



## **ASSET MANAGEMENT PLAN**

**TOWNSHIP OF KILLALOE, HAGARTY, AND RICHARDS  
COUNTY OF RENFREW, ONTARIO**

Prepared for

**THE CORPORATION OF THE  
TOWNSHIP OF KILLALOE, HAGARTY, AND  
RICHARDS**

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## EXECUTIVE SUMMARY

The Township of Killaloe, Hagarty, and Richards is a small, rural, lower-tier municipality situated in eastern Ontario, in the County of Renfrew. The Township is located approximately two hundred and sixty kilometres northeast of Toronto, Ontario, and one hundred and thirty kilometres west of Ottawa, Ontario.

Based on the rural nature of the municipality, and since a significant portion of its ratepayers are seasonal residents, the Township of Killaloe, Hagarty, and Richards faces some unique challenges and advantages related to asset management and provision of services in the next ten years and beyond concerning:

1. A largely rural road network over an area with a low population density that will require significant upgrades in the near future.
2. A small, centralized and costly water supply and wastewater services network that provides service to the Village of Killaloe only.
3. An aging stock of buildings and parks that will require upgrades, modernization, and/or replacement.
4. An aging fleet of vehicles and equipment with some costly replacements anticipated in the near future, specifically for Protection Services and Transportation Services.
5. A modern and cost effective long-term waste management strategic plan, with only minor asset upgrades anticipated in future.

The following five assets should be considered as the top priority assets for upgrade/replacement as part of Version 1.0 of this AMP:

No:	Asset Group	Asset Name	Projected Replacement or Upgrade Year	Condition Rating	Level of Service	Risk Factor	Replacement Cost
1	Roads	North Street (NO11/NO12)	2013	Poor	5	4	\$32,780
2	Roads	King Street (K111)	2011	Poor	5	4	\$25,080
3	Buildings and Parks	Killaloe Fire Hall (BO29)	2014	Poor	5	5	\$150,000
4	Vehicles and Equipment	1993 International 40S Fire Triple Combination Pumper and Tanker (VF4)	2013	Fair	5	5	\$250,000
5	Solid Waste	1995 Waste Site Cardboard Compactor (E-W2)	2005	Fair	4	4	\$60,000

The Township of Killaloe, Hagarty, and Richards' two current special projects (work in progress) should be considered for priority asset status, with the anticipated development and construction costs (replacement costs) per the following:

1. Round Lake / Foy Provincial Park Road Corridor = \$262,311.
2. Killaloe and District Public Library = \$1,000,000 (preliminary estimate only).

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## 1.0 INTRODUCTION

### 1.1 MUNICIPAL INFORMATION

The Township is a small, rural, lower-tier municipality situated in eastern Ontario, in the County of Renfrew (Figure 1). The Township was incorporated on July 1, 2000 following the amalgamation of the former Township of Hagarty and Richards and the Village of Killaloe (Township, 2013). The largest settlement areas in the Township are the villages of Killaloe and Round Lake Centre. The Township is located approximately two hundred and sixty (260) kilometres (km) northeast of Toronto, Ontario, and one hundred and thirty (130) km west of Ottawa, Ontario (Figure 1; Google Earth, 2013). The total land area of the Township is reportedly three hundred and ninety-five (395) square kilometres (km<sup>2</sup>; Statistics Canada, 2013).

According to the Census Profile information from Statistics Canada, the population of the Township as of 2011 included 2,402 residents, which represented a 5.8 percent decrease from the previous Census in 2006 when the population was reportedly 2,550 (Statistics Canada, 2013). The population density of the Township is a reported 6.10 people per km<sup>2</sup>. The total number of private dwellings within the Township in 2011 was 1,523 units, with 1,043 units occupied by usual (permanent) residents, and 480 seasonal dwellings (i.e. cottages, cabins, etc.). Owing to the rural nature of the municipality, the Township faces many unique challenges related to asset management and provision of services.

A summary of the municipal study area characteristics are included in Table 1 of Appendix A (Statistics Canada, 2013).

### 1.2 BACKGROUND

In June 2011, the Province of Ontario released a long-term infrastructure plan for Ontario entitled *Building Together*, which set out a strategic framework to aid in the guidance of fiscally-responsible future investments in the province. The Province identified that one of the key elements to the plan was ensuring good stewardship through proper asset management (Ministry of Infrastructure, 2012).

Based on the obligation of the Federal, Provincial, and Municipal governments to appropriately manage municipal infrastructure, the Province of Ontario has reportedly invested approximately thirteen (13) billion dollars into local infrastructure since 2003. Additionally, as of 2003, the Province of Ontario has instituted the *Infrastructure Ontario Loan Program* that has provided municipalities with secure financing opportunities at favorable interest rates to address local infrastructure needs (Ministry of Infrastructure, 2012).

The Province of Ontario identified that the first step for any municipality seeking Provincial capital funding for infrastructure improvements was to prepare a detailed AMP, and funding from the Province of Ontario was made available to assist municipalities in the development of their AMPs. The Province of Ontario's requirements for an AMP were published in the document entitled *Building Together – Guide for Municipal Asset Management Plans* (Guide; Ministry of Infrastructure, 2012).

Greenview Environmental Management Limited (Greenview) was retained by the Township to complete their AMP in accordance with the requirements of the Guide (Ministry of Infrastructure, 2012).

This AMP was developed by the Township and Greenview to be a high-level review of the Township's assets, using all available financial and technical documentation and resources. Significant emphasis was focused on working meetings with appropriate Township personnel, in an effort to emphasize practical, tangible observations and expectations for the Township's infrastructure assets.

### **1.3 PURPOSE**

This AMP is intended to be a resource tool for the Township in decision-making processes with respect to the quantification, management, maintenance, upgrade, and replacement of municipal infrastructure and assets, to assess how assets are managed in a way that continues to provide the level of service expected by the Township and its ratepayers in future, to balance risk and the Township's management strategy, and provide a financial assessment of municipal assets with a focus on the five (5) and ten (10) year planning horizon, and with consideration of a thirty (30) year and total life expectancy planning period. The AMP is a tool to be reviewed concurrently with municipal budgets, financial reports, financial information returns, audited tangible capital asset reports, and any other reports or documents relevant to municipal asset management and infrastructure project planning.

Per the Guide, the AMP should be re-evaluated at a minimum of every three (3) years; however, it is recommended that the AMP be reviewed annually as part of the Township's municipal budgeting process, in order to incorporate priority items and actions and update information relevant to the AMP (i.e. current Condition Ratings, etc.).

The goal of the AMP is to provide a tool for the Township to assist in the review, evaluation, and assessment of municipal assets.

The objectives of the AMP, in accordance with concepts set forth in the Guide (Ministry of Infrastructure, 2012), may include but are not limited to:

1. Where financially feasible, continue to develop and improve municipal physical, social, and

recreational assets and services.

2. To maintain and enhance the quality of the natural, built, and human environments in the municipality.
3. To cooperate with local municipalities (i.e. neighbours) for the diligent management of resources and assets (if possible), for the well-being of the Township and to provide for the needs of the community.
4. Participate in and/or encourage projects and programs which strengthen and diversify the Township's economic base.
5. Identify areas of the Township that should be prioritized for growth or expansion of services.
6. Identify specific projects and financial incentives that may be available to encourage the development and improvement of municipal assets.
7. Determine areas of focus for asset management over the short and long-term planning horizon.
8. Adopting preservation/preventative maintenance strategies for municipal assets that involve repairing minor issues prior to them becoming major issues.
9. Adopting replacement strategies for municipal assets that involve saving and/or borrowing of funds.

The objectives of the AMP were developed with due recognition of other municipal planning requirements (i.e. Official Plan, etc.).

#### **1.4 SCOPE**

The scope of this AMP is consistent with the requirements of the Guide (Ministry of Infrastructure, 2012), and the selected asset groups as prescribed by the Township for this project. The scope of the AMP includes the following applicable asset types:

- Roads.
- Water Supply Services.
- Wastewater Services.
- Vehicles and Equipment.
- Buildings and Parks.



- Solid Waste.
- Streetlights.

Further to the requirements of the Guide (Ministry of Infrastructure, 2012), the Township is not responsible for management of any bridges and/or large culverts or social housing. These assets are managed by the upper tier, at the County of Renfrew.

Consistent with the requirements of the Guide (Ministry of Infrastructure, 2012), this AMP includes the following sections:

- Executive Summary.
- Introduction (Section 1.0).
- State of Local Infrastructure (Section 2.0).
- Current and Desired Level of Service (Section 3.0).
- Risk Assessment and Management Strategy (Section 4.0).
- Financial Strategy (Section 5.0).
- Conclusions and Recommendations (Section 6.0).

## **2.0 STATE OF LOCAL INFRASTRUCTURE**

The following sections are intended to provide a summary of the detailed review of municipal assets including:

1. Definitions (Section 2.1).
2. Data Verification and Condition Assessment Policy (Section 2.2)
3. Roads (Section 2.3).
4. Water Supply Services (Section 2.4).
5. Wastewater Services (Section 2.5).
6. Buildings and Parks (Section 2.6).
7. Vehicles and Equipment (Section 2.7).
8. Solid Waste (Section 2.8).
9. Streetlights (Section 2.9).

A summary table of the municipal assets is included in Table 2 – General Summary of Municipal Assets (Appendix A), which is a summary of the Financial Assessment and Projections from Tables 6a to 6g (Appendix A). Detailed tables which identify specific elements of the Township's assets including, but not limited to, asset types, location, quantity, financial accounting and replacement cost valuation, year in service and asset life expectancy, condition rating, and level of service are detailed in Tables 3a to 3h – Detailed Summary of Municipal Assets (Appendix A).

### **2.1 DEFINITIONS**

The following is a select list of definitions which explain elements of Tables 3a to 3g (Appendix A; Detailed Summary of Municipal Assets), to assist in the review of the related tables. Tables 3a to 3g were created in accordance with the requirements of the Guide (Ministry of Infrastructure, 2012).

Item	Definition	Example
Asset ID	<ul style="list-style-type: none"> <li>• Individual identification tag, generally using a combination of letters and/or numbers.</li> <li>• From the Township's <i>2012 Tangible Capital Assets Report</i> and/or provided from Ontario Clean Water Agency.</li> </ul>	<ul style="list-style-type: none"> <li>• Roads = WH1, CH2</li> <li>• Water Supply Services = B021, 108397</li> </ul>
Detailed Asset Description	<ul style="list-style-type: none"> <li>• Used to describe assets that share similar characteristics with each other.</li> <li>• <i>Detailed Asset Descriptions</i> vary dependant on asset groups.</li> </ul>	<ul style="list-style-type: none"> <li>• Building</li> <li>• Equipment</li> <li>• Vehicles</li> </ul>
Geographic Township	<ul style="list-style-type: none"> <li>• Used to define the location of the asset in the amalgamated Township.</li> </ul>	<ul style="list-style-type: none"> <li>• Hagarty, Richards, or Killaloe</li> </ul>
Quantity	<ul style="list-style-type: none"> <li>• Used to define the number of units of each asset owned by the Township.</li> </ul>	<ul style="list-style-type: none"> <li>• Fire Hydrants</li> <li>• Water Mains</li> </ul>
Year in Service	<ul style="list-style-type: none"> <li>• Age of the asset, year asset was purchased, and/or the year the asset was put into service.</li> <li>• <i>Year in Service</i> is always a "year".</li> </ul>	<ul style="list-style-type: none"> <li>• 2006</li> </ul>
Asset Life Expectancy	<ul style="list-style-type: none"> <li>• The number of years the asset is anticipated to be useful/functional.</li> <li>• Based on either the Township's <i>Tangible Capital Assets Policy (2008)</i> and/or information supplied directly from Municipal personnel.</li> </ul>	<ul style="list-style-type: none"> <li>• Water Mains = 50 years</li> <li>• Light-duty trucks = 7 years</li> </ul>
Projected Replacement or Upgrade Year	<ul style="list-style-type: none"> <li>• The year an asset should be replaced and or upgraded.</li> <li>• Calculated based on the sum of the <i>Year in Service</i> and <i>Asset Life Expectancy</i>.</li> </ul>	<ul style="list-style-type: none"> <li>• Generator (Roads) <i>Year in Service</i> = 1999 <i>Asset Life Expectancy</i> = 20 years <i>Projected Replacement or Upgrade Year</i> = (1999 + 20) = 2019</li> </ul>
Capital Cost (2007)	<ul style="list-style-type: none"> <li>• Non-amortized asset value as of 2007.</li> </ul>	<ul style="list-style-type: none"> <li>• See <i>2012 Tangible Capital Assets Report</i></li> </ul>
Additions (2008 to 2012)	<ul style="list-style-type: none"> <li>• Sum of all additions/betterments to an asset between 2008 and 2012.</li> </ul>	<ul style="list-style-type: none"> <li>• See <i>2012 Tangible Capital Assets Report</i></li> </ul>

Total Cost	<ul style="list-style-type: none"> <li>Sum of Capital Cost (2007) and Additions (2008 to 2012).</li> </ul>	<ul style="list-style-type: none"> <li>See 2012 <i>Tangible Capital Assets Report</i></li> </ul>
Accumulated Amortization (2012)	<ul style="list-style-type: none"> <li>Sum of all accumulated amortization from 2007 to 2012.</li> </ul>	<ul style="list-style-type: none"> <li>See 2012 <i>Tangible Capital Assets Report</i></li> </ul>
Net Book Value (2012)	<ul style="list-style-type: none"> <li>Equals the difference between <i>Total Cost</i> and <i>Accumulated Amortization (2012)</i>.</li> </ul>	<ul style="list-style-type: none"> <li>See 2012 <i>Tangible Capital Assets Report</i></li> </ul>
Upgrade / Replacement Cost	<ul style="list-style-type: none"> <li>Anticipated total cost of upgrade and/or replacement of an asset.</li> </ul>	<ul style="list-style-type: none"> <li>New road, truck, building upgrades etc.</li> </ul>
Condition Rating	<ul style="list-style-type: none"> <li>A scale which identifies the current condition of a given asset.</li> <li>Scale using Good, Fair, or Poor rating, based on observations from Township Staff and/or other inspections.</li> </ul>	<ul style="list-style-type: none"> <li>Ford 250 4x4 = Good</li> <li>White Church Road = Poor</li> </ul>
Level of Service	<ul style="list-style-type: none"> <li>Defined as the <i>Level of Service</i> required for the asset to be maintained to meet the service requirements of the Township and its ratepayers.</li> <li>Generally, the scale is from one (1) to five (5), where one (1) is very low priority and five (5) is very high priority.</li> <li>For Roads, the level of service is defined as the municipal Road Class, per Bylaw #13-2011.</li> </ul>	<ul style="list-style-type: none"> <li>Mask Road = 4</li> <li>Killaloe Fire Hall = 5</li> </ul>

## 2.2 PROPOSED DATA VERIFICATION AND CONDITION ASSESSMENT POLICY

The AMP should be re-evaluated at a minimum of every three (3) years; however, it is recommended that the AMP be reviewed annually as part of the Township's budgeting process, in order to incorporate priority items and actions and update information relevant to the AMP (i.e. current Condition Ratings, etc.).

Values (Additions, Accumulated Amortization, Net Book Value) for each asset could be updated annually, based on the results of each year's audited Tangible Capital Assets Report.

Asset Life Expectancies could be updated following completion of significant maintenance activities, in order to note the anticipated extended life of the asset and prolong the Projected Replacement or Upgrade Year.

Replacement Costs (and/or Upgrade Costs) could be updated as new/more current information becomes available, as applicable.

Condition Ratings could be updated by the Township on an as needed basis, based on municipal

review/observations and/or by third-party investigations (i.e. engineer reviews). The ideal case would be to update Condition Ratings annually, and at a minimum every three (3) years.

### 2.3 ROADS

The following information in this section is based on Table 3a – Detailed Summary of Municipal Assets – Roads (Appendix A), which was prepared using information from the Township’s 2012 Tangible Capital Assets Report (Township, 2013) and information provided by the Township.

Based on the Township’s 2012 Tangible Capital Assets Report (Township, 2013), the Township maintains a road network with a total road length of approximately 155.32 km. The respective road surface types and total lengths are:

Road Surface Type	Total Kilometres (km)
Gravel (GS)	96.30
Cold Mix (CM)	5.43
Hot Mix (HM)	10.49
Double Surface Treatment (DS)	35.36
Other	7.73
<b>TOTAL</b>	<b>155.32</b>

The anticipated total required replacement cost for each road surface type, based on industry standards and information supplied by the Township are:

Road Surface Type	Anticipated Total Replacement Cost
Gravel (GS)	\$2,290,000
Cold Mix (CM)	\$430,000
Hot Mix (HM)	\$1,240,000
Double Surface Treatment (DS)	\$2,080,000
Other	\$270,000
<b>TOTAL</b>	<b>\$6,310,000</b>

The Township is engaged in a special project (work in progress) for the development and construction of the

Round Lake / Foy Provincial Park Road, with an anticipated expenditure in 2014 of \$262,311 for the installation of the gravel base and surface, which is to connect the Red Rock Road to Highway 58.

Assumptions and notes related to roads are included on Table 3a – Roads (Appendix A).

The financial strategy for the upgrade and/or replacement of municipal roads are discussed in Section 5.0 of this report and in Table 6a (Appendix A).

## 2.4 WATER SUPPLY SERVICES

The following information in this section is based on Table 3b – Detailed Summary of Municipal Assets – Water Supply Services (Appendix A), which was prepared using information from the 2012 Tangible Capital Assets Report (Township, 2013), information from the Ontario Clean Water Agency who manage the water supply services on behalf of the Township, and information provided by the Township.

