hidden Driveway	1	15			150	3	High
110645	Regulatory Sign	Leslie Road West Priority STOP (Oversized)	1	15			150	4	Medium
103543	Regulatory Sign	Leslie Road West Regulatory ALL-WAY Tab Sign (Oversize)	1	15			150	4	Medium
103544	Regulatory Sign	Victoria Road South Priority STOP (Oversized)	1	15			150	4	Medium
103545	Regulatory Sign	Victoria Road South Regulatory ALL-WAY Tab Sign (Oversize)	1	15			150	4	Medium
110647	Regulatory Sign	Leslie Road West Priority STOP (Oversized)	1	15			150	4	Medium
103547	Regulatory Sign	Leslie Road West Regulatory ALL-WAY Tab Sign (Oversize)	1	15			150	4	Medium
103548	Regulatory Sign	Victoria Road South Priority STOP (Oversized)	1	15			150	4	Medium
103549	Regulatory Sign	Victoria Road South Regulatory ALL-WAY Tab Sign (Oversize)	1	15			150	4	Medium
110648	Regulatory Sign	Victoria Road South Priority STOP AHEAD	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103551	Regulatory Sign	Victoria Road South Warning Hidden Driveway	1	15			150	4	Medium
103552	Regulatory Sign	Victoria Road South Warning SHARP CURVE (Left)	1	15			150	3	High
110646	Regulatory Sign	Victoria Road South Priority STOP AHEAD	1	15			150	4	Medium
103554	Regulatory Sign	Victoria Road South Warning Hidden Driveway	1	15			150	3	High
110663	Regulatory Sign	Victoria Road South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103556	Regulatory Sign	Victoria Road South Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
103557	Regulatory Sign	Victoria Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High
103558	Regulatory Sign	MacPhersons Lane Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103559	Regulatory Sign	MacPhersons Lane Warning CHEVRON ALIGNMENT	1	15			150	3	High
103560	Regulatory Sign	MacPhersons Lane Warning CHEVRON ALIGNMENT	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103561	Regulatory Sign	MacPhersons Lane Warning CHEVRON ALIGNMENT	1	15			150	3	High
103562	Regulatory Sign	MacPhersons Lane Warning CHEVRON ALIGNMENT	1	15			150	3	High
103563	Regulatory Sign	MacPhersons Lane Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103564	Regulatory Sign	Leslie Road West Priority STOP AHEAD	1	15			150	4	Medium
103565	Regulatory Sign	Watson Road South Priority STOP	1	15			150	4	Medium
103566	Regulatory Sign	Watson Road South Priority STOP	1	15			150	3	High
103567	Regulatory Sign	Watson Road South Warning SHARP CURVE (Right)	1	15			150	3	High
103569	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103570	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103571	Regulatory Sign	Watson Road South Priority CHECKERBOARD (Right Arrow, Oversized)	1	15			150	4	Medium
103572	Regulatory Sign	McCrae Station Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103573	Regulatory Sign	McCrae Station Road Warning CHEVRON ALIGNMENT	1	15			150	3	High
103574	Regulatory Sign	Leslie Road West Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
103575	Regulatory Sign	Leslie Road West Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
103576	Regulatory Sign	Leslie Road West Warning OBJECT MARKER (Left Direction)	1	15			150	3	High
103577	Regulatory Sign	Leslie Road West Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
103578	Regulatory Sign	Leslie Road West Warning CURVE (Right)	1	15			150	3	High
103579	Regulatory Sign	Leslie Road West Warning CURVE (Left)	1	15			150	3	High
103580	Regulatory Sign	Milborough Line Priority CHECKERBOARD (Right Arrow)	1	15			150	3	High
103582	Regulatory Sign	Watson Road South Warning HORSE WITH RIDER	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103583	Regulatory Sign	Watson Road South Warning Hidden Driveway	1	15			150	3	High
103584	Regulatory Sign	Watson Road South Warning HORSE WITH RIDER	1	15			150	3	High
103585	Regulatory Sign	Watson Road South Warning CURVE (Right)	1	15			150	3	High
103586	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103587	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103588	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103589	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103590	Regulatory Sign	Watson Road South Warning Caution Slow Winding Road	1	15			150	3	High
103591	Regulatory Sign	Watson Road South Warning Hidden Driveway	1	15			150	4	Medium
103592	Regulatory Sign	Watson Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103593	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103594	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103595	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103597	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103599	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103600	Regulatory Sign	Sideroad 17 Priority STOP	1	15			150	4	Medium
103601	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103602	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103603	Regulatory Sign	Sideroad 17 Regulatory MAXIMUM SPEED	1	15			150	3	High
103604	Regulatory Sign	Sideroad 17 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
103605	Regulatory Sign	Midway Lane Priority STOP	1	15			150	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
220952	Regulatory Sign	Midway Lane Warning NO EXIT	1	15			150	3	High
103608	Regulatory Sign	Midway Lane Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
103609	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103610	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103611	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103612	Regulatory Sign	Concession Road 11 Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
285279	Regulatory Sign	Concession Road 11 Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
103614	Regulatory Sign	Concession Road 11 Regulatory NO HEAVY TRUCKS	1	15			150	3	High
103615	Regulatory Sign	Concession Road 11 Warning OBJECT MARKER (Left Direction)	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103616	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103617	Regulatory Sign	Concession Road 11 Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
103618	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103619	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103620	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103621	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103622	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103623	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103624	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103625	Regulatory Sign	Concession Road 11 Warning SHARP CURVE (Left)	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103626	Regulatory Sign	Small Road Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
103627	Regulatory Sign	Small Rd Warning Object Marker Horizontal	1	15			150	3	High
103628	Regulatory Sign	Small Road Warning Object Marker Horizontal	1	15			150	4	Medium
103629	Regulatory Sign	Small Road Warning Object Marker Horizontal	1	15			150	4	Medium
103630	Regulatory Sign	Small Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103631	Regulatory Sign	Small Rd Warning SHARP CURVE (Right)	1	15			150	3	High
103632	Regulatory Sign	Small Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103633	Regulatory Sign	Darkwood Road Regulatory NO HEAVY TRUCKS	1	15			150	3	High
103635	Regulatory Sign	Darkwood Road Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
103638	Regulatory Sign	Small Road Priority STOP	1	15			150	4	Medium
103645	Regulatory Sign	Darkwood Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103646	Regulatory Sign	Darkwood Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103648	Regulatory Sign	Darkwood Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103649	Regulatory Sign	Darkwood Road Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
103650	Regulatory Sign	Darkwood Road Warning CHEVRON ALIGNMENT	1	15			150	3	High
103651	Regulatory Sign	Darkwood Road Warning CHEVRON ALIGNMENT	1	15			150	3	High
103652	Regulatory Sign	Ochs Drive Warning PLAYGROUND AHEAD	1	15			150	4	Medium
103653	Regulatory Sign	Winer Court Priority STOP	1	15			150	3	High
103654	Regulatory Sign	Ochs Drive Priority STOP	1	15			150	4	Medium
103655	Regulatory Sign	Laing Court Priority STOP	1	15			150	4	Medium
103656	Regulatory Sign	Currie Drive Warning PLAYGROUND AHEAD	1	15			150	4	Medium
103657	Regulatory Sign	Currie Drive Warning PLAYGROUND AHEAD	1	15			150	4	Medium
103658	Regulatory Sign	Back Street Warning Object Marker Horizontal	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103659	Regulatory Sign	Back Street Warning Object Marker Horizontal	1	15			150	4	Medium
103660	Regulatory Sign	Victoria Road South Warning SCHOOL BUS STOP AHEAD	1	15			150	4	Medium
103661	Regulatory Sign	Victoria Road South Warning INTERSECTION Sign (Controlled) - Right	1	15			150	4	Medium
103662	Regulatory Sign	Victoria Road South Warning HIDDEN INTERSECTION Tab Sign	1	15			150	4	Medium
103663	Regulatory Sign	Victoria Road South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103664	Regulatory Sign	Victoria Road South Warning TRUCK ENTRANCE (From Right)	1	15			150	3	High
103665	Regulatory Sign	Victoria Road South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103666	Regulatory Sign	Victoria Road South Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103667	Regulatory Sign	Victoria Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103668	Regulatory Sign	Victoria Road South Regulatory Maximum Speed Begins	1	15			150	4	Medium
103669	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103670	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	3	High
103671	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103672	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	3	High
103673	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103674	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103675	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103676	Regulatory Sign	Maltby Road East Priority STOP	1	15			150	4	Medium
103677	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103678	Regulatory Sign	Maltby Road East Priority STOP	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103679	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103680	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103681	Regulatory Sign	Concession Road 11 Warning HORSE WITH RIDER	1	15			150	3	High
103682	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103683	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	3	High
103684	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103685	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110649	Regulatory Sign	Concession Road 11 Warning T- INTERSECTION (Uncontrolled)	1	15			150	4	Medium
103687	Regulatory Sign	Concession Road 11 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103688	Regulatory Sign	Concession Road 11 Priority STOP	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103689	Regulatory Sign	Hume Road Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
103690	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103691	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED AHEAD	1	15			150	3	High
103692	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
103693	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
103694	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
103695	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
103696	Regulatory Sign	Hume Road Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
103697	Regulatory Sign	Hume Road Priority STOP	1	15			150	4	Medium
103698	Regulatory Sign	Hume Road Priority STOP	1	15			150	4	Medium
103699	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103700	Regulatory Sign	Hume Road Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
103701	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103702	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
103703	Regulatory Sign	Hume Road Priority STOP	1	15			150	4	Medium
103704	Regulatory Sign	Watson Road South Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
103705	Regulatory Sign	Watson Road South Warning INTERSECTION Sign (Controlled) - Left	1	15			150	3	High
103706	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103707	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103708	Regulatory Sign	Watson Road South Regulatory Maximum Speed Km/H Begins	1	15			150	3	High
103715	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103716	Regulatory Sign	Carter Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103717	Regulatory Sign	Carter Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103718	Regulatory Sign	Carter Road Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103719	Regulatory Sign	Carter Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103720	Regulatory Sign	Carter Road Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103721	Regulatory Sign	Carter Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103723	Regulatory Sign	Carter Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103724	Regulatory Sign	Carter Road Priority STOP AHEAD	1	15			150	3	High
103726	Regulatory Sign	Cooks Mill Road Priority STOP (Oversized)	1	15			150	4	Medium
103727	Regulatory Sign	Cooks Mill Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103729	Regulatory Sign	Cooks Mill Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103730	Regulatory Sign	Cooks Mill Road Warning SHARP CURVE (Left)	1	15			150	3	High
103731	Regulatory Sign	Cooks Mill Road Warning NARROW STRUCTURE	1	15			150	4	Medium
103732	Regulatory Sign	Cooks Mill Road Warning ONE LANE Tab Sign	1	15			150	4	Medium
103733	Regulatory Sign	Cooks Mill Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103734	Regulatory Sign	Cooks Mill Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103735	Regulatory Sign	Cooks Mill Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103736	Regulatory Sign	Cooks Mill Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103737	Regulatory Sign	Cooks Mill Road Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
103738	Regulatory Sign	Cooks Mill Road Warning OBJECT	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		MARKER (Right Direction)							
103740	Regulatory Sign	Cooks Mill Road Warning OBJECT MARKER (Left Direction)	1	15			150	3	High
103741	Regulatory Sign	Cooks Mill Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103742	Regulatory Sign	Cooks Mill Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103743	Regulatory Sign	Cooks Mill Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
103744	Regulatory Sign	Cooks Mill Road Warning NARROW STRUCTURE	1	15			150	4	Medium
103745	Regulatory Sign	Cooks Mill Road Warning ONE LANE Tab Sign	1	15			150	4	Medium
103746	Regulatory Sign	Cooks Mill Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103747	Regulatory Sign	Farnham Road Priority STOP	1	15			150	4	Medium
103748	Regulatory Sign	Farnham Road Regulatory MAXIMUM SPEED	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103749	Regulatory Sign	Farnham Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103750	Regulatory Sign	Farnham Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103751	Regulatory Sign	Farnham Road Regulatory MAXIMUM SPEED	1	15			150	3	High
103752	Regulatory Sign	Watson Road South Warning Hidden Driveway	1	15			150	4	Medium
103753	Regulatory Sign	Watson Road South Warning INTERSECTION Sign (Controlled)	1	15			150	4	Medium
103754	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103755	Regulatory Sign	Maltby Road East Priority STOP	1	15			150	3	High
103756	Regulatory Sign	Maltby Road East Priority STOP (Oversized)	1	15			150	3	High
103757	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103758	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103760	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103761	Regulatory Sign	Maltby Road East Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103762	Regulatory Sign	Maltby Road East Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
103763	Regulatory Sign	Maltby Road East Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
103764	Regulatory Sign	Maltby Road East Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
103765	Regulatory Sign	Maltby Road East Warning OBJECT MARKER (Left Direction)	1	15			150	3	High
103766	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103767	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103768	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103769	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103770	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103771	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103772	Regulatory Sign	Maltby Road East Warning INTERSECTION Sign (Controlled)	1	15			150	4	Medium
103773	Regulatory Sign	Maltby Road East Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103774	Regulatory Sign	Cockburn Road Warning SCHOOL AREA (Black and Yellow)	1	15			150	3	High
103775	Regulatory Sign	Cockburn Road Priority STOP	1	15			150	4	Medium
103776	Regulatory Sign	Old Brock Road Warning NO EXIT	1	15			150	3	High
103778	Regulatory Sign	Old Brock Road Warning SCHOOL AREA (Black and Yellow)	1	15			150	4	Medium
103779	Regulatory Sign	Old Brock Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103780	Regulatory Sign	Deer View Drive Priority STOP	1	15			150	3	High
103781	Regulatory Sign	Fox Run Road Warning CHEVRON ALIGNMENT	1	15			150	3	High
103783	Regulatory Sign	Fox Run Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103784	Regulatory Sign	Fox Run Road Priority STOP	1	15			150	3	High
103785	Regulatory Sign	Deer View Drive Priority STOP	1	15			150	3	High
103786	Regulatory Sign	Hamersley Road Warning NO EXIT	1	15			150	4	Medium
103787	Regulatory Sign	Hamersley Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103788	Regulatory Sign	Hamersley Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
103789	Regulatory Sign	Victoria Road South Regulatory NO HEAVY TRUCKS	1	15			150	3	High
103790	Regulatory Sign	Victoria Road South Warning Caution Winding Road	1	15			150	4	Medium
103792	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	3	High
103793	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	3	High



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110624	Regulatory Sign	Victoria Road South Warning CURVE (Left)	1	15			150	4	Medium
103797	Regulatory Sign	Old Ruby Lane Priority STOP	1	15			150	4	Medium
103798	Regulatory Sign	Old Ruby Lane Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103799	Regulatory Sign	Catherine Court Priority STOP	1	15			150	4	Medium
103800	Regulatory Sign	Old Ruby Lane Priority STOP	1	15			150	4	Medium
103801	Regulatory Sign	Victoria Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High
103802	Regulatory Sign	Victoria Road South Regulatory NO HEAVY TRUCKS	1	15			150	3	High
103803	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103804	Regulatory Sign	Watson Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High
103805	Regulatory Sign	Watson Road South Regulatory NO HEAVY TRUCKS	1	15			150	3	High
103806	Regulatory Sign	Watson Road South Warning CURVE (Left)	1	15			150	3	High
103808	Regulatory Sign	Watson Road South Regulatory MAXIMUM	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		SPEED Sign with KM/H included							
103809	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103810	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103812	Regulatory Sign	Watson Road South Warning Slow Dangerous Curve Ahead	1	15			150	4	Medium
103814	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
110658	Regulatory Sign	Watson Road South Warning SCHOOL BUS STOP AHEAD	1	15			150	4	Medium
103820	Regulatory Sign	Watson Road South Warning Maximum Speed Begins	1	15			150	3	High
103821	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103822	Regulatory Sign	Watson Road South Warning Caution Slow Winding Road	1	15			150	3	High
103823	Regulatory Sign	Watson Road South Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103824	Regulatory Sign	Watson Road South Warning INTERSECTION Sign (Uncontrolled)	1	15			150	3	High
103825	Regulatory Sign	Concession Road 2 Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
103826	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103827	Regulatory Sign	Sideroad 25 South Priority STOP	1	15			150	4	Medium
103828	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103829	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
103830	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103832	Regulatory Sign	Sideroad 25 South Warning Hidden Driveway	1	15			150	4	Medium
103833	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103834	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103835	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103837	Regulatory Sign	Sideroad 25 South Warning Hidden Driveway	1	15			150	4	Medium
103838	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103839	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103840	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103841	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103842	Regulatory Sign	Sideroad 25 South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103843	Regulatory Sign	Sideroad 20 South Warning School Bus Stopping	1	15			150	4	Medium
103844	Regulatory Sign	Sideroad 20 South Warning Hidden Driveway	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103845	Regulatory Sign	Sideroad 20 South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103846	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103847	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103848	Regulatory Sign	Sideroad 20 South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
103849	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103850	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103851	Regulatory Sign	Sideroad 20 South Warning Hidden Driveway	1	15			150	4	Medium
103852	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103853	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103854	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103855	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103856	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103857	Regulatory Sign	Sideroad 20 South Priority STOP (Oversized)	1	15			150	4	Medium
103858	Regulatory Sign	Concession Road 2 Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
103859	Regulatory Sign	Concession Road 1 Warning Hidden Driveway	1	15			150	4	Medium
103862	Regulatory Sign	Concession Road 4 Priority CHECKERBOARD (Right Arrow)	1	15			150	4	Medium
103863	Regulatory Sign	Concession Road 4 Warning SHARP CURVE (Right)	1	15			150	4	Medium
110632	Regulatory Sign	Sideroad 20 North Warning Hidden Driveway	1	15			150	4	Medium
110631	Regulatory Sign	Sideroad 20 North Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
296001	Regulatory Sign	Sideroad 20 North Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103869	Regulatory Sign	Sideroad 20 North Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103870	Regulatory Sign	Sideroad 20 North Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103871	Regulatory Sign	Sideroad 20 North Warning Hidden Driveway	1	15			150	4	Medium
103872	Regulatory Sign	Sideroad 20 North Warning CURVE (Right)	1	15			150	4	Medium
103873	Regulatory Sign	Sideroad 20 North Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103874	Regulatory Sign	Sideroad 20 North Warning NO EXIT	1	15			150	4	Medium
103875	Regulatory Sign	Sideroad 20 North Warning NO EXIT	1	15			150	4	Medium
103876	Regulatory Sign	Sideroad 20 North Warning Hidden Driveway	1	15			150	4	Medium
103877	Regulatory Sign	Sideroad 20 North Priority CHECKERBOARD (Dead End)	1	15			150	4	Medium
103878	Regulatory Sign	Concession Road 4 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110623	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
103880	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103881	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103882	Regulatory Sign	Sideroad 12 North Warning NO EXIT	1	15			150	4	Medium
103883	Regulatory Sign	Sideroad 12 North Priority STOP	1	15			150	4	Medium
103884	Regulatory Sign	Sideroad 12 North Priority STOP	1	15			150	4	Medium
103885	Regulatory Sign	Sideroad 12 North Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103887	Regulatory Sign	Sideroad 12 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103888	Regulatory Sign	Sideroad 12 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103889	Regulatory Sign	Sideroad 12 North Priority STOP (Oversized)	1	15			150	4	Medium
103890	Regulatory Sign	Sideroad 12 North Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103891	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103892	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103893	Regulatory Sign	Concession Road 4 Warning INTERSECTION Sign (Controlled, Oversized)	1	15			150	4	Medium
103894	Regulatory Sign	Concession Road 4 Warning HIDDEN INTERSECTION Tab Sign (Oversized)	1	15			150	4	Medium
103895	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103896	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
103897	Regulatory Sign	Concession Road 4 Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
103899	Regulatory Sign	Concession Road 4 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
103900	Regulatory Sign	Concession Road 4 Priority STOP	1	15			150	4	Medium
103901	Regulatory Sign	Roszell Road Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103902	Regulatory Sign	Roszell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110634	Regulatory Sign	Roszell Road Priority ADVISORY SPEED Tab	1	15			150	4	Medium
103906	Regulatory Sign	Roszell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110638	Regulatory Sign	Roszell Road Priority ADVISORY SPEED Tab	1	15			150	4	Medium
103909	Regulatory Sign	Roszell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103911	Regulatory Sign	Roszell Road Warning Caution Slow Moving Vehicles	1	15			150	4	Medium