The Township maintains water supply services in the Village of Killaloe only. The municipal water supply services are under constant review, maintenance, upgrades, and replacement activities, and therefore much of the water supply service systems are up-to-date and require little to no upgrades and/or replacements within the next ten (10) years.

All assets related to the water supply services are currently understood to be in good condition, per information supplied by the Township and Ontario Clean Water Agency, and will continue to be maintained in good condition for the life expectancy of asset and/or replaced as necessary.

Asset Type	Anticipated Total Replacement Cost
Water Treatment Building	\$5,000,000
Land Improvements	\$50,000
Linear Assets	\$2,300,000
Equipment	\$470,000
<b>TOTAL</b>	<b>\$7,820,000</b>

Assumptions and notes related to water supply services are included on Table 3b – Water Supply Services (Appendix A).

The financial strategy for the upgrade and/or replacement of the municipal water supply services are

discussed in Section 5.0 of this report and in Table 6b (Appendix A).

## 2.5 WASTEWATER SERVICES

The following information in this section is based on Table 3c – Detailed Summary of Municipal Assets – Wastewater Services (Appendix A), which was prepared using information from the 2012 Tangible Capital Assets Report (Township, 2013), information from the Ontario Clean Water Agency who manage the wastewater services on behalf of the Township, and information provided by the Township.

The Township maintains wastewater services in the Village of Killaloe only. The municipal wastewater services are under constant review, maintenance, upgrades, and replacement activities, and therefore much of the wastewater service systems are up-to-date. Based on the year in service and asset life expectancies of the assets of the wastewater services systems provided by Ontario Clean Water Agency, many assets related to wastewater services will require upgrades and/or replacements within the next ten (10) years.

Asset Type	Anticipated Total Replacement Cost
Sewage Treatment Building	\$500,000
Linear Assets	\$1,240,000
Equipment	\$2,700,000
<b>TOTAL</b>	<b>\$4,440,000</b>

All assets related to the wastewater services are currently understood to be in good condition, per information supplied by the Ontario Clean Water Agency, and will continue to be maintained in good condition for the life expectancy of asset and/or replaced as necessary. As noted above, the replacement cost for the assets related to wastewater services are considerable, and the Township should focus on maintaining and/or upgrading the existing assets in order to prolong the asset life expectancies with the aim of delaying the projected replacement or upgrade year as much as possible.

Assumptions and notes related to wastewater services are included on Table 3c – Wastewater Services (Appendix A).

The financial strategy for the upgrade and/or replacement of the municipal wastewater services are discussed in Section 5.0 of this report and Table 6c (Appendix A).

## 2.6 BUILDINGS AND PARKS

The following information in this section is based on Table 3d – Detailed Summary of Municipal Assets – Buildings and Parks (Appendix A), which was prepared using information from the 2012 Tangible Capital Assets Report (Township, 2013), information resultant of a building and parks review from a structural, mechanical, and electrical perspective completed by Greenview, and information provided by the Township.

Based on the 2012 Tangible Capital Assets Report (Township, 2013), the Township maintains sixteen (16) municipal buildings and two (2) municipal parks (land improvements; Sheryl Boyle Park land improvements and Station Park Landscaping and Parking Lot) that have been reviewed as part of this AMP (Table 3d; Appendix A). The number of buildings and parks (land improvements) maintained by the Township, sorted by the Operating Department are:

Building or Land Improvement	Operating Department	Number of Units	Total Anticipated Replacement Cost
Buildings	General Government	2	\$300,000
Buildings	Protection Services	2	\$170,000
Buildings	Recreation Services	7	\$350,000
Buildings	Transportation Services	3	\$165,000
Parks (land improvements)	Recreation Services	2	\$180,000
<b>TOTAL</b>		<b>16</b>	<b>\$1,170,000</b>

The Township is engaged in a special project (work in progress) for the development and construction of a new Killaloe and District Public Library in Killaloe, Ontario, with an anticipated budget of \$1,000,000. The special project is currently in the conceptual design phase, with additional work planned for 2014.

Assumptions and notes related to buildings and parks are included on Table 3d – Buildings and Parks (Appendix A).

The financial strategy for the upgrade and/or replacement of the municipal buildings and parks are discussed in Section 5.0 of this report and Table 6d (Appendix A).

## 2.7 VEHICLES AND EQUIPMENT

Based on the 2012 Tangible Capital Assets Report (Township, 2013), the Township maintains fourteen (14) municipal pieces of equipment and twenty-two (22) municipal vehicles that will require upgrade or



replacement and that have been reviewed as part of this AMP (Table 3g; Appendix A). Some existing municipal equipment and vehicles will not be replaced at the end of their asset life. The number of municipal pieces of equipment and vehicles maintained by the Township and their respective replacement cost, sorted by the Operating Department, are:

Equipment or Vehicle	Operating Department	Number of Units	Total Anticipated Replacement Cost
Equipment	General Government	3	\$37,000
Equipment	Protection Services	6	\$249,000
Equipment	Transport Services	5	\$64,000
Vehicles	Protection Services	5	\$970,000
Vehicles	Environmental Services	2	\$400,000
Vehicles	Building Department	1	\$40,000
Vehicles	Transport Services	14	\$1,401,000
<b>TOTAL</b>		<b>36</b>	<b>\$3,160,000</b>

Assumptions and notes related to vehicles and equipment are included on Table 3e – Vehicles and Equipment (Appendix A).

The financial strategy for the replacement of the municipal vehicles and equipment assets are discussed in Section 5.0 of this report and in Table 6e (Appendix A).

## 2.8 SOLID WASTE

The following information in this section is based on Table 3f – Detailed Summary of Municipal Assets – Solid Waste (Appendix A), which was prepared using information from the Annual Reports for the Township’s waste disposal sites, including the Killaloe Waste Disposal Site (WDS), Round Lake WDS, and Red Rock WDS (Greenview, 2013), 2012 Tangible Capital Assets Report (Township, 2013), and information provided by the Township.

Based on the Township’s Annual Reports (Greenview, 2013), the Township maintains and operates three (3) waste disposal and/or transfer sites within the Township. None of the three (3) existing waste disposal sites are planned to be replaced (i.e. site expansion), and therefore no replacement cost has been calculated. As of the end of 2012, the Township operates six (6) equipment assets at their waste sites that

will require upgrade or replacement and that have been reviewed as part of this AMP (Table 3f; Appendix A). Similarly, the closure costs for each of the three (3) waste sites have been included as part of the AMP (identified as replacement cost), per the following table:

Solid Waste Asset Type	Number of Assets	Replacement Cost
Waste Disposal Sites	3	\$0
Equipment	6	\$111,111
Closure Cost	3	\$468,000
<b>TOTAL</b>	<b>12</b>	<b>\$579,000</b>

Assumptions and notes related to solid waste are included on Table 3f – Solid Waste (Appendix A).

Starting in 2012 and continuing into 2013, the Township has been completing upgrades to the transfer stations at the Killaloe and Round Lake WDS. The assets involved in the transfer station upgrades have not at this time been included in the Township’s 2012 Tangible Capital Assets Report (Township, 2013). Once the new assets are completed (i.e. construction, installation, etc.) and have been included in future Tangible Capital Asset Reports, the assets should be included in the AMP.

The financial strategy for the upgrade and/or replacement of the municipal solid waste assets are discussed in Section 5.0 of this report and in Table 6f (Appendix A).

## 2.9 STREETLIGHTS

The following information in this section is based on Table 3g – Detailed Summary of Municipal Assets – Street Lights (Appendix A), which was prepared using information from the 2012 Tangible Capital Assets Report (Township, 2013) and information provided by the Township.

Based on information provided by the Township, the municipality maintains two hundred and fifteen (215) street lights that have been reviewed as part of this AMP (Table 3g; Appendix A). The replacement cost for each street light is understood to be approximately \$5000 or less, and therefore based on the Township’s procurement bylaw, replacement of street lights falls under the maintenance budget, rather than the capital budget. Therefore, street lights have been included in the AMP from a due diligence perspective; however maintenance and replacement has been included from an assessment and tracking perspective

(see Table 6g – Tracking Sheet – Maintenance of Street Lights; Appendix A). Table 6g is intended to aid the Township in the tracking of maintenance costs of each street light under the annual maintenance program and budget.

### **3.0 CURRENT AND DESIRED LEVEL OF SERVICE**

The following sections discuss the current and desired level of service for the Township's assets reviewed as part of the AMP.

#### **3.1 SUMMARY AND DEFINITIONS**

For the purposes of this AMP, level of service is defined as the level of service required for an asset to be maintained to meet the service requirements of the Township and its ratepayers. Generally, the scale is from one (1) to five (5), where one (1) is very low priority and five (5) is very high priority. The exception to this scale is for municipal roads, where the level of service is defined as the municipal road class, in accordance with municipal Bylaw #13-2011 (see Tables 3a to 3g; Appendix A).

Detailed tables that describe the asset type, service issue, current level of service (assess time and repair time), desired level of service (assess time and repair time), and performance measures and review are included for all assets including roads, water supply services, wastewater services, buildings and parks, vehicles and equipment, solid waste, and street lights in Tables 4a to 4g of this AMP (Appendix A).

Generally, the current and desired level of service for service issues for each asset type are understood to be relatively consistent, with some exceptions. At this time, it is understood that generally the Township does not have the resources (i.e. budget) to increase the level of service for its assets, and it is the Township's objective to maintain their existing asset base in the best and most effective way possible, given their existing resources. For details on the level of service and performance measures, see Tables 4a to 4g of this AMP (Appendix A).

As part of any re-evaluation of the AMP (as described in Section 2.2 of the AMP), current and desired levels of service, service issues, and performance measures should be concurrently re-evaluated. Any amendments or newly identified service issues and performance measures should be included in Tables 4a to 4g (Appendix A).

The following are descriptions of the level of service and performance measures review, as included in Tables 4a to 4g (Appendix A).

#### **3.2 ROADS**

A review of the level of service and performance measures for roads are included in Table 4a (Appendix A).

Gravel roads are currently understood to have the following service Issues: grading, resurfacing, calcium

treatment, brushing, ditching, winter plowing, winter sanding/salting, washout repairs, and shoulder maintenance.

Similarly, paved roads (including cold mix [CM], hot mix [HM], double surface treatment [DS]) are currently understood to have the following service issues: sweeping, patching/potholes, shoulder maintenance, resurfacing/sealant, brushing, winter plowing, winter sanding/salting, ditching, and washout repairs.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4a (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

### **3.3 WATER SUPPLY SERVICES**

A review of the level of service and performance measures for water supply services are included in Table 4b (Appendix A).

With the exception of the water supply building, in which service issues are divided into minor and major issues with corresponding assess and repair times, the other asset types related to water supply services are considered critical to public health and safety and any issues, whether minor or major, should be addressed equally. This applies to assets related to the process or chemical feed system, mechanical and electrical systems, wells, water mains, hydrants, and service connections, and pumps, valves and related equipment.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4b (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

### **3.4 WASTEWATER SERVICES**

A review of the level of service and performance measures for wastewater services are included in Table 4c (Appendix A).

With the exception of the wastewater treatment building, in which service issues are divided into minor and major issues with corresponding assess and repair times, the other asset types related to wastewater services are considered critical to public health and safety and any issues, whether minor or major, should be addressed equally. This applies to assets related to the sanitary sewers, process and chemical feed system, mechanical and electrical systems, service connections, and pumps, valves and related equipment.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4c (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

### **3.5 BUILDINGS AND PARKS**

A review of the level of service and performance measures for buildings and parks are included in Table 4d (Appendix A).

Service issues for municipal buildings (General Government, Protection Services, Recreational Services, and Transportation Services) and parks (Recreation Services - land improvements) are divided into minor and major issues. Since buildings related to Protection Services are critical from a health and safety perspective to the Township and its ratepayers (i.e. fire, first response, etc), priority should be given to Protection Services buildings as service issues are discovered/identified.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4d (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

### **3.6 VEHICLES AND EQUIPMENT**

A review of the level of service and performance measures for vehicles and equipment are included in Table 4e (Appendix A).

Service issues for vehicles (Protection Services, Environmental Services, and Transportation Services) and equipment (General Government, Transportation Services, and Protection Services) are divided into minor and major issues. Since Protection Services are critical from a health and safety perspective to the Township and its ratepayers (i.e. fire, first response, etc), priority should be given to vehicles and equipment related to Protection Services as service issues are discovered/identified.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4e (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

### **3.7 SOLID WASTE**

A review of the level of service and performance measures for solid waste are included in Table 4f (Appendix A).

The Township's waste disposal sites and equipment are currently understood to have the following potential service issues: noise, spills, complaints, fire, environmental, dust, breaks/malfunctions, maintenance, and litter.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4f (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

### **3.8 STREET LIGHTS**

A review of the level of service and performance measures for street sights are included in Table 4g (Appendix A).

The Township's street lights are currently understood to have potential service issues related to lights turning on, lights turning off, or are the lights too bright or too dim.

Details with regards to current level of service, desired level of service, and performance measures and review are included in Table 4g (Appendix A), and should be amended/updated during any re-evaluation of the AMP (if necessary).

## 4.0 RISK ASSESSMENT AND MANAGEMENT STRATEGY

The following sections discuss the risk assessment and management strategy for the Township's assets reviewed as part of the AMP.

### 4.1 SUMMARY AND DEFINITIONS

In accordance with the Guide (Ministry of Infrastructure, 2012), the risk assessment and management strategy component of the AMP is the set of proposed and/or planned actions that will enable the Township's assets to provide the current/desired level of service in a sustainable way, while managing risk, at the lowest lifecycle cost (i.e. preventative actions).

Detailed reviews of the risk assessment and management strategy are included in Tables 5a to 5g (Appendix A), and include evaluations of the risk factor for each asset type, risk elements, and planned actions. Planned actions include non-infrastructure solutions, maintenance activities, renewal/rehabilitation activities, replacement activities, disposal activities, and expansion activities. The risk assessment and management strategies for each asset group were developed based on the Township's current understanding of their assets and their requirements. As part of any re-evaluation of the AMP (as described in Section 2.2 of the AMP), the risk assessment and management strategy for each asset group should be concurrently re-evaluated. Any amendments or newly identified risk elements and planned actions should be included in Tables 5a to 5g (Appendix A).

The risk assessment and management strategy are detailed for all assets, including:

- Roads (Table 5a).
- Water Supply Services (Table 5b).
- Wastewater Services (Table 5c).
- Buildings and Parks (Table 5d).
- Vehicles and Equipment (Table 5e).
- Solid Waste (Table 5f).
- Street Lights (Table 5g).



## 4.2 PROCUREMENT METHODS

Procurement of new or replacement assets should be completed in accordance with Township Bylaw #19-2012, entitled *A By-Law of the Township of Killaloe, Hagarty, and Richards Governing Procurement Policies and Procedures* dated February 5, 2013.

Due to the rural nature of the Township and the distance of the Township from large city-centres, challenges with regards to procurement of services or products are anticipated, as there are generally fewer available service providers in the vicinity of the municipality than in more densely populated areas. Depending on the circumstances, the rural nature of the Township can have positive and negative impacts on the cost of procurement of products and services. In cases where local service providers are available, the cost for services are generally expected to be less than city prices; however, where no local service providers are available, then the cost for services are generally expected to be elevated as distance-related factors emerge (i.e. elevated mobilization costs, etc).

Multi-municipal cooperation in new or replacement projects for assets and services could be considered as part of the Township's procurement methods. Multi-municipal cooperation as part of procurement methods can have a positive effect from an economies of scale perspective, with the potential of financial benefits to all parties involved. The Township has had success in multi-municipal projects in the past with adjacent municipalities, most notably with respect to solid waste management. These types of efforts could be continued in future, with benefits anticipated with respect to municipal road maintenance, upgrades, and replacement, and replacement of municipal vehicles and equipment.

If any amendments to the Township's Procurement Bylaw #19-2012 are required to enter into multi-municipal agreements or partnerships, they should be considered by the Township on a per project basis.

As part of the budgeting of future projects, the Township should consider the design-build-finance-maintain model for budgeting purposes (i.e. AFP model), in order to apply due consideration to the total lifecycle costs of asset-related projects.

## 4.3 OPTIONS ANALYSIS REVIEW

Options analysis should be considered when the municipality is reviewing maintenance, upgrade, or replacement of assets. This can help the municipality to provide the needed level of service for its assets to its ratepayers.

As part of Version 1.0 of the AMP, and for the ease of the municipality in using the AMP as an asset planning tool, lifecycle costs for the upgrade/replacement of current assets were accounted for, including the

cost of constructing, maintaining, renewing, and operating an asset (as applicable). Financial assessment and projections for each asset group are included Tables 6a to 6g of the AMP (Appendix A), and discussed in Section 5.0 of this summary report. Financial projections were developed in straight-line amortizations, and the interest rate for any proposed contributions to reserves were assumed to equal the inflation rate (see Tables 6a to 6g; Appendix A). If necessary for any future asset replacement activities, more detailed reviews of replacement costs could be developed, and the AMP should be updated accordingly with any new or updated information.

Direct benefits and costs for an asset upgrade or replacement project should be considered on a per asset basis, with specific consideration of the following (as applicable):

- Efficiencies and network effects.
  - Ontario Regulation [O.Reg.] 397/11 - Energy Conservation and Demand Management Plans.
  - Labour and vehicle operating cost savings.
  - Multi-municipal cooperation.
  - Performance improvements.
- Investment scheduling and waste minimization.
  - Delay projects that could be impacted by any expansion activities (i.e. roads).
  - Coordinate multiple asset upgrades/replacements (i.e roads and water mains).
- Health and Safety.
  - Accident reduction.
  - Property damage reduction.
  - Injury reduction.
- Environmental Impacts.
  - Greenhouse gas emissions.
  - Nutrient loading.
  - Groundwater and surface water impacts.
  - Drainage impacts/improvements.
  - Climate change.