103912	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103913	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103914	Regulatory Sign	Roszell Road Priority CHECKERBOARD (Left Arrow)	1	15			150	3	High
103915	Regulatory Sign	Roszell Road Priority CHECKERBOARD (Right Arrow)	1	15			150	4	Medium
103917	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103920	Regulatory Sign	Roszell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103921	Regulatory Sign	Roszell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103924	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103925	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103926	Regulatory Sign	Roszell Road Priority CHECKERBOARD (Right Arrow)	1	15			150	4	Medium
103927	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103928	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103929	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103930	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
103931	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104000	Regulatory Sign	Boyce Drive Warning NO EXIT	1	15			150	4	Medium
104001	Regulatory Sign	Cassin Court Priority STOP	1	15			150	4	Medium
104002	Regulatory Sign	Bridlepath Street Regulatory KEEP RIGHT	1	15			150	4	Medium
104003	Regulatory Sign	Bridlepath Street Warning OBJECT MARKER (Left Direction)	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104006	Regulatory Sign	Bridlepath Street Priority STOP	1	15			150	4	Medium
104008	Regulatory Sign	Bridlepath Street Warning OBJECT MARKER (Left Direction)	1	15			150	3	High
104009	Regulatory Sign	Carriage Lane Priority STOP	1	15			150	4	Medium
104010	Regulatory Sign	Maple Leaf Lane Priority CHECKERBOARD (Dead End)	1	15			150	4	Medium
104012	Regulatory Sign	Maple Leaf Lane Warning PLAYGROUND AHEAD	1	15			150	4	Medium
104013	Regulatory Sign	Maple Leaf Lane Warning SPEED HUMP	1	15			150	4	Medium
104014	Regulatory Sign	Maple Leaf Lane Warning SPEED HUMP Tab Sign	1	15			150	4	Medium
104015	Regulatory Sign	Maple Leaf Lane Warning SPEED HUMP	1	15			150	4	Medium
104016	Regulatory Sign	Maple Leaf Lane Warning SPEED HUMP Tab Sign	1	15			150	4	Medium
104017	Regulatory Sign	Maple Leaf Lane Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104018	Regulatory Sign	Maple Leaf Lane Warning PLAYGROUND AHEAD	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104019	Regulatory Sign	Maple Leaf Lane Warning NO EXIT	1	15			150	3	High
104020	Regulatory Sign	Maple Leaf Lane Warning NO EXIT	1	15			150	4	Medium
110622	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
104023	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104024	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104025	Regulatory Sign	Kerr Crescent Priority STOP	1	15			150	4	Medium
104026	Regulatory Sign	Kerr Crescent Priority STOP	1	15			150	4	Medium
104027	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104028	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
104029	Regulatory Sign	McLean Road Priority CURVE (Right)	1	15			150	3	High
104030	Regulatory Sign	McLean Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104031	Regulatory Sign	McLean Road Warning CHEVRON ALIGNMENT	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104032	Regulatory Sign	McLean Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104033	Regulatory Sign	McLean Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104034	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104035	Regulatory Sign	McLean Road Priority CHECKERBOARD (Both Directions)	1	15			150	3	High
110644	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104037	Regulatory Sign	Concession Road 7 Priority STOP (Oversized)	1	15			150	4	Medium
104039	Regulatory Sign	Concession Road 7 Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
104040	Regulatory Sign	McLean Road Warning CURVE (Right)	1	15			150	4	Medium
104041	Regulatory Sign	McLean Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104042	Regulatory Sign	McLean Road Warning CURVE (Left)	1	15			150	3	High
104043	Regulatory Sign	McLean Road Warning OBJECT MARKER (Right Direction)	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104045	Regulatory Sign	McLean Road Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
104047	Regulatory Sign	Sideroad 25 North Priority STOP	1	15			150	4	Medium
104048	Regulatory Sign	Sideroad 25 North Warning NO EXIT	1	15			150	4	Medium
104049	Regulatory Sign	Sideroad 25 North Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104050	Regulatory Sign	Sideroad 25 North Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
104051	Regulatory Sign	Sideroad 25 North Warning OBJECT MARKER (Left Direction)	1	15			150	3	High
104052	Regulatory Sign	Sideroad 25 North Warning OBJECT MARKER (Left Direction)	1	15			150	3	High
104053	Regulatory Sign	Sideroad 25 North Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
104054	Regulatory Sign	Sideroad 25 North Priority CHECKERBOARD (Dead End)	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104056	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104058	Regulatory Sign	Smith Road Priority STOP	1	15			150	4	Medium
104059	Regulatory Sign	Concession Road 7 Warning TRUCK ENTRANCE (From Left, Oversized)	1	15			150	3	High
104060	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED AHEAD	1	15			150	3	High
104061	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
104062	Regulatory Sign	Concession Road 7 Regulatory NO HEAVY TRUCKS	1	15			150	3	High
104063	Regulatory Sign	Concession Road 7 Warning Caution Slow Moving Vehicles	1	15			150	3	High
104064	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
104065	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104066	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104067	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110628	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104069	Regulatory Sign	Concession Road 7 Warning PAVEMENT ENDS	1	15			150	3	High
104070	Regulatory Sign	Concession Road 7 Warning CURVE (Left)	1	15			150	4	Medium
104071	Regulatory Sign	Concession Road 7 Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
104072	Regulatory Sign	Concession Road 7 Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
104073	Regulatory Sign	Mason Rd Priority STOP	1	15			150	4	Medium
104074	Regulatory Sign	Mason Rd Warning NO EXIT	1	15			150	3	High
104075	Regulatory Sign	Concession Road 7 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104076	Regulatory Sign	Concession Road 7 Warning CURVE (Right)	1	15			150	3	High
104077	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104078	Regulatory Sign	Concession Road 7 Warning INTERSECTION Sign (Controlled) - Right	1	15			150	3	High
104079	Regulatory Sign	Concession Road 7 Warning PAVEMENT ENDS	1	15			150	3	High
104080	Regulatory Sign	Concession Road 2a Priority STOP (Oversized)	1	15			150	4	Medium
104081	Regulatory Sign	Concession Road 2a Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
104082	Regulatory Sign	Concession Road 7 Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
104083	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104084	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104085	Regulatory Sign	Calfass Road Warning SCHOOL AREA (Black and Yellow)	1	15			150	4	Medium
104086	Regulatory Sign	Calfass Road Warning SCHOOL AREA (Black and Yellow)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104087	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104088	Regulatory Sign	Calfass Road Warning Hidden Driveway	1	15			150	3	High
104089	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104090	Regulatory Sign	Calfass Road Warning Hidden Driveway	1	15			150	3	High
104091	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	3	High
110640	Regulatory Sign	Calfass Road Priority STOP AHEAD	1	15			150	4	Medium
104093	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104094	Regulatory Sign	Concession Road 7 Priority CHECKERBOARD (Both Directions)	1	15			150	3	High
104096	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104097	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104098	Regulatory Sign	Concession Road 7 Warning Hidden Driveway	1	15			150	4	Medium
104099	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104100	Regulatory Sign	Concession Road 7 Warning Hidden Driveway	1	15			150	3	High
104101	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104102	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104103	Regulatory Sign	Concession Road 7 Warning Hidden Intersection	1	15			150	4	Medium
104104	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104105	Regulatory Sign	Concession Road 2 Priority STOP	1	15			150	4	Medium
104106	Regulatory Sign	Concession Road 7 Priority CHECKERBOARD (Both Directions)	1	15			150	3	High
104107	Regulatory Sign	Concession Road 7 Warning INTERSECTION Sign (Controlled) - Left	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104108	Regulatory Sign	Concession Road 2 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
104109	Regulatory Sign	Concession Road 2 Priority STOP	1	15			150	4	Medium
104110	Regulatory Sign	Concession Road 2a Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
110642	Regulatory Sign	Concession Road 2a Priority STOP AHEAD	1	15			150	4	Medium
104113	Regulatory Sign	Concession Road 2a Warning CHEVRON ALIGNMENT	1	15			150	3	High
104114	Regulatory Sign	Concession Road 2a Warning Y-INTERSECTION (Controlled)	1	15			150	3	High
104117	Regulatory Sign	Concession Road 7 Warning Caution Slow Moving Vehicles	1	15			150	3	High
104118	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104119	Regulatory Sign	Concession Road 7 Warning Hidden Intersection	1	15			150	4	Medium
104120	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104121	Regulatory Sign	Concession Road 7 Warning Hidden Driveway	1	15			150	3	High
104122	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104123	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	3	High
104124	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
104125	Regulatory Sign	Concession Road 7 Priority STOP	1	15			150	3	High
104126	Regulatory Sign	Concession Road 7 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
104127	Regulatory Sign	Concession Road 7 Warning Caution Slow Moving Vehicles	1	15			150	3	High
104128	Regulatory Sign	Concession Road 7 Priority STOP	1	15			150	4	Medium
104129	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
104131	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104132	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104133	Regulatory Sign	Concession Road 7 Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
104134	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104135	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104136	Regulatory Sign	Concession Road 7 Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
104137	Regulatory Sign	Concession Road 7 Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
104138	Regulatory Sign	Concession Road 7 Priority STOP (Oversized)	1	15			150	3	High
104139	Regulatory Sign	Gore Road Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
104140	Regulatory Sign	Concession Road 7 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
104141	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104142	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104143	Regulatory Sign	Gore Road Warning INTERSECTION Sign (Controlled) - Right	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104144	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104145	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104146	Regulatory Sign	Gore Road Warning INTERSECTION Sign (CONTROLLED)	1	15			150	4	Medium
104147	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104148	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104149	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104150	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
104151	Regulatory Sign	Gore Road Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium
104152	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104153	Regulatory Sign	Gore Road Warning INTERSECTION Sign (Controlled) - Right	1	15			150	3	High
104154	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	3	High
104155	Regulatory Sign	Sideroad 25 South Priority STOP	1	15			150	4	Medium
104156	Regulatory Sign	Sideroad 25 South Priority	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		CHECKERBOARD (Both Directions)							
104157	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104500	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104501	Regulatory Sign	Gore Road Warning Hidden Driveway	1	15			150	4	Medium
104502	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104503	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104504	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104505	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104506	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104507	Regulatory Sign	Sideroad 20 South Priority STOP	1	15			150	4	Medium