Indirect benefits and costs for an asset upgrade or replacement project should be considered on a per asset basis, with specific consideration of the following (as applicable):

- Municipal wellbeing and health.
- Amenity values.
  - Public facilities (i.e. washrooms, parks, etc.).
- Culturally/historically significant assets.
  - Historical buildings.
  - Parks and land improvements.
- Municipal image.

As the AMP is designed to be an asset planning tool for the municipality, an assessment of the risks associated with all potential asset maintenance, upgrade, or replacement should be completed using an approach that allows for comparative analysis of the options available. Risks associated with each option could be based on quantitative data (if available). In instances when quantitative data is not available as part of the comparative analysis review, qualitative measures could be utilized with the intent of determining the probability of the occurrence of risk events.

Due to the fact that the Township is a small, rural municipality with limited resources, additional study focused on quantitative data gathering with respect to risk could be reviewed in future as part of updates to the AMP, if deemed valuable by the municipality.

For any review of the AMP, any opportunities to save resources by coordinating solutions to multiple problems concurrently should be explored. Specifically, and as part of any decision making process, the following opportunities should be considered:

1. Multi-municipal cooperation and contract negotiation.
2. Joint service boards.
3. Shared and/or uploading of services to the upper tier (i.e. County of Renfrew).

## 5.0 FINANCIAL STRATEGY

The following sections discuss the financial strategy for the Township's assets reviewed as part of the AMP.

### 5.1 SUMMARY AND DEFINITIONS

The financial strategy for the Township was developed with the assistance of municipal staff and Greenview, and is considered the critical component of the AMP. The financial strategy is designed to employ basic fundamentals and assumptions, such that the Township could amend and/or update the AMP in future years as information and data becomes available.

Tables 6a to 6g – Financial Assessment and Projections (Appendix A) describe all municipal assets included in the AMP by asset group including:

1. Table 6a – Roads.
2. Table 6b – Water Supply Services.
3. Table 6c – Wastewater Services.
4. Table 6d – Buildings and Parks.
5. Table 6e – Vehicles and Equipment.
6. Table 6f – Solid Waste
7. Table 6g – Street Lights.

Based on the scope of this AMP, Tables 6a to 6g account for an all-inclusive review of the replacement (or upgrade) costs for each asset, and consideration has been given by the Township relative to non-infrastructure solutions, maintenance activities, renewal/rehabilitation activities, replacement activities, disposal activities, and expansion activities associated with the replacement costs identified (Appendix A).

A practical and detailed review was completed by the Township in the determination of replacement costs, including, but not limited to, actual expenditures on similar assets and/or research completed by the Township on actual costs of replacement within the last two (2) to three (3) years (where possible).

A summary of the financial assessment and projections of Tables 6a to 6g are included in Table 2 – General Summary of Municipal Assets (Appendix A).

Tables 6a to 6g incorporate pertinent information required from Tables 3a to 3g, as well as detailing the proposed annual contributions to reserves required to upgrade/replace each municipal asset over its remaining useful life (Appendix A). In the event that an asset has already reached its projected replacement

or upgrade year (as of 2013), then the proposed annual contribution to reserves is determined to be equal to the replacement cost of the asset; however, if the asset has not reached the projected replacement or upgrade year, then the cost of upgrade/replacement (replacement cost) is divided over the remaining useful life years.

Proposed annual contributions to reserves are determined with focus on the five (5) and ten (10) year planning horizon, and with consideration of the thirty (30) year and total life expectancy planning perspective. The proposed annual contributions to reserves (for each year) are the recommended total monies to be saved per year by the municipality in order to replace/upgrade each asset at the end of its useful life.

For comparison purposes, the estimated borrowing cost is calculated based on the cost for the Township to borrow the required monies from Infrastructure Ontario to upgrade/replace each asset, consistent with recent lending rates. Lending rates can be updated on Tables 6a to 6g at any time, to reflect the most recent rates available when the AMP is under review by the Township (Appendix A). The term of the loan is assumed to be equal to asset life expectancy, rounded up to the nearest five (5) years, to a maximum of a thirty (30) lending term. Additionally, the difference in cost to the Township between borrowing or saving the required funds to upgrade/replace each asset is calculated and identified as difference (borrowing – savings). This calculation is designed to illustrate the monetary benefits to the municipality of saving money (as part of their reserves) in advance of asset upgrade/replacement, in comparison to the high costs of borrowing.

The proposed annual contributions to reserves and associated replacement costs assume the municipality will be required to obtain all funds required to upgrade/replace each asset without the assistance of Federal or Provincial funding, grants, or any other assistance.

Assumptions and notes associated with Tables 6a to 6g are included on each individual table (Appendix A).

Table 6g – Tracking Sheet – Maintenance of Street Lights differs from Tables 6a to 6f, insofar that it was designed to be a tracking mechanism for the maintenance completed each year on each and all of the street lights within the municipality (Appendix A). This approach was developed as the replacement cost for each street light was determined to be \$5000 or less, and therefore based on the Township's procurement bylaw, replacement of street lights falls under the maintenance budget, rather than the capital budget.

As noted in Section 2.0, the Township is engaged in two (2) special projects (work in progress) including the development and construction of the Round Lake / Foy Provincial Park Road Corridor and the new Killaloe and District Public Library.

## **5.2 INTEGRATION WITH MUNICIPAL BUDGETS**

The financial strategy was developed with a cost-based approach, using real-life upgrade/replacement costs for assets, as currently understood by the Township. This AMP is not directly integrated with municipal budgets and is designed to be an independent, third-party review of the actual assets owned and managed by the municipality.

This AMP should be reviewed, updated, and utilized with consideration of future municipal budgets, existing municipal reserves, Financial Information Returns (FIR), audited Financial Reports, audited Tangible Capital Asset Reports, and any other pertinent financial or planning documents of the municipality.

On an annual basis, or at least every three (3) years, it is recommended that any new municipal assets not represented in the AMP be included for future planning purposes.

## **5.3 MAINTENANCE VERSUS UPGRADE/REPLACEMENT OF ASSETS**

As the upgrade and/or replacement costs of each asset are understood to be generally costly to the municipality, particularly in years where multiple assets are required at least some level of upgrade or replacement, maintenance activities on assets should be strongly considered as a viable alternative.

Maintenance activities can be used to prolong the asset life expectancy, improve the condition rating of the asset, and in some cases revise the year in service of the asset where maintenance activities improved the condition of the asset to a like-new state.

The benefits of an appropriate maintenance schedule for municipal assets include, but may not be limited to, the following:

- Increasing available funds to be used in other maintenance, upgrades, or replacement of assets.
- Prolonging asset life expectancies beyond accounting-based estimates/pre-determined values.
- Allowing for additional years for the municipality to save/budget for replacement assets.

## **5.4 DETERMINATION OF PRIORITY ASSETS FOR REPLACEMENT/UPGRADE**

The determination of priority assets for replacement or upgrade should be considered based upon multiple factors, rather than on a singular element (i.e. Projected Replacement or Upgrade Year). It is recommended that the determination of a priority asset for replacement or upgrade should, at a minimum, consider the following aspects, as indicated in Tables 6a to 6g and 5a to 5g (Appendix A):

1. Year in Service (Table 6).
2. Asset Life Expectancy (Table 6).
3. Projected Year of Replacement (Table 6).
4. Condition Rating (Table 6).
5. Level of Service (Table 6).
6. Risk Factor (Table 5).

Determination of priority assets for replacement or upgrade should also consider available municipal budget monies, available municipal reserves, or any Federal or Provincial funding or grants available at that time. Any special projects, as determined by the Township prior to the development of this Asset Management Plan, should also be considered for priority asset status (as applicable).

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

The following are the conclusions and recommendations determined from the results of the AMP for the Township.

### 6.1 CONCLUSIONS

The Township of Killaloe, Hagarty, and Richards is a small, rural municipality in western Renfrew County in eastern Ontario. Based on the rural nature of the municipality, and since a significant portion of its ratepayers are seasonal residents, the Township faces some unique challenges and advantages related to asset management and provision of services in the next ten (10) years and beyond concerning:

1. A largely rural road network over an area with a low population density that will require significant upgrades in the near future.
2. A small, centralized and costly water supply and wastewater services network that provides service to the Village of Killaloe only.
3. An aging stock of buildings and parks that will require upgrades, modernization, and/or replacement.
4. An aging fleet of vehicles and equipment with some costly replacements anticipated in the near future, specifically for Protection Services and Transportation Services.
5. A modern and cost effective long-term waste management strategic plan, with only minor asset upgrades anticipated in future.

This AMP was designed to be a high-level review of the municipality's assets, and following the detailed review, the municipality now has a more complete understanding of its assets and their value.

Further to the details identified in Tables 3a to 3g and Tables 6a to 6g, please note the following recommendations (Appendix A).

### 6.2 RECOMMENDATIONS

Based on the detailed review and analysis of all municipal asset groups in this AMP, it is interpreted that the following five (5) assets should be considered as the top priority assets for upgrade/replacement as part of Version 1.0 of this AMP:



No:	Asset Group	Asset Name	Projected Replacement or Upgrade Year	Condition Rating	Level of Service	Risk Factor	Replacement Cost
1	Roads	North Street (NO11/NO12)	2013	Poor	5	4	\$32,780
2	Roads	King Street (KI11)	2011	Poor	5	4	\$25,080
3	Buildings and Parks	Killaloe Fire Hall (BO29)	2014	Poor	5	5	\$150,000
4	Vehicles and Equipment	1993 International 40S Fire Triple Combination Pumper and Tanker (VF4)	2013	Fair	5	5	\$250,000
5	Solid Waste	1995 Waste Site Cardboard Compactor (E-W2)	2005	Fair	4	4	\$60,000

In the event that maintenance activities could be used to increase the condition rating and asset life expectancy of the above noted priority assets, and consequently the projected replacement or upgrade year, then the Township could then look to other assets that may be targeted for replacement or upgrade in 2014.

The Township's two (2) current special projects (work in progress) should be considered for priority asset status, with the anticipated development and construction costs (replacement costs) per the following:


1. Round Lake / Foy Provincial Park Road Corridor = \$262,311.
2. Killaloe and District Public Library = \$1,000,000 (preliminary estimate only).

## 7.0 CLOSING

Greenview has prepared the Asset Management Plan (AMP) in accordance with the Guide (Ministry of Infrastructure, 2012) and the selected asset groups prescribed by the Township for this project. This report is governed by the attached statement of service conditions and limitations (Appendix B).

All respectfully submitted by:

### GREENVIEW ENVIRONMENTAL MANAGEMENT LIMITED



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Dan Hagan, B.Sc.  
Project Manager



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Tyler H. Peters, P.Eng.  
Project Director

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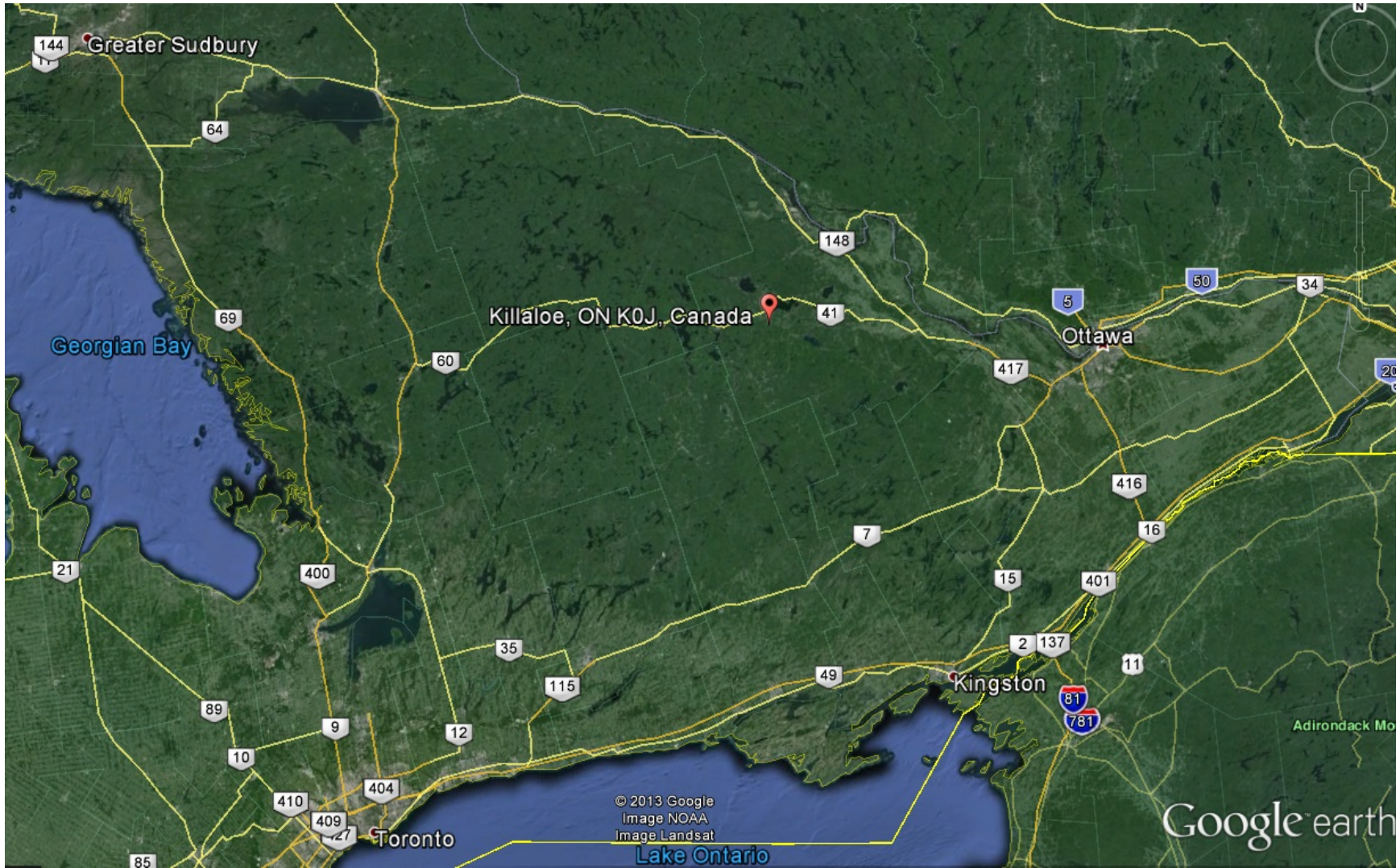
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**FIGURES**



Source: Google Earth, 2013



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 Bancroft, Ontario K0L 1C0  
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 fax: 866-905-8873  
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CREATED BY: DMH
CHECKED BY: THP
DATE: DECEMBER 2013
SCALE: NTS

SITE: TOWNSHIP OF KILLALOE, HAGARTY, AND RICHARDS
TITLE: REGIONAL LOCATION PLAN

PROJECT NO.: 107.13.007
FIGURE: 1

## **APPENDIX A**

### **Asset Data Summary Tables**



**Table 1**  
**Municipal Study Area Characteristics**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Population <sup>1</sup>	2402
Population Change (2006 to 2011) <sup>1,2</sup>	-5.8%
Total Households <sup>1</sup>	1523
<i>Permenant Households</i> <sup>1</sup>	1043
<i>Seasonal Households</i> <sup>3</sup>	480
Land Area (square kilometres) <sup>1</sup>	395.98
Population Density (population per square kilometres) <sup>1</sup>	6.10

Notes:

1. Data from Statistics Canada.
2. Percentage (%).
3. Calculated from data from Statistics Canada.





**Table 2**  
**General Summary of Municipal Assets**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Asset Type	Detailed Asset Description	Projected Contributions to Reserves										TOTAL (10 year)	TOTAL (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost)	Difference (Borrowing - Savings)
		Years 1 to 5					Years 6 to 10									
		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Roads	Gravel (GS)	\$ 425,935	\$ 163,624	\$ 163,624	\$ 163,624	\$ 163,624	\$ 163,624	\$ 163,624	\$ 163,624	\$ 163,624	\$ 163,624	\$ 1,898,555	\$ 2,553,911	\$ 2,553,911	\$ 3,817,105	\$ 1,263,194
	Cold Mix (CM)	\$ 82,396	\$ 82,396	\$ 49,076	\$ 49,076	\$ 23,736	\$ 23,736	\$ 23,736	\$ 23,736	\$ 23,736	\$ 23,736	\$ 405,355	\$ 434,320	\$ 434,320	\$ 578,832	\$ 144,512
	Hot Mix (HM)	\$ 457,925	\$ 400,065	\$ 81,010	\$ 81,010	\$ 40,365	\$ 31,147	\$ 31,147	\$ 16,486	\$ 16,486	\$ 16,486	\$ 1,172,128	\$ 1,241,988	\$ 1,241,988	\$ 1,894,242	\$ 652,254
	Double Surface Treatment (DS)	\$ 705,974	\$ 690,454	\$ 110,074	\$ 82,781	\$ 62,821	\$ 62,821	\$ 62,821	\$ 62,821	\$ 62,821	\$ 61,301	\$ 1,964,688	\$ 2,113,910	\$ 2,113,910	\$ 3,074,988	\$ 961,078
	Other	\$ 99,436	\$ 12,675	\$ 12,675	\$ 12,675	\$ 12,675	\$ 12,675	\$ 12,675	\$ 12,675	\$ 12,675	\$ 12,675	\$ 213,515	\$ 259,666	\$ 259,666	\$ 366,777	\$ 107,111
	<b>SUB-TOTAL</b>	<b>\$ 1,771,667</b>	<b>\$ 1,349,215</b>	<b>\$ 416,460</b>	<b>\$ 389,166</b>	<b>\$ 303,221</b>	<b>\$ 294,003</b>	<b>\$ 294,003</b>	<b>\$ 279,342</b>	<b>\$ 279,342</b>	<b>\$ 277,822</b>	<b>\$ 5,654,243</b>	<b>\$ 6,603,795</b>	<b>\$ 6,603,795</b>	<b>\$ 9,731,944</b>	<b>\$ 3,128,149</b>
Water Supply	Water Treatment Building	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 9,208,731	\$ 4,208,731
	Land Improvements	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 35,714	\$ 50,000	\$ 50,000	\$ 74,957	\$ 24,957
	Linear Assets	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 206,154	\$ 2,061,538	\$ 2,160,000	\$ 2,160,000	\$ 4,088,310	\$ 1,928,310
	Equipment	\$ 54,421	\$ 54,421	\$ 54,421	\$ 54,421	\$ 53,296	\$ 52,996	\$ 52,996	\$ 52,996	\$ 52,996	\$ 50,330	\$ 533,297	\$ 578,071	\$ 606,500	\$ 1,018,676	\$ 412,176
	<b>SUB-TOTAL</b>	<b>\$ 764,147</b>	<b>\$ 764,147</b>	<b>\$ 764,147</b>	<b>\$ 764,147</b>	<b>\$ 763,022</b>	<b>\$ 762,722</b>	<b>\$ 762,722</b>	<b>\$ 762,722</b>	<b>\$ 762,722</b>	<b>\$ 760,055</b>	<b>\$ 7,630,549</b>	<b>\$ 7,788,071</b>	<b>\$ 7,816,500</b>	<b>\$ 14,390,674</b>	<b>\$ 6,574,174</b>
Wastewater Services	Sewage Treatment Building	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 500,000	\$ 500,000	\$ 1,086,863	\$ 586,863
	Linear Assets	\$ 206,667	\$ 206,667	\$ 206,667	\$ 206,667	\$ 206,667	\$ 206,667	\$ -	\$ -	\$ -	\$ -	\$ 1,240,000	\$ 1,240,000	\$ 1,240,000	\$ 2,695,420	\$ 1,455,420
	Equipment	\$ 252,796	\$ 252,796	\$ 251,046	\$ 251,046	\$ 250,671	\$ 249,271	\$ 240,687	\$ 232,973	\$ 232,973	\$ 232,973	\$ 2,447,231	\$ 2,707,906	\$ 2,704,000	\$ 4,605,598	\$ 1,901,598
	<b>SUB-TOTAL</b>	<b>\$ 542,796</b>	<b>\$ 542,796</b>	<b>\$ 541,046</b>	<b>\$ 541,046</b>	<b>\$ 540,671</b>	<b>\$ 539,271</b>	<b>\$ 240,687</b>	<b>\$ 232,973</b>	<b>\$ 232,973</b>	<b>\$ 232,973</b>	<b>\$ 4,187,231</b>	<b>\$ 4,447,906</b>	<b>\$ 4,444,000</b>	<b>\$ 8,387,881</b>	<b>\$ 3,943,881</b>
Buildings and Parks	Buildings - General Government	\$ 42,857	\$ 42,857	\$ 42,857	\$ 42,857	\$ 42,857	\$ 42,857	\$ 42,857	\$ -	\$ -	\$ -	\$ 300,000	\$ 300,000	\$ 300,000	\$ 552,524	\$ 252,524
	Buildings - Protection Services	\$ 152,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 313,097	\$ 143,097
	Buildings - Recreation Services	\$ 1,057,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 1,350,000	\$ 1,350,000	\$ 1,350,000	\$ 2,301,963	\$ 951,963
	Buildings - Transportation Services	\$ 28,000	\$ 28,000	\$ 28,000	\$ 28,000	\$ 28,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 165,000	\$ 165,000	\$ 165,000	\$ 221,361	\$ 56,361
	Land Improvements - Recreation Services	\$ 55,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 180,000	\$ 180,000	\$ 180,000	\$ 215,998	\$ 35,998
	<b>SUB-TOTAL</b>	<b>\$ 1,335,357</b>	<b>\$ 130,357</b>	<b>\$ 130,357</b>	<b>\$ 130,357</b>	<b>\$ 130,357</b>	<b>\$ 107,357</b>	<b>\$ 82,357</b>	<b>\$ 39,500</b>	<b>\$ 39,500</b>	<b>\$ 39,500</b>	<b>\$ 2,165,000</b>	<b>\$ 2,165,000</b>	<b>\$ 2,165,000</b>	<b>\$ 3,604,943</b>	<b>\$ 1,439,943</b>
Vehicles and Equipment	Equipment (General Government)	\$ 20,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ -	\$ -	\$ -	\$ -	\$ 37,000	\$ 37,000	\$ 37,000	\$ 48,279	\$ 11,279
	Equipment (Protection Services)	\$ 55,519	\$ 45,519	\$ 45,519	\$ 40,186	\$ 4,186	\$ 4,186	\$ 2,519	\$ 2,519	\$ 2,519	\$ 2,519	\$ 205,190	\$ 249,000	\$ 249,000	\$ 342,987	\$ 93,987
	Equipment (Transport Services)	\$ 38,000	\$ 12,000	\$ 8,000	\$ 3,000	\$ 3,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,000	\$ 64,000	\$ 64,000	\$ 76,799	\$ 12,799
	Vehicles (Protection Services)	\$ 508,968	\$ 148,968	\$ 23,968	\$ 23,968	\$ 23,968	\$ 23,968	\$ 23,968	\$ 23,968	\$ 23,968	\$ 23,968	\$ 849,683	\$ 970,000	\$ 970,000	\$ 1,421,251	\$ 451,251
	Vehicles (Environmental Services)	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333	\$ 33,333	\$ 33,333	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ 400,000	\$ 400,000	\$ 508,314	\$ 108,314
	Vehicle (Building Department)	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,000	\$ 40,000	\$ 40,000	\$ 48,000	\$ 8,000
	Vehicles (Transport Services)	\$ 656,167	\$ 256,167	\$ 221,167	\$ 102,833	\$ 91,333	\$ 61,333	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 1,401,000	\$ 1,401,000	\$ 1,401,000	\$ 1,766,235	\$ 365,235
	<b>SUB-TOTAL</b>	<b>\$ 1,402,321</b>	<b>\$ 549,321</b>	<b>\$ 385,321</b>	<b>\$ 256,654</b>	<b>\$ 159,154</b>	<b>\$ 126,154</b>	<b>\$ 29,487</b>	<b>\$ 29,487</b>	<b>\$ 29,487</b>	<b>\$ 29,487</b>	<b>\$ 2,996,872</b>	<b>\$ 3,161,000</b>	<b>\$ 3,161,000</b>	<b>\$ 4,211,865</b>	<b>\$ 1,050,865</b>
Solid Waste	Waste Disposal Site	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Equipment	\$ 79,533	\$ 9,533	\$ 9,533	\$ 6,200	\$ 6,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111,000	\$ 111,000	\$ 111,000	\$ 133,199	\$ 22,199
	Closure Costs	\$ 141,443	\$ 141,443	\$ 48,943	\$ 48,943	\$ 48,943	\$ 19,143	\$ 19,143	\$ -	\$ -	\$ -	\$ 468,000	\$ 468,000	\$ 468,000	\$ 530,148	\$ 62,148
	<b>SUB-TOTAL</b>	<b>\$ 220,976</b>	<b>\$ 150,976</b>	<b>\$ 58,476</b>	<b>\$ 55,143</b>	<b>\$ 55,143</b>	<b>\$ 19,143</b>	<b>\$ 19,143</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 579,000</b>	<b>\$ 579,000</b>	<b>\$ 579,000</b>	<b>\$ 663,347</b>	<b>\$ 84,347</b>

ALL ASSETS	TOTAL Projected Contributions to Reserves										TOTAL (10 year)	TOTAL (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost)	Difference (Borrowing - Savings)
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
	<b>\$ 6,037,263</b>	<b>\$ 3,486,811</b>	<b>\$ 2,295,806</b>	<b>\$ 2,136,513</b>	<b>\$ 1,951,568</b>	<b>\$ 1,848,650</b>	<b>\$ 1,428,400</b>	<b>\$ 1,344,024</b>	<b>\$ 1,344,024</b>	<b>\$ 1,339,837</b>					

Street Lights (Total Maintenance Cost per Year)	Maintenance Cost Annual Tracking Summary										TOTAL (10 year)
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	

Notes:

1. See Notes and Assumptions from Tables 3 and 6.



**Table 3a**  
**Detailed Summary of Municipal Assets - Roads**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Surface Type (GS/CM/DS/HM) <sup>2</sup>	Surface or Base <sup>1</sup>	Geographic Township <sup>3</sup>	Road Location From <sup>1</sup>	Road Location To <sup>1</sup>	Length (metres) <sup>1</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Cost of Surface When Laid / Estimated Original Base Cost <sup>1,2</sup>	Additions (2008 to 2012) <sup>1,2</sup>	Total Cost of Surface / Base <sup>4</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>2</sup>	Condition Rating (good/fair/poor) <sup>2</sup>	Level of Service (Road Class) <sup>5</sup>	Comments
WH1	White Church Rd	50% CM/ 50% GS	Surface	Hagarty	Round Lake Rd	Griffith Wagner Rd	2142	1998	15	2013	\$ 35,830.79	\$ -	\$ 35,830.79	\$ 33,442.07	\$ 2,388.72	\$ 86,761.00	poor	4	
CH12	Church Street	CM	Surface	Hagarty	911 #864	Highway 60	1522	2008	15	2023	\$ 97,036.80	\$ 81,327.24	\$ 178,364.04	\$ 104,168.54	\$ 74,195.50	\$ 121,760.00	fair	5	
CH11	Church Street	CM	Surface	Hagarty	Mountain View Rd	911-864	811	2009	15	2024	\$ -	\$ 94,887.66	\$ 94,887.66	\$ 18,977.53	\$ 75,910.13	\$ 64,880.00	good	4	
HI31	Hillcrest Avenue	CM	Surface	Hagarty	Highway 60	Shrine Hill Dr	20	2012	20	2032	\$ -	\$ 14,147.62	\$ 14,147.62	\$ -	\$ 14,147.62	\$ 1,600.00	good	5	
HI32	Hillcrest Avenue	CM	Surface	Hagarty	Shrine Hill Dr	Dead End	501	2007	20	2027	\$ 53,765.50	\$ -	\$ 53,765.50	\$ 38,979.99	\$ 14,785.51	\$ 40,080.00	good	5	
MO21	Mountain View Rd	CM	Surface	Hagarty	Brudenell Rd	Lisk Rd	475	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38,000.00	fair	4	
RO21	Rochefort Rd	CM	Surface	Hagarty	Gorman Rd & Cormac Rd	Sullivan Rd	833	1995	20	2015	\$ 53,108.84	\$ -	\$ 53,108.84	\$ 45,142.51	\$ 7,966.33	\$ 66,640.00	poor	4	
RO22	Rochefort Rd	CM	Surface	Hagarty	Sullivan Rd	Brudenell Rd	1267	2012	5	2017	\$ 80,778.99	\$ 48,412.92	\$ 129,191.91	\$ 68,662.14	\$ 60,529.77	\$ 101,360.00	poor	4	
GR2	Greens Rd	CM / GS	Surface	Hagarty	Brudenell Rd	Dead End	906	2012	20	2032	\$ -	\$ 6,178.73	\$ 6,178.73	\$ -	\$ 6,178.73	\$ 40,770.00	fair	5	
HA11	Harrington Rd	CM / GS	Surface	Hagarty	Highway 60	Great Heron Ln	718	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32,310.00	good	5	
AL1	Albert Street	DS	Surface	Hagarty	Round Lake Rd	Dead End	280	1998	16	2014	\$ 4,683.76	\$ -	\$ 4,683.76	\$ 4,371.51	\$ 312.25	\$ 11,200.00	fair	4	
BE1	Bear Trail Rd	DS	Surface	Richards	Round Lake Rd	Dead End	1812	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 72,480.00	fair	4	
BU11	Buck Hill Rd	DS	Surface	Hagarty	Simpson Pit Rd	911 #296	1471	2008	15	2023	\$ -	\$ 16,530.24	\$ 16,530.24	\$ 4,408.06	\$ 12,122.18	\$ 58,840.00	fair	5	
BY1	Byers Creek Rd	DS	Surface	Hagarty	Simpson Pit Rd	911 #287	1432	2008	15	2023	\$ -	\$ 49,590.71	\$ 49,590.71	\$ 13,224.19	\$ 36,366.52	\$ 57,280.00	fair	4	
DE11	Dear Trail Rd	DS	Surface	Richards	Round Lake Rd	911 #164	811	1998	17	2015	\$ 13,566.19	\$ -	\$ 13,566.19	\$ 12,661.78	\$ 904.41	\$ 32,440.00	fair	5	
DI11	Division Rd	DS	Surface	Richards/Hagarty	Round Lake Rd	911 #1570	342	2007	15	2022	\$ 5,720.88	\$ -	\$ 5,720.88	\$ 5,339.49	\$ 381.39	\$ 13,680.00	good	4	
MA32	Mask Rd	DS	Surface	Hagarty	Round Lake Rd	Heritage Rd	2032	1998	17	2015	\$ 33,990.74	\$ -	\$ 33,990.74	\$ 31,724.69	\$ 2,266.05	\$ 81,280.00	good	4	
MA33	Mask Rd	DS	Surface	Hagarty	Heritage Rd	Green Ridge Rd	2040	1998	17	2015	\$ 34,124.56	\$ -	\$ 34,124.56	\$ 31,849.59	\$ 2,274.97	\$ 748,680.00	fair	4	
MA34	Mask Rd	DS	Surface	Hagarty	Green Ridge Rd	Simpson Pit Rd	2047	1998	18	2016	\$ 34,241.65	\$ -	\$ 34,241.65	\$ 31,958.87	\$ 2,282.78	\$ 81,880.00	good	4	
MA35	Mask Rd	DS	Surface	Hagarty	Simpson Pit R	911 #2491	1646	2008	15	2023	\$ 51,093.46	\$ -	\$ 51,093.46	\$ 13,624.92	\$ 37,468.54	\$ 65,840.00	good	4	
MA36	Mask Rd	DS	Surface	Hagarty	911 #2491	unmaintained part	1735	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,400.00	good	4	
MO1	Mockingbird Rd	DS	Surface	Richards	Turners Rd	911 #79	390	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,600.00	good	5	
PE1	Pecoskie Drive	DS	Surface	Richards	Turners Rd	Dead End	884	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,360.00	good	5	
PI1	Pine View Drive	DS	Surface	Hagarty	Wilno South Rd	Dead End	108	1997	15	2012	\$ 1,773.77	\$ -	\$ 1,773.77	\$ 1,773.77	\$ -	\$ 4,320.00	poor	5	
RE12	Red Rock Rd	DS	Surface	Richards/Hagarty	John Foy Lane	Pine Point Lane	934	2012	20	2032	\$ -	\$ 20,957.11	\$ 20,957.11	\$ -	\$ 20,957.11	\$ 37,360.00	good	4	
RE11	Red Rock Rd	DS	Surface	Richards/Hagarty	Tramore Rd	John Foy Lane	1359	2010	15	2025	\$ -	\$ 63,742.51	\$ 63,742.51	\$ 8,499.00	\$ 55,243.51	\$ 54,360.00	fair	4	
RE15	Red Rock Rd	DS	Surface	Richards	Perrigo Lane	Reserve Creek Lane	39	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,560.00	good	4	
RE16	Red Rock Rd	DS	Surface	Richards	Reserve Creek Lane	Round Lake Rd	284	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,360.00	good	4	
RE13	Red Rock Rd	DS	Surface	Richards	Pine Point Lane	Whippoorwill Lane	218	2012	20	2032	\$ -	\$ 4,600.34	\$ 4,600.34	\$ -	\$ 4,600.34	\$ 8,720.00	good	4	
SU12	Sunrise Rd	DS	Surface	Richards	Round Lake Rd	911 #168	725	1998	17	2015	\$ 12,127.60	\$ -	\$ 12,127.60	\$ 11,319.09	\$ 808.51	\$ 29,000.00	fair	5	
TR11	Tramore Rd	DS	Surface	Hagarty	911 #1308	Boyle Lane	655	2010	15	2025	\$ 10,956.66	\$ -	\$ 10,956.66	\$ 10,226.22	\$ 730.44	\$ 26,200.00	good	4	
TR14	Tramore Rd	DS	Surface	Richards/Hagarty	River Rd	Round Lake Rd	4214	1997	18	2015	\$ 967.38	\$ -	\$ 967.38	\$ 967.38	\$ -	\$ 168,560.00	poor	4	
TR13	Tramore Rd	DS	Surface	Richards/Hagarty	Red Rock Rd	River Rd	2064	2009	15	2024	\$ 34,526.03	\$ 33,060.47	\$ 67,586.50	\$ 41,040.42	\$ 26,546.08	\$ 82,560.00	fair	4	
TR12	Tramore Rd	DS	Surface	Richards/Hagarty	Boyle Lane	Red Rock Rd	1436	2011	15	2026	\$ 24,021.01	\$ 39,384.20	\$ 63,405.21	\$ 25,045.22	\$ 38,359.99	\$ 57,440.00	good	4	
TU11	Turners Rd	DS	Surface	Richards	Round Lake Rd	Mockingbird Lane	1867	2000	17	2017	\$ 34,458.78	\$ -	\$ 34,458.78	\$ 27,567.02	\$ 6,891.76	\$ 74,680.00	good	4	
TU12	Turners Rd	DS	Surface	Richards	Mockingbird Lane	Pecoskie Drive	1249	2000	15	2015	\$ 23,052.50	\$ -	\$ 23,052.50	\$ 18,442.00	\$ 4,610.50	\$ 49,960.00	fair	4	
TU13	Turners Rd	DS	Surface	Richards	Pecoskie Drive	Stevenson Lake Lane	1271	2000	15	2015	\$ 23,458.55	\$ -	\$ 23,458.55	\$ 18,766.84	\$ 4,691.71	\$ 50,840.00	fair	4	
TU14	Turners Rd	DS	Surface	Richards	Stevenson Lake Lane	911 #1255 Border TMV	1889	2013	15	2028	\$ 34,864.83	\$ -	\$ 34,864.83	\$ 27,891.86	\$ 6,972.97	\$ 75,560.00	good	4	
YA1	Yantha Drive	DS	Surface	Richards	Oak Avenue	Dead End	129	2000	17	2017	\$ 2,380.92	\$ -	\$ 2,380.92	\$ 1,904.74	\$ 476.18	\$ 5,160.00	fair	4	
CA3	Cardinal Rd	DS / GS	Surface	Hagarty	Highway 60	Scenic Rd	2241	2009	15	2024	\$ -	\$ 27,979.02	\$ 27,979.02	\$ 5,595.80	\$ 22,383.22	\$ 56,025.00	fair	5	
ST12	Stone Church Rd	DS / GS	Surface	Hagarty	Highway 60	Mountain View Rd	1725	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,800.00	fair	4	
AN3	Antoine Rd	GS	Surface	Hagarty	Winnie Rd	Dead End	966	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,660.00	fair	5	
BE2	Beaver Rd	GS	Surface	Hagarty	Simpson Pit Rd	Dead End	1224	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 446,760.00	fair	5	
BE3	Beechnut Lake Rd	GS	Surface	Richards	Round Lake Rd	Dead End	330	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,450.00	fair	6(b)	
BU12	Buck Hill Rd	GS	Surface	Hagarty	911 #296	Horse Shoe Rd	4575	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,750.00	poor	5	
BY2	Byers Creek Rd	GS	Surface	Hagarty	911 #288	Dead End	1993	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,930.00	fair	6(b)	