104508	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104509	Regulatory Sign	Gore Road Priority CHECKERBOARD (Both Directions)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104510	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104511	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104512	Regulatory Sign	Gore Road Warning Hidden Driveway	1	15			150	4	Medium
104513	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104514	Regulatory Sign	Gore Road Warning Hidden Driveway	1	15			150	4	Medium
104516	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104517	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104518	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104519	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104520	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104521	Regulatory Sign	Gore Road Regulatory LOAD RESTRICTION	1	15			150	4	Medium
104525	Regulatory Sign	Concession Road 1 Warning Caution Slow Moving Vehicles	1	15			150	4	Medium
104526	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104527	Regulatory Sign	Sideroad 20 South Priority STOP	1	15			150	4	Medium
104528	Regulatory Sign	Sideroad 20 South Priority STOP	1	15			150	4	Medium
104529	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
104530	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104531	Regulatory Sign	Concession Road 1 Regulatory ENDS Tab Sign	1	15			150	4	Medium
110625	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED KM/H BEGINS	1	15			150	4	Medium
104534	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104535	Regulatory Sign	Concession Road 1 Warning Hidden Intersection	1	15			150	4	Medium
104536	Regulatory Sign	Sideroad 25 South Priority STOP	1	15			150	4	Medium
104537	Regulatory Sign	Sideroad 25 South Priority STOP	1	15			150	4	Medium
110639	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104540	Regulatory Sign	Sideroad 25 South Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104541	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104542	Regulatory Sign	Concession Road 1 Warning PEDESTRIANS AHEAD	1	15			150	4	Medium
104543	Regulatory Sign	Concession Road 1 Warning Hidden Intersection	1	15			150	4	Medium
104544	Regulatory Sign	Concession Road 4 Warning Hidden Driveway	1	15			150	4	Medium
104545	Regulatory Sign	Concession Road 4 Warning Caution (Tab Sign)	1	15			150	4	Medium
104547	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED BEGINS	1	15			150	3	High
104550	Regulatory Sign	Concession Road 1 Regulatory STRAIGHT THROUGH OR LEFT TURN ONLY	1	15			150	3	High
104551	Regulatory Sign	Concession Road 1 Warning Caution Slow Moving Vehicles	1	15			150	3	High
104552	Regulatory Sign	Concession Road 1 Priority STOP (Oversized)	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104554	Regulatory Sign	Leslie Road West Warning SHARP CURVE (Right)	1	15			150	4	Medium
104556	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104557	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	3	High
104558	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104559	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	3	High
104560	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104561	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104562	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104563	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104564	Regulatory Sign	Concession Road 2 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104565	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110641	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
104568	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
104569	Regulatory Sign	Concession Road 2 Warning TRUCK ENTRANCE (From Left)	1	15			150	4	Medium
104570	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
104571	Regulatory Sign	Concession Road 2 Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
104572	Regulatory Sign	Concession Road 2 Warning Hidden Driveway	1	15			150	4	Medium
104574	Regulatory Sign	Telfer Glen Street Warning Watch For Children	1	15			150	3	High
104575	Regulatory Sign	Telfer Glen Street Regulatory MAXIMUM SPEED	1	15			150	3	High
104576	Regulatory Sign	Settlers Court Priority STOP	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
104577	Regulatory Sign	Settlers Court Regulatory MAXIMUM SPEED	1	15			150	3	High
104578	Regulatory Sign	Calfass Road Priority STOP	1	15			150	3	High
104579	Regulatory Sign	Settlers Court Warning Watch For Children	1	15			150	3	High
104580	Regulatory Sign	Settlers Court Priority STOP	1	15			150	3	High
104581	Regulatory Sign	Calfass Road Priority STOP	1	15			150	3	High
104582	Regulatory Sign	Calfass Road Warning SHARP CURVE (Left)	1	15			150	3	High
104584	Regulatory Sign	Calfass Road Warning CHEVRON ALIGNMENT	1	15			150	3	High
104585	Regulatory Sign	Calfass Road Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
104586	Regulatory Sign	Calfass Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104587	Regulatory Sign	Calfass Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
104588	Regulatory Sign	Church Street Warning Watch For Children	1	15			150	3	High
104589	Regulatory Sign	Victoria Street Priority STOP	1	15			150	4	Medium
110650	Regulatory Sign	Watson Road South Priority ADVISORY SPEED Tab	1	15			150	4	Medium
110651	Regulatory Sign	Watson Road South Priority CURVE (Left)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110652	Regulatory Sign	Watson Road South Priority ADVISORY SPEED Tab	1	15			150	4	Medium
110653	Regulatory Sign	Watson Road South Priority CURVE (Right)	1	15			150	4	Medium
110654	Regulatory Sign	Watson Road South Priority ADVISORY SPEED Tab	1	15			150	4	Medium
110655	Regulatory Sign	Watson Road South Priority CURVE (Left)	1	15			150	4	Medium
110656	Regulatory Sign	Watson Road South Priority ADVISORY SPEED Tab	1	15			150	4	Medium
285277	Regulatory Sign	Watson Road South Priority CURVE (Right)	1	15			150	4	Medium
110659	Regulatory Sign	Concession Road 11 Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
110660	Regulatory Sign	Concession Road 11 Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
110661	Regulatory Sign	Watson Road South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
110662	Regulatory Sign	Watson Road South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
110665	Regulatory Sign	Roszell Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110666	Regulatory Sign	Watson Road South Priority ADVISORY SPEED Tab	1	15			150	4	Medium
110667	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	3	High
110629	Regulatory Sign	Concession Road 4 Priority STOP (Oversized)	1	15			150	4	Medium
110669	Regulatory Sign	Concession Road 4 Priority STOP (Oversized)	1	15			150	4	Medium
110670	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
110671	Regulatory Sign	Darkwood Road Priority TURN (Left, Oversized)	1	15			150	4	Medium
110672	Regulatory Sign	Old Brock Road Regulatory SCHOOL BUS LOADING ZONE	1	15			150	4	Medium
110673	Regulatory Sign	Calfass Road Priority STOP	1	15			150	4	Medium
110674	Regulatory Sign	Concession Road 2 Warning Hidden Driveway	1	15			150	4	Medium
110675	Regulatory Sign	Maple Leaf Lane Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110677	Regulatory Sign	Maltby Road East Warning RAILWAY CROSSING AHEAD	1	15			150	3	High
110679	Regulatory Sign	Concession Road 7 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110680	Regulatory Sign	Concession Road 7 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110681	Regulatory Sign	Concession Road 1 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110682	Regulatory Sign	Leslie Road West Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110683	Regulatory Sign	Ellis Road Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110684	Regulatory Sign	Concession Road 4 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110685	Regulatory Sign	Concession Road 4 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
110686	Regulatory Sign	Bridlepath Street Regulatory STRAIGHT THROUGH ONLY	1	15			150	4	Medium
110687	Regulatory Sign	Bridlepath Street Regulatory RIGHT TURN ONLY	1	15			150	4	Medium
110688	Regulatory Sign	Bridlepath Street Regulatory KEEP RIGHT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
110689	Regulatory Sign	Bieber Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
110691	Regulatory Sign	Leslie Road West Priority CHECKERBOARD (Left Arrow)	1	15			150	4	Medium
110693	Regulatory Sign	Forestell Road Priority SHARP CURVE (Left)	1	15			150	4	Medium
110633	Regulatory Sign	Roszell Road Priority SHARP CURVE (Right)	1	15			150	4	Medium
110697	Regulatory Sign	Ellis Road Priority CHECKERBOARD (Right Arrow)	1	15			150	4	Medium
110698	Regulatory Sign	Sideroad 25 South Warning RAILWAY CROSSING AHEAD	1	15			150	4	Medium
110699	Regulatory Sign	Concession Road 2a Warning ADVISORY SPEED Tab	1	15			150	4	Medium
171063	Regulatory Sign	McLean Road Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
171065	Regulatory Sign	McLean Road Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
171066	Regulatory Sign	Victoria Road South Warning CHEVRON ALIGNMENT	1	15			150	3	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
171067	Regulatory Sign	Small Road Warning CHEVRON ALIGNMENT	1	15			150	3	High
171068	Regulatory Sign	Cooks Mill Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
171069	Regulatory Sign	Watson Road South Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
171070	Regulatory Sign	Watson Road South Warning Caution Slow Moving Vehicles	1	15			150	3	High
171071	Regulatory Sign	Hume Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
175345	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
175346	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	3	High
175347	Regulatory Sign	Gore Road Priority CHECKERBOARD (Both Directions, Oversized)	1	15			150	4	Medium
175349	Regulatory Sign	Gore Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
175351	Regulatory Sign	Gore Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
175352	Regulatory Sign	Gore Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium
175353	Regulatory Sign	Gore Road Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
175354	Regulatory Sign	Gore Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
175355	Regulatory Sign	Gore Road Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
175356	Regulatory Sign	Gore Road Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
175357	Regulatory Sign	Concession Road 1 Regulatory LOAD RESTRICTION	1	15			150	4	Medium
175358	Regulatory Sign	Sideroad 10 South Warning NARROW STRUCTURE	1	15			150	4	Medium
175359	Regulatory Sign	Sideroad 10 South Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
175360	Regulatory Sign	Sideroad 10 South Warning NARROW STRUCTURE	1	15			150	4	Medium
175361	Regulatory Sign	Sideroad 20 South Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
210574	Regulatory Sign	Gore Road Regulatory LOAD RESTRICTION 5 TONNES PER AXLE	1	15			150	4	Medium
220891	Regulatory Sign	Concession Road 4 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220892	Regulatory Sign	Concession Road 4 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220893	Regulatory Sign	Sideroad 20 North Regulatory No Parking - Commercial Vehicles In Excess Of 4500Kg - 8Pm - 6Am - On City Streets	1	15			150	4	Medium
220894	Regulatory Sign	Sideroad 20 North Regulatory No Parking - 2Am - 6Am - On City Streets - Unless Otherwise Posted	1	15			150	4	Medium
220895	Regulatory Sign	Sideroad 20 North Warning Dec 1 - Mar 31 (Tab Sign)	1	15			150	4	Medium
220896	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220897	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
220898	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220899	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220900	Regulatory Sign	Concession Road 4 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220901	Regulatory Sign	Concession Road 4 Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220902	Regulatory Sign	Roszell Road Priority SHARP CURVE (Left)	1	15			150	4	Medium
220903	Regulatory Sign	Ellis Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
220904	Regulatory Sign	Roszell Road Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220930	Regulatory Sign	Sideroad 12 North Priority CHECKERBOARD (Dead End)	1	15			150	4	Medium
220931	Regulatory Sign	Cooks Mill Road Priority STOP AHEAD	1	15			150	4	Medium
220932	Regulatory Sign	Carter Road Priority STOP (Oversized)	1	15			150	4	Medium
220933	Regulatory Sign	Carter Road Regulatory MAXIMUM SPEED Sign with KM/H included	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
220934	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220935	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220936	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220937	Regulatory Sign	Watson Road South Priority CURVE (Right)	1	15			150	4	Medium
220938	Regulatory Sign	Watson Road South Priority ADVISORY SPEED Tab	1	15			150	4	Medium
220939	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220940	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220941	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220942	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220943	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
220944	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220945	Regulatory Sign	Concession Road 11 Priority MAXIMUM TONNES (Single Weight)	1	15			150	3	High
220946	Regulatory Sign	Darkwood Road Priority ADVISORY SPEED Tab	1	15			150	4	Medium
220949	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220950	Regulatory Sign	Watson Road South Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
220953	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
220954	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
220955	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
220956	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
103647	Regulatory Sign	Darkwood Road Priority	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		CHECKERBOARD (Right Arrow)							
222708	Regulatory Sign	Concession Road 1 Warning Maximum Speed	1	15			150	4	Medium
222709	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED AHEAD	1	15			150	4	Medium
222710	Regulatory Sign	Leslie Road West Regulatory LOAD RESTRICTION	1	15			150	4	Medium
222711	Regulatory Sign	Calfass Road Regulatory MAXIMUM SPEED	1	15			150	3	High
222712	Regulatory Sign	Calfass Road Regulatory LOAD RESTRICTION 5 TONNES PER AXLE	1	15			150	3	High
222713	Regulatory Sign	Victoria Street Warning Watch For Children	1	15			150	4	Medium
222714	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
222715	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
222716	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
222717	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
222718	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
222719	Regulatory Sign	Concession Road 1 Regulatory MAXIMUM SPEED	1	15			150	4	Medium
222720	Regulatory Sign	Concession Road 2 Regulatory NO HEAVY TRUCKS	1	15			150	4	Medium
222721	Regulatory Sign	Concession Road 2a Warning CHEVRON ALIGNMENT	1	15			150	4	Medium
222722	Regulatory Sign	Concession Road 2 Warning Y-INTERSECTION (Controlled)	1	15			150	4	Medium
110643	Regulatory Sign	Concession Road 2 Priority ADVISORY SPEED Tab	1	15			150	4	Medium
222724	Regulatory Sign	Concession Road 7 Warning OBJECT MARKER (Left Direction)	1	15			150	4	Medium
285272	Regulatory Sign	Victoria Road South Regulatory Trucks 4500 Kg Or Over Must Follow These Signs	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
285273	Regulatory Sign	Victoria Road South Warning Hidden Driveway	1	15			150	3	High
285274	Regulatory Sign	Victoria Road South Priority STOP	1	15			150	3	High
285275	Regulatory Sign	Maltby Road East Warning INTERSECTION Sign (Uncontrolled)	1	15			150	4	Medium
285276	Regulatory Sign	Watson Road South Warning OBJECT MARKER (Right Direction)	1	15			150	3	High
285278	Regulatory Sign	Watson Road South Warning OBJECT MARKER (Right Direction)	1	15			150	4	Medium
285280	Regulatory Sign	Concession Road 11 Priority MAXIMUM TONNES (Single Weight)	1	15			150	4	Medium
220947	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED	1	15			150	4	Medium
285281	Regulatory Sign	Darkwood Road Regulatory MAXIMUM SPEED BEGINS	1	15			150	4	Medium
285282	Regulatory Sign	Concession Road 11 Warning NARROW STRUCTURE (Oversized)	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
285283	Regulatory Sign	Concession Road 11 Priority YIELD TO ONCOMING TRAFFIC	1	15			150	4	Medium
285269	Regulatory Sign	McLean Road Warning Object Marker Horizontal	1	15			150	3	High
285271	Regulatory Sign	McLean Road Warning Object Marker Horizontal	1	15			150	2	High
285284	Regulatory Sign	Watson Road South Warning Hidden Driveway	1	15			150	4	Medium
296002	Regulatory Sign	Concession Road 4 Regulatory Object Marker Horizontal	1	15			150	4	Medium
296003	Regulatory Sign	Concession Road 4 Regulatory Object Marker Horizontal	1	15			150	4	Medium
285286	Regulatory Sign	Concession 7 Warning TRUCK ENTRANCE (From Right, Oversized)	1	15			150	3	High
285285	Regulatory Sign	Sideroad 25 North Regulatory MAXIMUM TONNES (Single Weight, Oversized)	1	15			150	4	Medium
296004	Regulatory Sign	Sideroad 20 South Warning Hidden Driveway	1	15			150	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
103831	Regulatory Sign	Sideroad 25 South Warning School Bus Stop Ahead	1	15			150	4	Medium
SL 278_F	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 279_F	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 281_F	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 282_F	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 280_F	Street Light	Wallpack Type 2 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 283_F	Street Light	Wallpack Type 2 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 284_F	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 285_F	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	300	4	Medium
SL 286_F	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	300	4	Medium
SL 287_F	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	300	4	Medium
SL 293_F	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	300	4	Medium
SL 288_F	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	300	4	Medium
SL 289_F	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	300	4	Medium
SL 290_F	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	300	4	Medium
SL 291_F	Street Light	Wallpack Type 4 HPS Lampheight: 6	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground							
SL 292_F	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	300	4	Medium
SL 311_F	Street Light	Wallpack Type 5 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 312_F	Street Light	Wallpack Type 5 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 313_F	Street Light	Wallpack Type 5 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 308_F	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 309_F	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 310_F	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 314_F	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 315_F	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 318_F	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 261_F	Street Light	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete	1	20		2034	300	4	Medium
SL 262_F	Street Light	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete	1	20		2034	300	4	Medium
SL 307_F	Street Light	Floodlight Type 2 HPS Lampheight: 20 Location: Underground	1	20		2034	300	4	Medium
SL 305_F	Street Light	Floodlight LED Lampheight: 15 Location: Underground	1	20		2034	300	4	Medium
SL 306_F	Street Light	Floodlight LED Lampheight: 20	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground							
SL 173_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 174_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 175_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 176_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 177_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 178_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 180_F	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 181_F	Street Light	Sentinel Type 2 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 260_F	Street Light	Sentinel Type 1 HPS Lampheight: 25 Location: Overhead Concrete	1	20		2034	300	4	Medium
SL 317_F	Street Light	Sentinel Type 1 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 166_F	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	300	4	Medium
SL 167_F	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	300	4	Medium
SL 168_F	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	300	4	Medium
SL 169_F	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 170_F	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	300	4	Medium
SL 171_F	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	300	4	Medium
SL 150_F	Street Light	Decorative - Top Hat Type 1 HPS Lampheight: 20 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 128_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 129_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 130_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 131_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 132_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 133_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 134_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 135_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 136_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 137_F	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 138_F	Street Light	Decorative - Acorn Post Top Type 2 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	300	4	Medium
SL 304_F	Street Light	Cobrahead Type 2 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 316_F	Street Light	Cobrahead Type 2 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 62_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 63_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 64_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 65_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 66_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 67_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 68_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 69_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 70_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 71_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 72_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 73_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 74_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 75_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 76_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 77_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 78_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 79_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 80_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 81_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 82_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 83_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 84_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 85_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 86_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 87_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 89_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 90_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 91_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 92_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 93_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 94_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 95_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 96_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 97_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 98_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 99_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 100_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 101_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 102_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 103_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 104_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 105_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 106_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 107_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 108_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 109_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 110_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 111_F	Street Light	Cobrahead HPS Lampheight: 35 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 112_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 139_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 140_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 141_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 142_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 143_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 144_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 145_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 146_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 147_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 148_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 149_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 151_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 152_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 153_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 154_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 155_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 156_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 157_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 158_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 159_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 160_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 161_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 162_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 163_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 164_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 165_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 172_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 179_F	Street Light	Cobrahead HPS Lampheight: 20 Location: Overhead Wood	1	20		2038	300	5	Low