**Table 3a**  
**Detailed Summary of Municipal Assets - Roads**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Surface Type (GS/CM/DS/HM) <sup>2</sup>	Surface or Base <sup>1</sup>	Geographic Township <sup>3</sup>	Road Location From <sup>1</sup>	Road Location To <sup>1</sup>	Length (metres) <sup>1</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Cost of Surface When Laid / Estimated Original Base Cost <sup>1,2</sup>	Additions (2008 to 2012) <sup>1</sup>	Total Cost of Surface / Base <sup>4</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>2</sup>	Condition Rating (good/fair/poor) <sup>2</sup>	Level of Service (Road Class) <sup>5</sup>	Comments
DE12	Dear Trail Rd	GS	Surface	Richards	911 #164	911 #462	1493	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,930.00	fair	5	
DI12	Division Rd	GS	Surface	Richards/Hagarty	911 #1571	911 #1836	1329	2008	15	2023	\$ -	\$ 4,329.53	\$ 4,329.53	\$ 1,154.54	\$ 3,174.99	\$ 13,290.00	fair	6(a)	
DI13	Division Rd	GS	Surface	Richards/Hagarty	911 #1837	Horse Shoe Rd	3357	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,570.00	fair	6(a)	
DO1	Doyle Mountain Rd	GS	Surface	Hagarty	Brudenell Twp	OGrady Settlement Rd	2375	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,750.00	poor	4	
EN1	Eno Rd - Dear Trail Rd to Dead End	GS	Surface	Richards	Dear Trail	Dead End	1177	2009	20	2029	\$ -	\$ 35,599.80	\$ 35,599.80	\$ 5,339.97	\$ 30,259.83	\$ 11,770.00	fair	4	
GO1	Gorman Rd	GS	Surface	Hagarty	Rocheport Rd	Cormac Rd to Algoma Boundary	1800	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,000.00	poor	6(a)	
GR11	Green Ridge Rd	GS	Surface	Hagarty	South End	Mask Rd	323	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,230.00	poor	5	
GR12	Green Ridge Rd	GS	Surface	Hagarty	Mask Rd	911 #333	1342	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53,680.00	fair	5	
GR13	Green Ridge Rd	GS	Surface	Hagarty	911 #334	North end	438	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,380.00	fair	5	
HE21	Heritage Rd	GS	Surface	Hagarty	Old Trestle Rd	Wildlife Rd	2042	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,420.00	poor	5	
HE22	Heritage Rd	GS	Surface	Hagarty	Wildlife Rd	Mask Rd	2046	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,460.00	poor	5	
HE23	Heritage Rd	GS	Surface	Hagarty	Mask Rd	Dead End	680	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,800.00	fair	5	
HI1	Hidden Trail Rd	GS	Surface	Hagarty	Highway 60	Scenic Rd	2087	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,870.00	fair	5	
HI2	High Country Rd	GS	Surface	Hagarty	OGrady Settlement Rd	Mountain View Rd	2032	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 741,680.00	poor	5	
HO1	Horse Shoe Rd	GS	Surface	Hagarty	Buck Hill Rd	Division Rd	782	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,820.00	poor	6(a)	
IN1	Inukshuk Rd	GS	Surface	Hagarty	Wilno South Rd	Dead End	1042	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,420.00	poor	5	
JA1	Jack Chute Rd	GS	Surface	Richards	Round Lake Rd	Dead End	1071	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,710.00	good	5	
JO3	John Foy Lane	GS	Surface	Richards/Hagarty	Red Rock Rd	Dead End	404	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,040.00	good	5	
KE12	Keetch Street	GS	Surface	Killaloe	Lions Lane	Dead End	356	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,560.00	good	5	
LA4	Lane Street	GS	Surface	Killaloe	Mill Street	Mill Street	192	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,920.00	poor	5	
LE11	Lenny Rd	GS	Surface	Hagarty	Mountain View Rd	911 #7	37	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 370.00	good	5	
LE12	Lenny Rd	GS	Surface	Hagarty	911 #7	Dead End	848	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,480.00	good	5	
LI1	Lisk Rd	GS	Surface	Hagarty	Highway 60	Mountain View Rd	1903	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,030.00	poor	5	
LO1	Long Meadows Rd	GS	Surface	Hagarty	Round Lake Rd	Dead End	1479	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,790.00	fair	5	
MA31	Mask Rd	GS	Surface	Hagarty	Highway 60	Round Lake Rd	2186	2012	20	2032	\$ -	\$ 8,065.21	\$ 8,065.21	\$ -	\$ 8,065.21	\$ 21,860.00	fair	4	
MO13	Mockingbird Rd	GS	Surface	Richards	unmaintained	Dead End	1844	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,440.00	poor	5	
MO12	Mockingbird Rd	GS	Surface	Richards	911 #80	911 #179	509	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,360.00	fair	6(a)	
MO23	Mountain View Rd	GS	Surface	Hagarty	Stone Church Rd	Simpson Pit Rd	2165	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,650.00	fair	4	
MO26	Mountain View Rd	GS	Surface	Hagarty	OGrady Settlement Rd & Lenny Rd	Church Street	1398	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,980.00	poor	4	
MO22	Mountain View Rd	GS	Surface	Hagarty	Lisk Rd	Stone Church Rd	2030	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,300.00	fair	4	
MO24	Mountain View Rd	GS	Surface	Hagarty	Simpson Pit Rd	High Country Rd	2015	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,150.00	poor	4	
MO25	Mountain View Rd	GS	Surface	Hagarty	High Country Rd	OGrady Settlement Rd & Lenny Rd	2094	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,940.00	poor	4	
MO27	Mountain View Rd	GS	Surface	Hagarty	Church Street	Wilno South Rd	657	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,570.00	good	4	
OG12	O'Grady Settlement Rd	GS	Surface	Hagarty	High Country Rd	Doyle Mountain Rd	1211	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,110.00	fair	5.0	
OG11	O'Grady Settlement Rd	GS	Surface	Hagarty	Rocheport Rd	High Country Rd	3625	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,250.00	poor	5	
OG13	O'Grady Settlement Rd	GS	Surface	Hagarty	Doyle Mountain Rd	Mountain View Rd	2771	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,710.00	poor	5	
OL13	Old Trestle Rd	GS	Surface	Hagarty	Stone Church Rd	Highway 60	1080	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,800.00	fair	5	
OL11	Old Trestle Rd	GS	Surface	Hagarty	Highway 60	Heritage Rd	421	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,210.00	fair	5	
OL12	Old Trestle Rd	GS	Surface	Hagarty	Heritage Rd	Stone Church Rd	1857	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,570.00	fair	5	
RE14	Red Rock Rd	GS	Surface	Richards	Whippoorwill Lane	Perrigo Lane	5611	2012	15	2027	\$ -	\$ 47,207.01	\$ 47,207.01	\$ -	\$ 47,207.01	\$ 56,110.00	fair	4	
RI1	Rink Rd	GS	Surface	Hagarty	Round Lake Rd	Dean End	229	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,290.00	fair	5	
RI21	River Rd	GS	Surface	Hagarty	Tramore Rd	911 #6527	135	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,350.00	fair	5	
RI22	River Rd	GS	Surface	Hagarty	911 #6527	Dead End	239	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,390.00	fair	6(a)	
L004/L005	Round Lake/Foy Provincial Park Road Corridor	GS	Surface	Richards/Hagarty	Red Rock Rd	Highway 58	1700	n/a	20	2013	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 262,311.00	poor	5	Special Project - Work in Progress
RO31	Rozek Rd	GS	Surface	Hagarty	Scenic Rd	911 #26	127	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,270.00	fair	5	
RO32	Rozek Rd	GS	Surface	Hagarty	911 #27	Dead End	4001	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,010.00	fair	6(b)	



**Table 3a**  
**Detailed Summary of Municipal Assets - Roads**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Surface Type (GS/CM/DS/HM) <sup>2</sup>	Surface or Base <sup>1</sup>	Geographic Township <sup>3</sup>	Road Location From <sup>1</sup>	Road Location To <sup>1</sup>	Length (metres) <sup>1</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Cost of Surface When Laid / Estimated Original Base Cost <sup>1,2</sup>	Additions (2008 to 2012) <sup>1</sup>	Total Cost of Surface / Base <sup>4</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>2</sup>	Condition Rating (good/fair/poor) <sup>2</sup>	Level of Service (Road Class) <sup>5</sup>	Comments
SC11	Scenic Rd	GS	Surface	Hagarty	Wilno North Rd	Rozek Rd	2147	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,470.00	fair	5	
SC12	Scenic Rd	GS	Surface	Hagarty	Rozek Rd	Hidden Trail Rd	2124	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,240.00	fair	5	
SC13	Scenic Rd	GS	Surface	Hagarty	Hidden Trail Rd	Cardinal Rd	1070	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,700.00	fair	5	
SC14	Scenic Rd	GS	Surface	Hagarty	Cardinal Rd	Simpson Pit Rd	946	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,460.00	fair	5	
SC15	Scenic Rd	GS	Surface	Hagarty	Simpson Pit Rd	911 #1398	295	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,950.00	fair	5	
SC16	Scenic Rd	GS	Surface	Hagarty	911 #1399	911 #1478	404	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,040.00	fair	5	
SI1	Simpson Pit Rd South	GS	Surface	Hagarty	Mountain View Rd	Highway 60	2085	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,850.00	fair	5	
ST13	Stone Church Rd	GS	Surface	Hagarty	Mountain View Rd	911 #767	662	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,620.00	fair	4	
ST11	Stone Church Rd	GS	Surface	Hagarty	Old Trestle Rd	Highway 60	385	2009	15	2024	\$ -	\$ 31,207.20	\$ 31,207.20	\$ 6,241.44	\$ 24,965.76	\$ 3,850.00	fair	4	
ST14	Stone Church Rd	GS	Surface	Hagarty	911 #767	Russell Rd	335	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,350.00	poor	4	
ST15	Stone Church Rd	GS	Surface	Hagarty	Russell Rd	Dead End #992	1125	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,250.00	poor	4	
SU13	Sunrise Rd	GS	Surface	Richards	911 #168 Waste Site	911 #308	686	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,860.00	fair	6	
WA1	Water Street	GS	Surface	Killaloe	Queen Street	911 #226	1122	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,220.00	good	5	
WI12	Wildlife Rd	GS	Surface	Hagarty	Round Lake Rd	Heritage Rd	2029	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,290.00	good	5	
WI13	Wildlife Rd	GS	Surface	Hagarty	Heritage Rd	Dead End #754	1293	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,930.00	good	5	
WI11	Wildlife Rd	GS	Surface	Hagarty	Highway 60	Round Lake Rd	443	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,430.00	good	6(b)	
WI32	Wilno North Rd	GS	Surface	Hagarty	just past Scenic Rd	Winnie Rd	1976	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,760.00	fair	5	
WI4	Winnie Rd	GS	Surface	Hagarty	Wilno North Rd	Dead End 911 #250	1249	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,490.00	poor	6(b)	
AN1	Angus Street	HM	Surface	Killaloe	Queen Street	River Street	81	1995	22	2017	\$ 6,455.31	\$ -	\$ 6,455.31	\$ 5,487.01	\$ 968.30	\$ 8,910.00	fair	5	
AN21	Annie Street	HM	Surface	Killaloe	Southern Dead End	Queen Street	104	1995	22	2017	\$ 8,288.29	\$ -	\$ 8,288.29	\$ 7,045.05	\$ 1,243.24	\$ 11,440.00	fair	5	
AN22	Annie Street	HM	Surface	Killaloe	Queen Street	Zummach Drive	203	1995	20	2015	\$ 16,178.11	\$ -	\$ 16,178.11	\$ 13,751.39	\$ 2,426.72	\$ 22,330.00	fair	5	
BO1	Boland Street	HM	Surface	Killaloe	Queen Street	John Street	48	1995	22	2017	\$ 3,825.37	\$ -	\$ 3,825.37	\$ 3,251.56	\$ 573.81	\$ 5,280.00	fair	5	
BO1	Boland Street	HM	Surface	Killaloe	John Street	Mary Street	159	1995	22	2017	\$ 12,671.53	\$ -	\$ 12,671.53	\$ 10,770.80	\$ 1,900.73	\$ 17,490.00	fair	5	
BO1	Boland Street	HM	Surface	Killaloe	Mary Street	Dead End	131	1995	20	2015	\$ 10,440.06	\$ -	\$ 10,440.06	\$ 8,874.05	\$ 1,566.01	\$ 14,410.00	fair	5	
CA1	Cain Rd	HM	Surface	Richards	Round Lake Rd	Dead End	108	2000	20	2020	\$ 1,993.33	\$ -	\$ 1,993.33	\$ 1,594.66	\$ 398.67	\$ 11,880.00	good	6(a)	
CA21	Cameron Street	HM	Surface	Killaloe	North Street	Henry Street	50	1993	25	2018	\$ 3,764.99	\$ -	\$ 3,764.99	\$ 3,576.74	\$ 188.25	\$ 5,500.00	good	5	
CA21	Cameron Street	HM	Surface	Killaloe	Lake Street	North Street	55	1993	25	2018	\$ 4,141.49	\$ -	\$ 4,141.49	\$ 3,934.42	\$ 207.07	\$ 6,050.00	good	5	
CA22	Cameron Street	HM	Surface	Killaloe	Henry Street	Queen Street	101	2009	20	2029	\$ 7,605.29	\$ 47,474.95	\$ 55,080.24	\$ 14,346.27	\$ 40,733.97	\$ 11,110.00	good	5	
CI11	Civic Street	HM	Surface	Killaloe	Mill Street	Dead End	302	1995	22	2017	\$ 24,067.93	\$ -	\$ 24,067.93	\$ 20,457.74	\$ 3,610.19	\$ 33,220.00	fair	5	
CO11	Coll Street	HM	Surface	Killaloe	Queen Street	Mary Street	154	1997	20	2017	\$ 12,767.93	\$ -	\$ 12,767.93	\$ 9,575.95	\$ 3,191.98	\$ 16,940.00	fair	5	
CO12	Coll Street	HM	Surface	Killaloe	Mary Street	Dead End	65	1997	20	2017	\$ 5,389.06	\$ -	\$ 5,389.06	\$ 4,041.80	\$ 1,347.27	\$ 7,150.00	fair	5	
EL11	Elm Street	HM	Surface	Killaloe	Henry Street	Meadow Drive	341	2008	20	2028	\$ 25,677.26	\$ -	\$ 25,677.26	\$ 24,393.40	\$ 1,283.86	\$ 125,488.00	good	5	
HE11	Henry Street	HM	Surface	Killaloe	Cameron St	Lisk Street	101	1995	20	2015	\$ 8,049.21	\$ -	\$ 8,049.21	\$ 6,841.83	\$ 1,207.38	\$ 11,110.00	good	5	
HE12	Henry Street	HM	Surface	Killaloe	Lisk Street	Elm Street	106	1995	20	2015	\$ 8,447.68	\$ -	\$ 8,447.68	\$ 7,180.53	\$ 1,267.15	\$ 11,660.00	good	5	
HE13	Henry Street	HM	Surface	Killaloe	Elm Street	Meadow Drive	361	1995	20	2015	\$ 28,769.95	\$ -	\$ 28,769.95	\$ 24,454.46	\$ 4,315.49	\$ 39,710.00	good	5	
JA21	James Street	HM	Surface	Killaloe	River Street	Queen Street	142	1995	20	2015	\$ 11,316.71	\$ -	\$ 11,316.71	\$ 9,619.20	\$ 1,697.51	\$ 15,620.00	fair	5	
JA22	James Street	HM	Surface	Killaloe	Queen Street	King Street	62	1995	20	2015	\$ 4,941.10	\$ -	\$ 4,941.10	\$ 4,199.94	\$ 741.17	\$ 6,820.00	fair	5	
JA23	James Street	HM	Surface	Killaloe	King Street	Zummach Drive	66	1995	20	2015	\$ 5,259.88	\$ -	\$ 5,259.88	\$ 4,470.90	\$ 788.98	\$ 7,260.00	fair	5	
JO11	John Street	HM	Surface	Killaloe	Queen Street	Boland Street	49	1995	20	2015	\$ 3,905.06	\$ -	\$ 3,905.06	\$ 3,319.30	\$ 585.76	\$ 5,390.00	good	5	
JO12	John Street	HM	Surface	Killaloe	Boland Street	Ryan Street	98	1995	20	2015	\$ 7,810.12	\$ -	\$ 7,810.12	\$ 6,638.60	\$ 1,171.52	\$ 10,780.00	good	5	
JO13	John Street	HM	Surface	Killaloe	Ryan Street	Roche Street	101	1995	20	2015	\$ 8,049.21	\$ -	\$ 8,049.21	\$ 6,841.83	\$ 1,207.38	\$ 11,110.00	good	5	
JO2	John Street (RL)	HM	Surface	Hagarty	Round Lake Rd	Round Lake Rd	1149	1997	18	2015	\$ 18,870.96	\$ -	\$ 18,870.96	\$ 18,870.96	\$ -	\$ 126,390.00	fair	5	
KE11	Keetch Street	HM	Surface	Killaloe	Queen Street	Lions Lane	202	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,220.00	good	5	
KI11	King Street	HM	Surface	Killaloe	Queen Street	James Street	228	1991	20	2011	\$ 17,144.74	\$ -	\$ 17,144.74	\$ 17,144.74	\$ -	\$ 25,080.00	poor	5	
LA11	Lake Street	HM	Surface	Killaloe	Queen Street	Cameron Street	155	1995	20	2015	\$ 12,352.75	\$ -	\$ 12,352.75	\$ 10,499.84	\$ 1,852.91	\$ 17,050.00	poor	5	
LA12	Lake Street	HM	Surface	Killaloe	Cameron Street	Dead End	47	1995	20	2015	\$ 3,745.67	\$ -	\$ 3,745.67	\$ 3,183.82	\$ 561.85	\$ 5,170.00	poor	5	