SL 182_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 183_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 184_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 185_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 186_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 187_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 188_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 189_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 190_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 191_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 192_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 193_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 194_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 195_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 196_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 197_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 198_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 199_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 200_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 201_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 202_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 203_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 204_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 205_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 206_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 207_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 208_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 209_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 210_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 211_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 212_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 213_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 214_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 215_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 216_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 217_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 218_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 219_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 220_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 221_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 222_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 223_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	300	3	Medium
SL 224_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 225_F	Street Light	Cobrahead HPS Lampheight: 20	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Wood							
SL 226_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	300	5	Low
SL 227_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	300	4	Medium
SL 228_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 229_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 230_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 231_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 232_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 233_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 234_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 235_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 236_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 237_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 238_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 239_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 240_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 241_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 242_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 243_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 244_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 245_F	Street Light	Cobrahead HPS Lampheight: 30 Location: Overhead Wood	1	20		2038	300	5	Low
SL 246_F	Street Light	Cobrahead HPS Lampheight: 30 Location: Overhead Wood	1	20		2038	300	5	Low
SL 247_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 248_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 249_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 250_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 251_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 252_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 253_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 254_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 255_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 256_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 257_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 258_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 259_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 263_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 264_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 265_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 266_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 267_F	Street Light	Cobrahead HPS Lampheight: 20 Location: Overhead Wood	1	20		2038	300	5	Low
SL 268_F	Street Light	Cobrahead HPS Lampheight: 30 Location: Overhead Wood	1	20		2038	300	5	Low
SL 269_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 270_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 271_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 272_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 273_F	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 274_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 275_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 276_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 277_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 294_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 295_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium
SL 296_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 297_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 298_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 299_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 300_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 301_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 302_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	300	3	Medium
SL 303_F	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	300	5	Low
SL 1_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14	1	20		2030	300	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 2_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 3_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 4_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 5_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 6_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 7_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 8_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 9_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 10_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 11_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 12_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 13_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14	1	20		2034	300	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 14_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 15_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 16_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 17_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 18_F	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 19_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 20_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 21_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 22_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 23_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 24_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 25_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 26_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 27_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 28_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 29_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 30_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 31_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 32_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 33_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 34_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 35_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 55_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 56_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14	1	20		2030	300	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 57_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 58_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 59_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 60_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 61_F	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 36_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 37_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 38_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 39_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 40_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 41_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 42_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 43_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 44_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 45_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 46_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 47_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 48_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14	1	20		2038	300	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 49_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 50_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 51_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 52_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 53_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 54_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14	1	20		2038	300	5	Low



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 113_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 114_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 115_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 116_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 117_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 118_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 119_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 120_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 121_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 122_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 123_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 124_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14	1	20		2034	300	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Metal							
SL 125_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2034	300	4	Medium
SL 126_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2038	300	5	Low
SL 127_F	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	20		2030	300	3	Medium
SL 278_P	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 279_P	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 281_P	Street Light	Wallpack Type 1 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 282_P	Street Light	Wallpack Type 1 HPS Lampheight: 20	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground							
SL 280_P	Street Light	Wallpack Type 2 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 283_P	Street Light	Wallpack Type 2 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 284_P	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 285_P	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 286_P	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 287_P	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 293_P	Street Light	Wallpack Type 3 HPS Lampheight: 10 Location: Underground	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 288_P	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 289_P	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 290_P	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 291_P	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 292_P	Street Light	Wallpack Type 4 HPS Lampheight: 6 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 311_P	Street Light	Wallpack Type 5 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 312_P	Street Light	Wallpack Type 5 HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 313_P	Street Light	Wallpack Type 5 HPS Lampheight: 20	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground							
SL 308_P	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 309_P	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 310_P	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 314_P	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 315_P	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 318_P	Street Light	Wallpack HPS Lampheight: 20 Location: Underground	1	20		2034	1304.103412	4	Medium
SL 261_P	Street Light	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete	1	20		2034	4026.787647	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 262_P	Street Light	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete	1	20		2034	4026.787647	4	Medium
SL 307_P	Street Light	Floodlight Type 2 HPS Lampheight: 20 Location: Underground	1	20		2034	4026.787647	4	Medium
SL 305_P	Street Light	Floodlight LED Lampheight: 15 Location: Underground	1	20		2034	4026.787647	4	Medium
SL 306_P	Street Light	Floodlight LED Lampheight: 20 Location: Underground	1	20		2034	4026.787647	4	Medium
SL 173_P	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 174_P	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 175_P	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 176_P	Street Light	Sentinel Type 2 HPS Lampheight: 20	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 177_P	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 178_P	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 180_P	Street Light	Sentinel Type 2 HPS Lampheight: 20 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 181_P	Street Light	Sentinel Type 2 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 260_P	Street Light	Sentinel Type 1 HPS Lampheight: 25 Location: Overhead Concrete	1	20		2034	1304.103412	4	Medium
SL 317_P	Street Light	Sentinel Type 1 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 166_P	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	4026.787647	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 167_P	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 168_P	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 169_P	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 170_P	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 171_P	Street Light	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 150_P	Street Light	Decorative - Top Hat Type 1 HPS Lampheight: 20 Location: Underground Concrete	1	20		2034	4026.787647	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 128_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 129_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 130_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 131_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 132_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 133_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 134_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 135_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 136_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 137_P	Street Light	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 138_P	Street Light	Decorative - Acorn Post Top Type 2 HPS Lampheight: 12 Location: Underground Metal	1	20		2034	4026.787647	4	Medium
SL 304_P	Street Light	Cobrahead Type 2 HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 316_P	Street Light	Cobrahead Type 2 HPS Lampheight: 25	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 62_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 63_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 64_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 65_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 66_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 67_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 68_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 69_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 70_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 71_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 72_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 73_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 74_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 75_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 76_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 77_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 78_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 79_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 80_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 81_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 82_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 83_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 84_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 85_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 86_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 87_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 88_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 89_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 90_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 91_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 92_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 93_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 94_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 95_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 96_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 97_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 98_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 99_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 100_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 101_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 102_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 103_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 104_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 105_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 106_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 107_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 108_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 109_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 110_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 111_P	Street Light	Cobrahead HPS Lampheight: 35 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 112_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 139_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 140_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 141_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 142_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 143_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 144_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 145_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 146_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 147_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 148_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 149_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 151_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 152_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 153_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 154_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 155_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 156_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 157_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 158_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 159_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 160_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 161_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 162_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 163_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 164_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 165_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 172_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 179_P	Street Light	Cobrahead HPS Lampheight: 20 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 182_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 183_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 184_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 185_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 186_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 187_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 188_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 189_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 190_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 191_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 192_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 193_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 194_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 195_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 196_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 197_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 198_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 199_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 200_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 201_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 202_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 203_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 204_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 205_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 206_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 207_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 208_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 209_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 210_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 211_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 212_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 213_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 214_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 215_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 216_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 217_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 218_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 219_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 220_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 221_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 222_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Underground Concrete							
SL 223_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2030	1304.103412	3	Medium
SL 224_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 225_P	Street Light	Cobrahead HPS Lampheight: 20 Location: Underground Wood	1	20		2034	1304.103412	4	Medium
SL 226_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2038	1304.103412	5	Low
SL 227_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Underground Concrete	1	20		2034	1304.103412	4	Medium
SL 228_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 229_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 230_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 231_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 232_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 233_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 234_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 235_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 236_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 237_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 238_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 239_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 240_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 241_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 242_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 243_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 244_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 245_P	Street Light	Cobrahead HPS Lampheight: 30 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 246_P	Street Light	Cobrahead HPS Lampheight: 30 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 247_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 248_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 249_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 250_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 251_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 252_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 253_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 254_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 255_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 256_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 257_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 258_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 259_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 263_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 264_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 265_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 266_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 267_P	Street Light	Cobrahead HPS Lampheight: 20 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 268_P	Street Light	Cobrahead HPS Lampheight: 30 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 269_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 270_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 271_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 272_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 273_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 274_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 275_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 276_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 277_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 294_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 295_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 296_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2034	1304.103412	4	Medium