**Table 3a**  
**Detailed Summary of Municipal Assets - Roads**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Surface Type (GS/CM/DS/HM) <sup>2</sup>	Surface or Base <sup>1</sup>	Geographic Township <sup>3</sup>	Road Location From <sup>1</sup>	Road Location To <sup>1</sup>	Length (metres) <sup>1</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Cost of Surface When Laid / Estimated Original Base Cost <sup>1,2</sup>	Additions (2008 to 2012) <sup>1</sup>	Total Cost of Surface / Base <sup>4</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>2</sup>	Condition Rating (good/fair/poor) <sup>2</sup>	Level of Service (Road Class) <sup>5</sup>	Comments
LA21	Lake Street (RL)	HM	Surface	Richards/Hagarty	Round Lake Rd	Dead End	87	1995	20	2015	\$ 5,546.78	\$ -	\$ 5,546.78	\$ 4,714.76	\$ 832.02	\$ 9,570.00	good	5	
LA3	Lakeview Drive	HM	Surface	Richards	Round Lake Rd	Round Lake Rd	561	1997	18	2015	\$ 9,213.76	\$ -	\$ 9,213.76	\$ 9,213.76	\$ -	\$ 61,710.00	fair	5	
LI21	Lisk Street	HM	Surface	Killaloe	Mill Street	Mill Street	314	1993	25	2018	\$ 23,644.16	\$ -	\$ 23,644.16	\$ 22,461.95	\$ 1,182.21	\$ 34,540.00	fair	5	
MA11	Maple Street	HM	Surface	Killaloe	Roche Street	William Street	82	1993	24	2017	\$ 6,174.59	\$ -	\$ 6,174.59	\$ 5,865.86	\$ 308.73	\$ 9,020.00	fair	5	
MA12	Maple Street	HM	Surface	Killaloe	William Street	Highway 60	78	1993	24	2017	\$ 5,873.39	\$ -	\$ 5,873.39	\$ 5,579.72	\$ 293.67	\$ 8,580.00	fair	5	
MA21	Mary Street	HM	Surface	Killaloe	Coll Street	Boland Street	100	1995	20	2015	\$ 7,969.51	\$ -	\$ 7,969.51	\$ 6,774.08	\$ 1,195.43	\$ 11,000.00	poor	5	
MA22	Mary Street	HM	Surface	Killaloe	Boland Street	Ryan Street	100	1995	20	2015	\$ 7,969.51	\$ -	\$ 7,969.51	\$ 6,774.08	\$ 1,195.43	\$ 11,000.00	poor	5	
MC1	McCarthy Lane	HM	Surface	Killaloe	Queen Street	Dead End	74	1995	25	2020	\$ 5,897.44	\$ -	\$ 5,897.44	\$ 5,012.82	\$ 884.62	\$ 8,140.00	good	5	
ME11	Meadow Drive	HM	Surface	Killaloe	Queen Street	Elm Street	200	2000	20	2020	\$ 15,939.03	\$ -	\$ 15,939.03	\$ 13,548.18	\$ 2,390.85	\$ 22,000.00	good	5	
ME12	Meadow Drive	HM	Surface	Killaloe	Elm Street	Henry Street	152	2000	20	2020	\$ 12,113.66	\$ -	\$ 12,113.66	\$ 10,296.61	\$ 1,817.05	\$ 16,720.00	good	5	
MI11	Mill Street	HM	Surface	Killaloe	Queen Street	Civic Street	153	1995	20	2015	\$ 12,193.36	\$ -	\$ 12,193.36	\$ 10,364.36	\$ 1,829.00	\$ 16,830.00	fair	5	
MI12	Mill Street	HM	Surface	Killaloe	Civic Street	Lane Street	326	1995	20	2015	\$ 25,980.62	\$ -	\$ 25,980.62	\$ 22,083.53	\$ 3,897.09	\$ 35,860.00	fair	5	
MI13	Mill Street	HM	Surface	Killaloe	Lane Street	Lane Street	141	1995	20	2015	\$ 11,237.01	\$ -	\$ 11,237.01	\$ 9,551.46	\$ 1,685.55	\$ 15,510.00	fair	5	
MI14	Mill Street	HM	Surface	Killaloe	Lane Street	Highway 60	822	1995	20	2015	\$ 65,509.40	\$ -	\$ 65,509.40	\$ 55,682.99	\$ 9,826.41	\$ 90,420.00	fair	5	
NO11	North Street	HM	Surface	Killaloe	Cameron Street	Queen Street	163	1993	20	2013	\$ 12,273.88	\$ -	\$ 12,273.88	\$ 11,660.19	\$ 613.69	\$ 17,930.00	poor	5	
NO12	North Street	HM	Surface	Killaloe	Queen Street	Dead End	135	1993	20	2013	\$ 10,165.48	\$ -	\$ 10,165.48	\$ 9,657.21	\$ 508.27	\$ 14,850.00	poor	5	
OA11	Oak Avenue	HM	Surface	Richards	Round Lake Rd	Yantha Drive	144	2000	20	2020	\$ 2,657.77	\$ -	\$ 2,657.77	\$ 2,126.22	\$ 531.55	\$ 15,840.00	fair	5	
OA12	Oak Avenue	HM	Surface	Richards	Yantha Drive	Dead End	255	2000	20	2020	\$ 4,706.47	\$ -	\$ 4,706.47	\$ 3,765.18	\$ 941.29	\$ 28,050.00	fair	5	
RI3	River Street	HM	Surface	Killaloe	Angus Street	James Street	176	1995	20	2015	\$ 14,026.34	\$ -	\$ 14,026.34	\$ 11,922.39	\$ 2,103.95	\$ 19,360.00	fair	5	
RO11	Roche Street	HM	Surface	Killaloe	Queen Street	John Street	272	2006	20	2026	\$ 20,453.37	\$ 25,349.43	\$ 45,802.80	\$ 25,523.18	\$ 20,279.62	\$ 29,920.00	good	5	
RO12	Roche Street	HM	Surface	Killaloe	John Street	Maple Street	300	2006	20	2026	\$ 22,558.87	\$ 27,960.25	\$ 50,519.12	\$ 28,150.83	\$ 22,368.29	\$ 33,000.00	good	5	
RO13	Roche Street	HM	Surface	Killaloe	Maple Street	Dead End	118	2006	20	2026	\$ 8,873.15	\$ 10,996.33	\$ 19,869.48	\$ 11,072.38	\$ 8,797.10	\$ 12,980.00	good	5	
RY11	Ryan Street	HM	Surface	Killaloe	Queen Street	John Street	162	1995	22	2017	\$ 12,910.61	\$ -	\$ 12,910.61	\$ 10,974.02	\$ 1,936.59	\$ 17,820.00	good	5	
RY12	Ryan Street	HM	Surface	Killaloe	John Street	Mary Street	156	1995	22	2017	\$ 12,432.44	\$ -	\$ 12,432.44	\$ 10,567.57	\$ 1,864.87	\$ 17,160.00	good	5	
RY13	Ryan Street	HM	Surface	Killaloe	Mary Street	Dead End	87	1995	22	2017	\$ 6,933.48	\$ -	\$ 6,933.48	\$ 5,893.46	\$ 1,040.02	\$ 9,570.00	good	5	
SU11	Sunrise Rd	HM	Surface	Richards	Dead End at Lake	Round Lake Rd	113	1998	17	2015	\$ 1,890.23	\$ -	\$ 1,890.23	\$ 1,764.21	\$ 126.02	\$ 12,430.00	good	5	
WI21	William Street	HM	Surface	Killaloe	Maple Street	Dead End	280	1995	20	2015	\$ 22,314.64	\$ -	\$ 22,314.64	\$ 18,967.44	\$ 3,347.20	\$ 30,800.00	fair	5	
ZU11	Zummach Drive	HM	Surface	Killaloe	James Street	Annie Street	104	1995	20	2015	\$ 8,288.29	\$ -	\$ 8,288.29	\$ 7,045.05	\$ 1,243.24	\$ 11,440.00	fair	5	
ZU12	Zummach Drive	HM	Surface	Killaloe	Annie Street	Dead End	67	1995	20	2015	\$ 5,339.57	\$ -	\$ 5,339.57	\$ 4,538.63	\$ 800.94	\$ 7,370.00	fair	5	

Road Type	Total Length in kilometres (km)
Gravel (GS)	98.00
Cold Mix (CM)	5.43
Hot Mix (HM)	10.49
Double Surface Treatment (DS)	35.36
Other	7.73
<b>Total</b>	<b>157.02</b>

- Notes:
- Road Surface Amortization Calculations, Township of Killaloe, Hagarty and Richards (2013).
  - From information supplied by Township of Killaloe, Hagarty, Richards.
  - Geographical Township established from Township of Killaloe, Hagarty, & Richards Road Names (2001).
  - Total Cost of Surface/Base equals sum of Cost of Surface When Laid/Estimated Original Base, and Additions.
  - Level of Service (Road Classes) from by-law #13-2011.

- Assumptions:
- GS (Gravel) surface replacement estimated at \$10000 per kilometer.
  - DS (Double Surface Treatment) surface replacement estimated at \$40000 per kilometer.
  - CM ( Cold Mix) surface replacement estimated at \$80000 per kilometer.
  - HM (Hot Mix) surface replacement estimated at \$110000 per kilometre.

Selected Focus Items



**Table 3b**  
**Detailed Summary of Municipal Assets - Water Supply Services**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Geographic Township <sup>2</sup>	Address and/or Location (if applicable) <sup>1</sup>	Quantity <sup>1</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Capital Cost <sup>1</sup> (2007)	Additions (2008 to 2012) <sup>1</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1</sup>	Net Book Value (2012) <sup>1</sup>	Replacement Cost <sup>1</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
B021	Water Treatment Plant	Environmental Services	Buildings	Facilities	Killaloe	226 Water Street	1	2012	30	2023	\$ 1,606,058.28	\$ 187,239.00	\$ 1,793,297.28	\$ 1,017,170.32	\$ 588,887.96	\$ 5,000,000.00	good	5	
I_Water	Infrastructure Killaloe Water Distribution Network	Environmental Services	Linear Assets	Infrastructure	Killaloe	228 Water Street	1	1993	30	2023	\$ 1,854,921.11	\$ -	\$ 1,854,921.11	\$ 1,174,783.30	\$ 680,137.81	\$ 2,000,000.00	good	5	
I_Water	Infrastructure Killaloe Water Distribution Network	Environmental Services	Linear Assets	Infrastructure	Killaloe	229 Water Street	1	1996	27	2023	\$ 55,759.08	\$ -	\$ 55,759.08	\$ 33,042.40	\$ 22,716.68	\$ -	good	5	
LI021A	Water Treatment Plant Fencing	Environmental Services	Land Improvements	Fencing	Killaloe	232 Water Street	1	2007	20	2027	\$ 46,640.00	\$ -	\$ 46,640.00	\$ 11,660.00	\$ 34,980.00	\$ 50,000.00	good	3	
Water Main	Water Mains (Length in Kilometres)	Environmental Services	Linear Assets	Linear Asset	Killaloe	Killaloe, ON	3.5	1989	50	2039	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,000.00	good	5	
DH01 - DH10 <sup>3</sup>	Dry Hydrants	Environmental Services	Equipment	Linear Asset	Killaloe	Killaloe, ON	10	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000.00	good	5	
FH01 - FH14 <sup>3</sup>	Fire Hydrants	Protection Services	Equipment	Linear Asset	Killaloe	Killaloe, ON	14	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000.00	good	5	
108397	UV LIGHT 01 REACTOR	Environmental Services	Equipment	DISIN	Killaloe	226 Water Street	1	2007	30	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000.00	good	5	
108398	UV LIGHT 02 REACTOR	Environmental Services	Equipment	DISIN	Killaloe	226 Water Street	1	2007	30	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000.00	good	5	
108403	ANALYZER TURBIDITY	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2007	30	2037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
108409	VALVE PRV RAW FLOW REDUCING VA	Environmental Services	Equipment	VALVE	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
112850	PUMP CENT 02 HL	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	40	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112853	PUMP CENT 03 HL	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	40	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112858	PUMP CENT 04 HL	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	40	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112861	PUMP CENT 05 FIRE	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	40	2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000.00	good	5	
112862	MOTOR PUMP 05 FIRE	Environmental Services	Equipment	MOTOR	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000.00	good	5	
112867	VALVE PRV 6" DIST LINE	Environmental Services	Equipment	VALVE	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
112870	VALVE PRV 4" DIST LINE	Environmental Services	Equipment	VALVE	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
112871	PUMP SUBM 01 BACKWASH	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112873	METER FLOW TREATED WATER	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112874	METER LEVEL CLEARWELL	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112875	PUMP SUBM 02 BACKWASH	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112877	PUMP CENT JOCKEY	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	2007	10	2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112881	METER PRESSURE DISTRIBUTION	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112883	TANK SURGE 01 MAIN DISTRIB SYS	Environmental Services	Equipment	TANKPR	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	good	5	
112886	MCC WTP	Environmental Services	Equipment	ELECTR	Killaloe	226 Water Street	1	2013	10	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00	good	5	
112887	TANK CLEARWELL #1	Environmental Services	Equipment	TANKPR	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	good	5	
112888	PANEL PLC AUTOCON	Environmental Services	Equipment	CONTR0	Killaloe	226 Water Street	1	2013	10	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	good	5	
112889	RECORDER CHART WELL LEVEL	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112890	PANEL CONTROL FILTERS AIR OPER	Environmental Services	Equipment	CONTR0	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112891	FILTER GREEN SAND 01	Environmental Services	Equipment	FILTER	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	good	5	
112892	FILTER GREEN SAND 02	Environmental Services	Equipment	FILTER	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	good	5	
112894	DEHUMIDIFIER WTP	Environmental Services	Equipment	HVAC	Killaloe	226 Water Street	1	2012	10	2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00	good	5	
112907	ACTUATOR ELEC VALVE 1 RAWWATER	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112908	ACTUATOR ELEC VALVE 02 TREATED	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	good	5	
112909	ACTUATOR ELECTRIC VALVE 03 BW	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	good	5	
112910	ACTUATOR ELEC VALVE 4 BW OUT	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112912	ACTUATOR ELEC VALVE 07 RAW IN	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112913	ACTUATOR ELEC VALVE 08 TREATED	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112914	ACTUATOR ELECTRIC VALVE 09 BW	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112915	ACTUATOR ELEC VALVE 10 BW OUT	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112917	ACTUATOR ELECTRIC VALVE 12 BW	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112918	PUMP DIAPH POTASSIUM PERMANGAN	Environmental Services	Equipment	CHEMIC	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112923	GENERATOR ELECTRIC STDBY POWER	Environmental Services	Equipment	GENERA	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500.00	good	5	
112924	ENGINE DIESEL WTP KILLALOE	Environmental Services	Equipment	GENERA	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500.00	good	5	
112926	PANEL TRANSFER GENSET	Environmental Services	Equipment	GENERA	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000.00	good	5	
112928	PANEL CONTROL GEN SET	Environmental Services	Equipment	CONTR0	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112931	LIFTING DEVICE HOIST/BEAM	Environmental Services	Equipment	LIFTIN	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	





**Table 3b**  
**Detailed Summary of Municipal Assets - Water Supply Services**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Geographic Township <sup>2</sup>	Address and/or Location (if applicable) <sup>1</sup>	Quantity <sup>1</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Capital Cost <sup>1</sup> (2007)	Additions (2008 to 2012) <sup>1</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1</sup>	Net Book Value (2012) <sup>1</sup>	Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
112933	PUMP DIAPH POST CL2	Environmental Services	Equipment	CHEMIC	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112934	PUMP DIAPH PRE CL2	Environmental Services	Equipment	CHEMIC	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112935	PUMP WELL SPARE	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112936	ALARM DIALER WTP	Environmental Services	Equipment	CONTR	Killaloe	226 Water Street	1	2013	5	2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112937	ACTUATOR ELECTRIC VALVE 06 BW	Environmental Services	Equipment	ACTUAT	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
140056	ANALYZER COLORIMETER	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2007	10	2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
140106	PUMP CENT JOCKEY HIGH LIFT	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	2011	15	2026	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
140125	METER FLOW RAW WATER TO FILTER	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
140164	TANK FUEL DIESEL	Environmental Services	Equipment	TANKPR	Killaloe	226 Water Street	1	2013	10	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
140190	ANALYZER HYDROGEN PEROXIDE	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2012	10	2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
140191	ANALYZER HYDROGEN PEROXIDE	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2012	10	2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
140192	ANALYZER HYDROGEN PEROXIDE	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2012	10	2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
140193	ANALYZER CHLORINE	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2012	10	2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00	good	5	
191420	ANALYZER CHLORINE FREE	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	2012	10	2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
191460	TANL CLEARWELL #2	Environmental Services	Equipment	TANKPR	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	good	5	
191519	ANALYZER TURBIDITY PORTABLE 21	Environmental Services	Equipment	INSTRU	Killaloe	226 Water Street	1	1993	30	2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
191893	PUMP WELL	Environmental Services	Equipment	PUMP	Killaloe	226 Water Street	1	2007	20	2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	

Notes:

1. From Tangible Capital Assets, Amortization Check (2012) and information supplied by Ontario Clean Water Agency.
2. Geographical Township established from Township of Killaloe, Hagarty, & Richards Road Names (2001).
3. Total Cost equals sum of Capital Cost (2007) and Additions (2008 - 2012).
4. Replacement Cost from information supplied by Ontario Clean Water Agency.
5. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Items



**Table 3c**  
**Detailed Summary of Municipal Assets - Wastewater Services**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Geographic Township <sup>1</sup>	Address and/or Location (if applicable) <sup>1</sup>	Quantity	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Capital Cost <sup>1</sup> (2007)	Additions (2008 to 2012) <sup>1</sup>	Total Cost	Accumulated Amortization (2012) <sup>1</sup>	Net Book Value (2012) <sup>1</sup>	Replacement Cost	Condition (good / fair / poor)	Level of Service (1 to 5) <sup>5</sup>	Comments
B032	Sewage Treatment Plant	Environmental Services	Buildings	Facilities	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ 1,385,089.51	\$ -	\$ 1,385,089.51	\$ 1,385,089.51	\$ -	\$ 500,000.00	good	5	
I_SanSewers	Infrastructure Sanitary Sewers Killaloe 1979	Environmental Services	Linear Assets	Infrastructure	Killaloe	227 Water Street	1	1979	40	2019	\$ 850,011.76	\$ -	\$ 850,011.76	\$ 850,011.76	\$ -	\$ 1,000,000.00	good	5	
-	Sanitary Sewer System (Length in Kilometres)	Environmental Services	Linear Assets	Infrastructure	Killaloe	Lot 5, Concession 6	9.6	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,000.00	good	5	
80410	ENGINE DIESEL WWTP KILLALOE	Environmental Services	Equipment	GENERA	Killaloe	Lot 5, Concession 6	1	2000	20	2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00	good	5	
107998	ANALYZER GAS TRI-DETECTOR (SP	Environmental Services	Equipment	INSTRU	Killaloe	Lot 5, Concession 6	1	2005	10	2015	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	2	
108381	GENERATOR ELECTRIC STDBY POWER	Environmental Services	Equipment	GENERA	Killaloe	Lot 5, Concession 6	1	2000	20	2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00	good	5	
108420	PUMP DIAPH CL2(SPARE)	Environmental Services	Equipment	CHEMIC	Killaloe	Lot 5, Concession 6	1	2007	10	2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112805	PANEL TRANSFER GENSET	Environmental Services	Equipment	GENERA	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112807	GEAR DRIVE CLARIFIER	Environmental Services	Equipment	GEAR	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000.00	good	5	
112809	LIFTING DEVICE JIB	Environmental Services	Equipment	LIFTIN	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	1	
112811	PUMP SUBM SLUDGE 3 INCH	Environmental Services	Equipment	PUMP	Killaloe	Lot 5, Concession 6	1	2000	30	2030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	good	2	
112812	SAMPLER PORTABLE RAW SEWAGE	Environmental Services	Equipment	INSTRU	Killaloe	Lot 5, Concession 6	1	2010	10	2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	good	2	
112813	MCC 01 PLANT MAIN CONTROL	Environmental Services	Equipment	ELECTR	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000.00	good	5	
112814	ALARM DIALER PLANT	Environmental Services	Equipment	CONTRO	Killaloe	Lot 5, Concession 6	1	2005	10	2015	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	5	
112817	BLOWER POS DISP 01 AERATION	Environmental Services	Equipment	BLOWER	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500.00	good	5	
112818	MOTOR BLOWER 01 AERATION	Environmental Services	Equipment	MOTOR	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112819	BLOWER POS DISP 02 AERATION	Environmental Services	Equipment	BLOWER	Killaloe	Lot 5, Concession 6	1	2009	20	2029	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500.00	good	5	
112820	MOTOR BLOWER 02 AERATION	Environmental Services	Equipment	MOTOR	Killaloe	Lot 5, Concession 6	1	2009	20	2029	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	5	
112828	CLARIFIER SECONDARY	Environmental Services	Equipment	TANKPR	Killaloe	Lot 5, Concession 6	1	2004	20	2024	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000.00	good	5	
112833	PUMP DIAPH CL2	Environmental Services	Equipment	CHEMIC	Killaloe	Lot 5, Concession 6	1	2005	20	2025	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00	good	3	
112834	PUMP DIAPH PHAS 8	Environmental Services	Equipment	CHEMIC	Killaloe	Lot 5, Concession 6	1	2013	5	2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	3	
112835	TANK AERATION DIGESTER	Environmental Services	Equipment	TANKPR	Killaloe	Lot 5, Concession 6	1	1979	45	2024	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000.00	good	5	
112846	PANEL CONTROL HENRY ST SPS	Environmental Services	Equipment	CONTRO	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112847	TANK WETWELL HENRY ST	Environmental Services	Equipment	TANKPR	Killaloe	Lot 5, Concession 6	1	1979	50	2029	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000.00	good	5	
112848	PUMP SUBM 01 HENRY ST SPS	Environmental Services	Equipment	PUMP	Killaloe	Lot 5, Concession 6	1	2008	10	2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
112849	PUMP SUBM 02 HENRY ST SPS	Environmental Services	Equipment	PUMP	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	5	
140085	PUMP SUBM SPARE HENRY ST SPS	Environmental Services	Equipment	PUMP	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
191529	ANALYZER DO PORTABLE	Environmental Services	Equipment	INSTRU	Killaloe	Lot 5, Concession 6	1	2005	25	2030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	good	2	
191643	PUMP SUBM 02 PLANT PS	Environmental Services	Equipment	PUMP	Killaloe	Lot 5, Concession 6	1	1979	40	2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	good	3	

Notes:  
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 2. Geographical Township established from Township of Killaloe, Hagarty, & Richards Road Names (2001).  
 3. Total Cost equals sum of Capital Cost (2007) and Additions (2008 - 2012).  
 4. Replacement Cost from information supplied by Ontario Clean Water Agency.  
 5. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Items





**Table 3d**  
**Detailed Summary of Municipal Assets - Buildings and Parks**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Geographic Township <sup>2</sup>	Address and/or Location (if applicable) <sup>3</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1,3</sup>	Projected Replacement or Upgrade Year <sup>1,3</sup>	Capital Cost <sup>1</sup> (2007)	Additions (2008 to 2012) <sup>1</sup>	Total Cost <sup>5</sup>	Accumulated Amortization (2012) <sup>1</sup>	Net Book Value (2012) <sup>1</sup>	Upgrade/Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>6</sup>	Comments <sup>4</sup>
B022	Municipal Office Building	General Government	Buildings	Office Buildings	Killaloe	1 John Street	1993	30	2020	\$ 22,211.71	\$ -	\$ 22,211.71	\$ 14,067.41	\$ 8,144.30	\$ 200,000.00	fair	4	Major upgrade including fire separations, envelope, mechanical, electrical.
B022	Municipal Office Building	General Government	Buildings	Office Buildings	Killaloe	1 John Street	1993	30	2020	\$ 16,548.82	\$ -	\$ 16,548.82	\$ 10,480.97	\$ 6,067.85	\$ -	fair	4	
B022	Municipal Office Building	General Government	Buildings	Office Buildings	Killaloe	1 John Street	2000	30	2020	\$ 73,370.80	\$ -	\$ 73,370.80	\$ 33,913.60	\$ 39,457.20	\$ -	fair	4	
B027	Killaloe and District Medical Centre Provincial Courthouse	General Government	Buildings	Office Buildings	Killaloe	45 Mill Street	1976	30	2020	\$ 165,362.59	\$ -	\$ 165,362.59	\$ 165,362.59	\$ -	\$ 100,000.00	fair	5	Major upgrade including fire separations, envelope, mechanical, electrical.
B011	Firehall Round Lake Centre	Protection Services	Buildings	Garages	Hagarty	2995 Round Lake Road	1990	30	2023	\$ 111,742.32	\$ -	\$ 111,742.32	\$ 81,944.28	\$ 29,798.04	\$ 20,000.00	good	5	Minor upgrade.
B011	Firehall Round Lake Centre	Protection Services	Buildings	Garages	Hagarty	2995 Round Lake Road	1999	30	2023	\$ 9,223.02	\$ -	\$ 9,223.02	\$ 4,918.91	\$ 4,304.11	\$ -	good	5	
B029	Firehall Killaloe	Protection Services	Buildings	Garages	Killaloe	7 Civic Street	1955	30	2014	\$ 12,953.50	\$ -	\$ 12,953.50	\$ 12,953.50	\$ -	\$ 150,000.00	poor	5	\$20,000 being spent 2013. Future upgrades exterior masonry, flashing, base board heating, HRV.
B029	Firehall Killaloe	Protection Services	Buildings	Garages	Killaloe	7 Civic Street	1991	15	2014	\$ 10,636.83	\$ -	\$ 10,636.83	\$ 10,636.83	\$ -	\$ -	poor	5	
B029	Firehall Killaloe	Protection Services	Buildings	Garages	Killaloe	7 Civic Street	1995	11	2014	\$ 41,978.47	\$ -	\$ 41,978.47	\$ 41,978.47	\$ -	\$ -	poor	5	
B008A	Round Lake Recreation Centre Clubhouse	Recreation Services	Buildings	Park Buildings	Hagarty	545 Albert St.	2002	20	2023	\$ 60,000.00	\$ -	\$ 60,000.00	\$ 30,000.00	\$ 30,000.00	\$ 100,000.00	good	3	Upgrades to mechanical, general requirements.
B008B	Round Lake Recreation Centre Rink Clubhouse	Recreation Services	Buildings	Park Buildings	Hagarty	545 Albert St.	2003	20	2023	\$ 62,352.01	\$ -	\$ 62,352.01	\$ 28,058.40	\$ 34,293.61	\$ -	good	4	
B008B	Round Lake Recreation Centre Rink Clubhouse	Recreation Services	Buildings	Park Buildings	Hagarty	545 Albert St.	2004	19	2023	\$ 10,320.00	\$ -	\$ 10,320.00	\$ 4,345.28	\$ 5,974.72	\$ -	good	4	
B020	Tourist Information Booth Public Washrooms Emerson Lepine Memorial	Recreation Services	Buildings	Park Buildings	Killaloe	177 Queen St.	1998	15	2023	\$ 12,380.18	\$ -	\$ 12,380.18	\$ 11,554.90	\$ 825.28	\$ 10,000.00	good	4	General Upgrade
B020	Tourist Information Booth Public Washrooms Emerson Lepine Memorial	Recreation Services	Buildings	Park Buildings	Killaloe	177 Queen St.	1999	15	2023	\$ 7,103.21	\$ -	\$ 7,103.21	\$ 6,534.95	\$ 568.26	\$ -	good	4	
TBD	Killaloe and District Public Library	Recreation Services	Buildings	Library	Killaloe	177 Queen St.	n/a	30	2013	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000.00	poor	4	Special Project - Work in Progress
B023	Killaloe Rink and Skateboard Park (Recreational Centre)	Recreation Services	Buildings	Park Buildings	Killaloe	28 Cameron St.	1969	3	2023	\$ 12,429.18	\$ -	\$ 12,429.18	\$ 12,429.18	\$ -	\$ 150,000.00	fair	3	Major upgrade including structural reconstruction of west garage wall, mechanical, electrical, roof.
B023	Killaloe Rink and Skateboard Park (Rink)	Recreation Services	Buildings	Park Buildings	Killaloe	29 Cameron St.	2010	8	2023	\$ 77,971.15	\$ 91,396.61	\$ 169,367.76	\$ 100,820.30	\$ 68,547.46	\$ 20,000.00	good	3	General Upgrade for maintenance
B033A	Hoch Park Farmhouse	Recreation Services	Buildings	Park Buildings	Killaloe	86 Queen St.	2005	19	2013	\$ 26,234.81	\$ -	\$ 26,234.81	\$ 9,665.46	\$ 16,569.35	\$ -	poor	2	Close to all access.
B033A	Hoch Park Farmhouse	Recreation Services	Buildings	Park Buildings	Killaloe	86 Queen St.	2007	17	2013	\$ 29,680.64	\$ -	\$ 29,680.64	\$ 8,729.60	\$ 20,951.04	\$ -	poor	2	
B033B	Hoch Park Barn	Recreation Services	Buildings	Park Buildings	Killaloe	68 Queen Street	1999	25	2014	\$ 26,149.34	\$ -	\$ 26,149.34	\$ 13,597.61	\$ 12,551.73	\$ 25,000.00	fair	4	General Upgrade (No public access)
B006A	Municipal Garage	Transportation Services	Buildings	Garages	Hagarty	16370 Hwy 60	1961	15	2023	\$ 44,289.47	\$ -	\$ 44,289.47	\$ 44,289.47	\$ -	\$ 50,000.00	fair	4	General Upgrade for operations.
B006B	Quonset Hut	Transportation Services	Buildings	Garages	Hagarty	16370 Hwy 60	1976	15	2018	\$ 11,148.72	\$ -	\$ 11,148.72	\$ 11,148.72	\$ -	\$ 75,000.00	poor	3	Replacement.
B006C	Steel Salt Shed	Transportation Services	Buildings	Garages	Hagarty	16370 Hwy 60	1993	15	2018	\$ 9,722.93	\$ -	\$ 9,722.93	\$ 9,722.93	\$ -	\$ 40,000.00	fair	4	Replacement.
B015A	Station Park Gazebo	Recreation Services	Buildings	Park Buildings	Killaloe	102 Queen St.	2000	15	2023	\$ 3,434.17	\$ -	\$ 3,434.17	\$ 2,747.28	\$ 686.89	\$ 5,000.00	good	3	General Upgrade
B015B	Station Park Covered Bridge	Recreation Services	Buildings	Park Buildings	Killaloe	102 Queen St.	1995	15	2023	\$ 9,513.75	\$ -	\$ 9,513.75	\$ 9,513.75	\$ -	\$ 40,000.00	fair	3	General Upgrade
LI013A	Sheryl Boyle Park Land Improvements	Recreation Services	Land Improvements	Landscaping	Hagarty	3 Deer Trail Road	1992	10	2002	\$ 24,647.31	\$ -	\$ 24,647.31	\$ 24,647.31	\$ -	\$ 30,000.00	fair	3	
LI015A	Station Park Landscaping and Parking Lot	Recreation Services	Land Improvements	Landscaping	Killaloe	McCarthys Lane	1999	10	2019	\$ 144,484.23	\$ -	\$ 144,484.23	\$ 144,484.23	\$ -	\$ 150,000.00	fair	3	
LI023A	Killaloe Rink and Skateboard Park (Rink)	Recreation Services	Land Improvements	Rink Surface	Killaloe	28 Cameron St.	2007	10	2023	\$ 28,250.00	\$ -	\$ 28,250.00	\$ 14,125.00	\$ 14,125.00	\$ -	fair	3	
L004	Red Rock Corridor Part 1	Other	Vacant Land	Vacant Land	Richards	n/a	1980	-	-	\$ 1.00	\$ -	\$ 1.00	\$ -	\$ 1.00	\$ -	good	1	Unopened Road - Requires Development
L005	Red Rock Corridor Part 2	Other	Vacant Land	Vacant Land	Richards	n/a	1980	-	-	\$ 1.00	\$ -	\$ 1.00	\$ -	\$ 1.00	\$ -	good	1	Unopened Road - Requires Development