SL 297_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 298_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 299_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 300_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 301_P	Street Light	Cobrahead HPS Lampheight: 25	1	20		2030	1304.103412	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
		Location: Overhead Wood							
SL 302_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2030	1304.103412	3	Medium
SL 303_P	Street Light	Cobrahead HPS Lampheight: 25 Location: Overhead Wood	1	20		2038	1304.103412	5	Low
SL 1_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 2_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 3_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 4_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 5_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 6_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 7_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 8_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 9_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 10_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 11_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 12_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 13_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 14_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 15_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 16_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 17_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 18_P	Street Light	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 19_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 20_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 21_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 22_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 23_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 24_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 25_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 26_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 27_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 28_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 29_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 30_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 31_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 32_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 33_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 34_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 35_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 55_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 56_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 57_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 58_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 59_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 60_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 61_P	Street Light	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 36_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 37_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 38_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 39_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 40_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 41_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 42_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 43_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 44_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 45_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 46_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 47_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 48_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 49_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 50_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 51_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 52_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 53_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 54_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 113_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 114_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 115_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 116_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 117_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 118_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 119_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 120_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 121_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
SL 122_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 123_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium
SL 124_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 125_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2042	4026.787647	4	Medium
SL 126_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2048	4026.787647	5	Low
SL 127_P	Street Light	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal	1	30		2036	4026.787647	3	Medium



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
5040	Fire licensed vehicles	Pumper 32	1	20	2010	2030	300000	4	Medium
5033	Fire licensed vehicles	Quint Truck	1	25	2003	2028	500000	3	Medium
5031	Fire licensed vehicles	Fire Pumper 31	1	20	2005	2025	468000	3	Medium
5038	Fire licensed vehicles	Freightliner Pumper Tanker 38	1	20	2012	2032	450000	4	Medium
5035	Fire licensed vehicles	Rescue Truck 35	1	20	2000	2020	520000	3	Medium
Aerial 33Fire licensed vehicles	Fire licensed vehicles	Aerial 33	1	25	2017	2042	500000	4	Medium
7006	Fire licensed vehicles	Tanker 37	1	20	2010	2030	410000	4	Medium
7005A	Fire licensed vehicles	2013 Vehicle For Fire & Rescue	1	7	2016	2024	23000	4	Medium
1_66FVT	Fire vehicle tires	P-31	1	10	2004	2019	648	1	High
2_11FVT	Fire vehicle tires	P-31	1	10	2004	2019	648	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
3_3FVT	Fire vehicle tires	P-31	1	10	2003	2019	825	1	High
4_96FVT	Fire vehicle tires	P-31	1	10	2003	2019	825	1	High
5_81FVT	Fire vehicle tires	P-31	1	10	2003	2019	825	1	High
6_77FVT	Fire vehicle tires	P-31	1	10	2003	2019	825	1	High
7_64FVT	Fire vehicle tires	P-32	1	10	2012	2022	686	3	Medium
8_19FVT	Fire vehicle tires	P-32	1	10	2012	2022	686	3	Medium
9_22FVT	Fire vehicle tires	P-32	1	10	2012	2022	686	3	Medium
10_14FVT	Fire vehicle tires	P-32	1	10	2012	2022	686	3	Medium
11_90FVT	Fire vehicle tires	P-32	1	10	2012	2022	686	3	Medium
12_46FVT	Fire vehicle tires	P-32	1	10	2012	2022	686	3	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
13_63FVT	Fire vehicle tires	A-33	1	8	2012	2020	825	3	Medium
14_38FVT	Fire vehicle tires	A-33	1	8	2012	2020	825	3	Medium
15_73FVT	Fire vehicle tires	A-33	1	8	2011	2019	825	3	Medium
16_16FVT	Fire vehicle tires	A-33	1	8	2011	2019	825	3	Medium
17_74FVT	Fire vehicle tires	A-33	1	8	2011	2019	825	3	Medium
18_76FVT	Fire vehicle tires	A-33	1	8	2011	2019	825	3	Medium
19_36FVT	Fire vehicle tires	R-35	1	10	2016	2030	648	4	Medium
20_20FVT	Fire vehicle tires	R-35	1	10	2016	2030	648	4	Medium
21_91FVT	Fire vehicle tires	R-35	1	10	2017	2030	370	4	Medium
22_65FVT	Fire vehicle tires	R-35	1	10	2017	2030	370	4	Medium

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
23_30FVT	Fire vehicle tires	R-35	1	10	2017	2030	370	4	Medium
24_66FVT	Fire vehicle tires	R-35	1	10	2017	2030	370	4	Medium
25_57FVT	Fire vehicle tires	T-37	1	10	2014	2024	825	4	Medium
26_100FVT	Fire vehicle tires	T-37	1	10	2014	2024	825	4	Medium
27_69FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
28_4FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
29_40FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
30_35FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
31_1FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
32_77FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
33_70FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
45_1FVT	Fire vehicle tires	C-1		10	2014	2019	250	1	High
46_31FVT	Fire vehicle tires	C-1		10	2014	2019	250	1	High
47_71FVT	Fire vehicle tires	C-1		10	2014	2019	250	1	High
48_70FVT	Fire vehicle tires	C-1		10	2014	2019	250	1	High
34_59FVT	Fire vehicle tires	T-37	1	10	2009	2019	825	1	High
35_18FVT	Fire vehicle tires	T-38	1	10	2018	2028	825	1	High
36_27FVT	Fire vehicle tires	T-38	1	10	2018	2028	825	1	High
37_60FVT	Fire vehicle tires	T-38	1	10	2018	2028	648	1	High
38_76FVT	Fire vehicle tires	T-38	1	10	2018	2028	648	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
39_53FVT	Fire vehicle tires	T-38	1	10	2018	2028	648	1	High
40_1FVT	Fire vehicle tires	T-38-FT	1	10	2006	2019	825	1	High
41_1FVT	Fire vehicle tires	T-38-FT		10	2009	2019	825	1	High
42_14FVT	Fire vehicle tires	T-38	1	10	2018	2028	648	1	High
43_24FVT	Fire vehicle tires	T-38	1	10	2018	2028	648	1	High
44_8FVT	Fire vehicle tires	T-38	1	10	2018	2028	648	1	High
49_56FVT	Fire vehicle tires	C-1 Winter	1	10	2017	2019	250	1	High
50_57FVT	Fire vehicle tires	C-1 Winter	1	10	2017	2019	250	1	High
51_94FVT	Fire vehicle tires	C-1 Winter	1	10	2017	2019	250	1	High
52_10FVT	Fire vehicle tires	C-1 Winter	1	10	2017	2019	250	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
53_10FVT	Fire vehicle tires	P-30	1	10	2002	2012	370	1	High
54_43FVT	Fire vehicle tires	P-30	1	10	2002	2012	370	1	High
55_80FVT	Fire vehicle tires	P-30	1	10	2002	2012	370	1	High
56_8FVT	Fire vehicle tires	P-30	1	10	2002	2012	370	1	High
57_20FVT	Fire vehicle tires	P-30	1	10	2002	2012	370	1	High
58_81FVT	Fire vehicle tires	P-30	1	10	2002	2012	370	1	High
8016	Work licensed vehicles	2013 International Plow Truck 301	1	8	2013	2021	250000	2	Medium
8014	Work licensed vehicles	2012 Dump/Plow 302	1	8	2012	2020	250000	2	Medium
8017	Work licensed vehicles	2015 International Plow Truck - 303	1	8	2015	2023	225000	2	Medium
8013	Work licensed vehicles	2011 Single Axle Truck 304	1	8	2011	2019	250000	1	High

Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
7003	Work licensed vehicles	1 Ton Dump/Plow 305	1	12	2008	2020	100000	2	Medium
8019	Work licensed vehicles	2015 GMC Sierra 1500	1	5	2015	2020	40000	3	Medium
7009	Work licensed vehicles	2017 Pickup Truck - Staff - 3/4 Ton	1	8	2017	2025	52000	3	Medium
7008	Work licensed vehicles	2011 Chevy Silverado Pickup 4	1	7	2011	2018	40000	1	High
7005B	Building Department licensed vehicles	2016 Mid-Size Pickup		7	2016	2024	23000	3	Medium
4060	Parks and Recreation Unlicensed vehicles	Floor Scrubber	1	10	2016	2026	8000	4	Medium
8015	Work Unlicensed vehicles	Anti-Ice Equipment	1					5	Low
8015-1	Work Unlicensed vehicles	Slide in Spray Unt	1	20		2038	5000	5	Low
8015-2	Work Unlicensed vehicles	Storage Tank	2	20		2038	14000	5	Low



Asset #	Asset Class	Description	Quantity	L.E	Acquisition Date	Replacement Year	Replacement Cost	Condition	Risk
8015-3	Work Unlicensed vehicles	Pumps	2	20		2038	5000	5	Low
8001	Work Unlicensed vehicles	JCB Backhoe 6	1	12	2008	2020	125000	2	Medium
8003	Work Unlicensed vehicles	Road Grader G740 501	1	25	2000		350000	5	Low
8002	Work Unlicensed vehicles	Road Grader G740 501	1	25	2000	2022	350000	2	Medium
8018	Work Unlicensed vehicles	Brush Chipper	1	10	2015	2022	40000	4	Medium
7007	Parks and Recreation Unlicensed vehicles	Lawn Tractor	1	10	2018	2028	30000	4	Medium
8020	Parks and Recreation Unlicensed vehicles	Olympia Ice Resurfacer	1	25	2017	2042	80000	5	Low
8012	Parks and Recreation Unlicensed vehicles	Trailers (1) - Parks Department	1	20	2014	2034	5000	4	Medium