Notes:

1. Tangible Capital Assets, Amortization Check (2012).
2. Geographical Township established from Township of Killaloe, Hagarty, & Richards Road Names (2001).
3. From information supplied by Township of Killaloe, Hagarty, Richards.
4. Based on structural and mechanical inspection completed by Greenview Environmental Management Limited (August 2013).
5. Total Cost of Surface/Base equals sum of Cost of Surface When Laid/Estimated Original Base, and Additions.
6. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Items



**Table 3e**  
**Detailed Summary of Municipal Assets - Vehicles and Equipment**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Capital Cost <sup>1</sup> (2007)	Additions (2008 to 2012) <sup>1</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1</sup>	Net Book Value (2012) <sup>1</sup>	Replacement Cost <sup>2</sup>	Condition (good / fair / poor) <sup>2</sup>	Level of Service (1 to 5) <sup>3,4</sup>	Comments
V-T02	2008 Ford 4x4 SRW 3/4 Ton Truck 02 Road Supervisors Truck with Snow plow	Building Department	Vehicles	Trucks - Medium Duty	2007	7	2014	\$ 32,436.44	\$ -	\$ 32,436.44	\$ 23,168.90	\$ 9,267.54	\$ 40,000.00	good	3	
V-D01	2001 John Deere 700H Dozer used 2004	Environmental Services	Vehicles	Off Road - Heavy	2004	15	2019	\$ 111,240.00	\$ -	\$ 111,240.00	\$ 59,328.00	\$ 51,912.00	\$ 200,000.00	good	3	
V-W03	1996 Western Star Model CNV 3 axle Diesel Garbage Truck used 2007	Environmental Services	Vehicles	Trucks - Heavy Duty	2007	10	2017	\$ 25,711.68	\$ -	\$ 25,711.68	\$ 12,855.85	\$ 12,855.83	\$ 200,000.00	fair	4	
E-AdmComputers	Admin Computers and Software	General Government	Equipment	Computers & Software	2009	5	2014	\$ 36,108.05	\$ -	\$ 36,108.05	\$ 28,886.44	\$ 7,221.61	\$ 2,000.00	good	3	
E-AdmCopier	Admin Photocopier	General Government	Equipment	Equipment	2009	5	2014	\$ 8,634.60	\$ -	\$ 8,634.60	\$ 5,180.76	\$ 3,453.84	\$ 15,000.00	fair	4	
-	Generator - Municipality Office	General Government	Equipment	Equipment	1999	20	2019	\$ 2,650.00	\$ -	\$ -	\$ -	\$ -	\$ 20,000.00	good	5	
-	Generator - Roads	General Government	Equipment	Equipment	1999	20	2019	\$ 2,650.00	\$ -	\$ -	\$ -	\$ -	\$ -	good	2	
-	Killaloe Fire Hall - Generator	Protection Services	Equipment	Equipment	1999	20	2019	\$ 22,470.00	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00	good	5	
-	Round Lake Fire Hall - Generator	Protection Services	Equipment	Equipment	2013	20	2033	\$ 7,000.00	\$ -	\$ -	\$ -	\$ -	\$ 9,000.00	good	5	
-	Radio and Repeater	Protection Services	Equipment	Equipment	1999	10	2009	\$ 6,036.22	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00	fair	5	
-	Generator - Portable Fire	Protection Services	Equipment	Equipment	1999	20	2019	\$ 2,650.00	\$ -	\$ -	\$ -	\$ -	\$ -	good	2	
E-Prot2006	Bunker Gear (X 10 units)	Protection Services	Equipment	Pooled Equipment	2006	10	2016	\$ 14,752.00	\$ -	\$ 14,752.00	\$ -	\$ -	\$ 16,000.00	good	5	
E-Prot2007	Bunker Gear (X 9 units)	Protection Services	Equipment	Pooled Equipment	2007	10	2017	\$ 13,280.00	\$ -	\$ -	\$ -	\$ -	\$ 144,000.00	good	5	
E-Prot2012	2012 Compressor and Filling Station	Protection Services	Equipment	Compressor & Filling station	2012	30	2042	\$ 12,211.22	\$ -	\$ 12,211.22	\$ -	\$ 12,211.22	\$ 60,000.00	good	5	
VF3	1986 Ford Fire Pumper used 1995	Protection Services	Vehicles	Fire Trucks	1995	20	2015	\$ 100,000.00	\$ -	\$ 100,000.00	\$ 85,000.00	\$ 15,000.00	\$ 250,000.00	fair	5	
VF4	1993 International 40S Fire Triple Combination Pumper and Tanker	Protection Services	Vehicles	Fire Trucks	1993	20	2013	\$ 172,118.75	\$ -	\$ 172,118.75	\$ 163,512.86	\$ 8,605.89	\$ 250,000.00	fair	5	
VF5	1999 Ford CTV F450 Rescue Van used 2003	Protection Services	Vehicles	Fire - Light	2003	10	2013	\$ 124,607.90	\$ -	\$ 124,607.90	\$ 112,147.11	\$ 12,460.79	\$ 110,000.00	fair	5	
VF6	2007 International Fire Tanker - Truck	Protection Services	Vehicles	Fire Trucks	2007	20	2027	\$ 159,594.00	\$ -	\$ 159,594.00	\$ 39,898.50	\$ 119,695.50	\$ 250,000.00	good	5	
VF6	2007 International Fire Tanker - Pump	Protection Services	Vehicles	Pump	2011	15	2026	\$ 14,246.41	\$ -	\$ 14,246.41	\$ 949.76	\$ 13,296.65	\$ -	good	5	
VJ7	2011 Ford Rapid Response Vehicle	Protection Services	Vehicles	Fire Trucks	2011	20	2031	\$ 100,897.49	\$ 100,897.49	\$ 201,794.98	\$ 5,044.87	\$ 95,852.62	\$ 110,000.00	good	5	
E-R1	Gardner Denver 150 Compressor used 1983	Transportation Services	Equipment	Tools	1983	10	1993	\$ 5,500.00	\$ -	\$ 5,500.00	\$ 5,500.00	\$ -	\$ -	fair	1	
E-R6	2008 Snowblower Attachment Trackless 51 inch	Transportation Services	Equipment	Attachments	2008	7	2015	\$ 9,369.00	\$ -	\$ 9,369.00	\$ -	\$ -	\$ 8,000.00	fair	4	
E-R7	2008 Tanks for Dust Control	Transportation Services	Equipment	Attachments	2008	10	2018	\$ 10,673.08	\$ -	\$ 10,673.08	\$ 4,269.23	\$ 6,403.85	\$ 15,000.00	fair	3	
E-R8	2009 Back Blade Installed on V-T1 Truck 1	Transportation Services	Equipment	Attachments	2009	7	2016	\$ 12,981.00	\$ -	\$ 12,981.00	\$ 5,563.29	\$ 7,417.71	\$ 15,000.00	good	5	
E-TA	1989 Tag-a-long Trailer	Transportation Services	Equipment	Trailers	1989	10	1999	\$ 15,762.60	\$ -	\$ 15,762.60	\$ 15,762.60	\$ -	\$ 20,000.00	fair	2	
E-TC	2004 Recycling Trailer	Transportation Services	Equipment	Trailers	2004	10	2014	\$ 5,531.62	\$ -	\$ 5,531.62	\$ 4,425.28	\$ 1,106.34	\$ 6,000.00	good	4	
V-B01	2001 John Deere 310SG Tractor Backhoe used 2007	Transportation Services	Vehicles	Off Road - Medium	2007	12	2019	\$ 48,600.00	\$ -	\$ 48,600.00	\$ 20,250.00	\$ 28,350.00	\$ 90,000.00	fair	3	
V-E01	2003 DAI-WOO SOLAR 170W-III Excavator with Brushing Attachment	Transportation Services	Vehicles	Off Road - Heavy	2003	15	2018	\$ 55,056.09	\$ -	\$ 55,056.09	\$ 33,033.69	\$ 22,022.40	\$ 150,000.00	fair	2	
V-E01	2003 DAI-WOO SOLAR 170W-III Excavator with Brushing Attachment	Transportation Services	Vehicles	Off Road - Heavy	2008	15	2023	\$ -	\$ 12,500.00	\$ 12,500.00	\$ 5,000.00	\$ 7,500.00	\$ 30,000.00	fair	2	
V-G03	Roanoke Roberts brush cutter mounted on 440 Adams Grader used 1992	Transportation Services	Vehicles	Off Road - Heavy	1992	15	2007	\$ 20,000.00	\$ -	\$ 20,000.00	\$ 20,000.00	\$ -	\$ -	poor	1	
V-G06	1999 Champion 740A-VHP Motor Grader	Transportation Services	Vehicles	Off Road - Heavy	1999	15	2014	\$ 240,648.43	\$ -	\$ 240,648.43	\$ 208,561.99	\$ 32,086.44	\$ 250,000.00	fair	4	
V-L02	1989 John Deere Model 544E Front End Loader	Transportation Services	Vehicles	Off Road - Heavy	1989	12	2001	\$ 60,188.40	\$ -	\$ 60,188.40	\$ 60,188.40	\$ -	\$ 120,000.00	fair	2	
V-S02	1992 Trackless MTS Tractor Sidewalk Plow with sweeper used 2005	Transportation Services	Vehicles	Off Road - Light	2005	10	2015	\$ 18,360.00	\$ -	\$ 18,360.00	\$ 12,852.00	\$ 5,508.00	\$ 70,000.00	poor	4	
V-S03	2000 Elgin Pelican Sweeper used 2008	Transportation Services	Vehicles	Trucks - Heavy Duty	2008	8	2016	\$ 48,600.00	\$ -	\$ 48,600.00	\$ 24,300.00	\$ 24,300.00	\$ 120,000.00	fair	2	
V-T11	2010 Ford 1/2 ton with snow plow	Transportation Services	Vehicles	Trucks - Medium Duty	2010	7	2017	\$ 35,763.54	\$ -	\$ 35,763.54	\$ 10,218.15	\$ 25,545.39	\$ 40,000.00	good	4	
V-T11	Fisher Plow - for 2010 Ford 1/2 ton	Transportation Services	Vehicles	Fisher Plow	2011	6	2017	\$ -	\$ 5,393.28	\$ 5,393.28	\$ 898.88	\$ 4,494.40	\$ 6,000.00	good	3	
V-T1	2006 International 7600 SBA 6X4	Transportation Services	Vehicles	Trucks - Heavy Duty	2006	10	2016	\$ 192,340.00	\$ -	\$ 192,340.00	\$ 115,404.00	\$ 76,936.00	\$ 220,000.00	fair	4	
V-T10	2009 Chevrolet Silverado 4x4 half ton Silver	Transportation Services	Vehicles	Trucks - Light Duty	2009	5	2014	\$ 23,497.32	\$ -	\$ 23,497.32	\$ 14,098.39	\$ 9,398.93	\$ 30,000.00	fair	4	
V-T3	2006 International 7600 SBA 6X4 Buyout Lease 2009	Transportation Services	Vehicles	Trucks - Heavy Duty	2009	7	2016	\$ -	\$ 19,278.00	\$ 19,278.00	\$ 8,262.00	\$ 11,016.00	\$ -	-	-	
V-T3	Back Blade for 2006 International 7600 SBA 6X4 Buyout Lease 2009 (V-T1)	Transportation Services	Vehicles	Back Blade	2011	5	2016	\$ 13,718.82	\$ -	\$ 13,718.82	\$ 2,743.76	\$ 10,975.06	\$ 15,000.00	good	4	
V-T5	1995 International Plow Truck	Transportation Services	Vehicles	Trucks - Heavy Duty	1995	10	2005	\$ 125,478.64	\$ -	\$ 125,478.64	\$ 125,478.64	\$ -	\$ -	fair	2	
V-T8	2009 International Tandem Plow Truck	Transportation Services	Vehicles	Trucks - Heavy Duty	2009	10	2019	\$ 193,974.04	\$ -	\$ 193,974.04	\$ 58,192.21	\$ 135,781.83	\$ 220,000.00	good	4	
V-T9	1995 GMC 4x4 SIE 1500 half ton GRN used 2004	Transportation Services	Vehicles	Trucks - Light Duty	2004	5	2009	\$ 9,435.02	\$ -	\$ 9,435.02	\$ 9,435.02	\$ -	\$ -	poor	1	
V-T12	Ford 250 4X4 - 3/4 ton	Transportation Services	Vehicles	Trucks - Light Duty	2012	7	2019	\$ 4,038.00	\$ -	\$ 4,038.00	\$ -	\$ 34,601.00	\$ 40,000.00	good	4	

Notes:  
 1. Tangible Capital Assets, Amortization Check (2012).  
 2. From information supplied by Township of Killaloe, Hagarty, and Richards.  
 3. Total Cost of Surface/Base equals sum of Cost of Surface When Laid/Estimated Original Base, and Additions.  
 4. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Items



Table 3f  
 Detailed Summary of Municipal Assets - Solid Waste  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Geographic Township <sup>1</sup>	Address and/or Location (if applicable) <sup>2</sup>	Remaining Capacity (m <sup>3</sup> ) <sup>2</sup>	Year in Service (years) <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year <sup>2</sup>	Last Topographical Survey <sup>2</sup>	Capital Cost <sup>1</sup> (2007)	Additions (2008 to 2012) <sup>1</sup>	Total Cost	Accumulated Amortization (2012) <sup>1</sup>	Net Book Value (2012) <sup>1</sup>	Replacement Cost	Condition (good / fair / poor)	Level of Service (1 to 5) <sup>2</sup>	Comments
E-W1	1993 Recycling Bin, 46 Cu Yd	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	1993	10	2003	-	\$ 6,595.56	\$ -	\$ 6,595.56	\$ 6,595.56	\$ -	\$ 10,000	good	4	
E-W2	1995 Waste Site Cardboard Compactor	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	1995	10	2005	-	\$ 28,807.50	\$ -	\$ 28,807.50	\$ 28,807.50	\$ -	\$ 60,000	fair	4	
E-W3	2001 Cart, Recycling, 360L (95 Gal) Qty 82	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	2001	10	2011	-	\$ 8,645.26	\$ -	\$ 8,645.26	\$ 8,645.26	\$ -	\$ -	good	4	
E-W4	2006 Recycling Bin, 46 Cu Yd	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	2006	10	2016	-	\$ 8,480.00	\$ -	\$ 8,480.00	\$ 5,088.00	\$ 3,392.00	\$ 10,000	good	4	
E-W5	2008 Precast Concrete Barriers	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	2008	10	2018	-	\$ 6,636.00	\$ -	\$ 6,636.00	\$ -	\$ -	\$ 10,000	good	2	
E-W6	2008 Killaloe Waste Site Attendants Shelter	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	2008	10	2018	-	\$ 7,723.00	\$ -	\$ 7,723.00	\$ -	\$ -	\$ 9,000	good	3	
E-W7	2008 Killaloe Waste Site MOLOK Organics Equipment	Environmental Services	Equipment	Equipment	Hagarty	Killaloe WDS	-	2008	10	2018	-	\$ 9,302.15	\$ -	\$ 9,302.15	\$ -	\$ -	\$ 12,000	good	3	
-	Round Lake WDS	Environmental Services	WDS	Waste Disposal Site	Richards	168 Sunrise Road	n/a	1967	0	1967	2012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	good	4	
-	Killaloe WDS	Environmental Services	WDS	Waste Disposal Site	Hagarty	1049 Mask Road	1355	1970	2.6	2015	2013	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	good	5	
-	Red Rock WDS	Environmental Services	WDS	Waste Disposal Site	Richards	Beechnut Lake Road - Part Lot 11 Conc. 7	7550	1979	10	2021	2011	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	good	3	
-	Closure Cost - Round Lake WDS	Environmental Services	WDS	Waste Disposal Site	Richards	168 Sunrise Road	n/a	1967	6	2018	2012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 149,000	good	4	
-	Closure Cost - Killaloe WDS	Environmental Services	WDS	Waste Disposal Site	Hagarty	1049 Mask Road	1355	1970	2	2015	2013	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 185,000	good	4	
-	Closure Cost - Red Rock WDS	Environmental Services	WDS	Waste Disposal Site	Richards	Beechnut Lake Road - Part Lot 11 Conc. 7	7550	1979	7	2020	2011	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 134,000	good	3	

Notes:  
 1. Tangible Capital Assets, Amortization Check (2012).  
 2. Geographical Township established from Township of Killaloe, Hagarty, & Richards Road Names (2001).  
 3. Township of Killaloe - Hagarty - Richards, Annual Monitoring Reports (2013).  
 4. From information supplied by Township of Killaloe, Hagarty, and Richards.  
 5. Total Cost of Surface/Base equals sum of Cost of Surface When Laid/Estimated Original Base, and Additions.  
 6. From information supplied by Township of Killaloe, Hagarty, and Richards and/or Greenview Environmental Management Limited.  
 7. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Items



**Table 3g**  
**Detailed Summary of Municipal Assets - Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1,2</sup>	Asset Name <sup>1,2</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1,2</sup>	Detailed Assets Description <sup>1,2</sup>	Geographic Location <sup>1,2</sup>	Location (Zone)	GPS Location (Northing Coordinate) <sup>1,2</sup>	GPS Location (Easting Coordinate) <sup>1,2</sup>	Year In Service (years) <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Capital Cost (2007) <sup>1,2</sup>	Additions (2008 to 2012) <sup>1,2</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
I_SLights	Infrastructure Street Lights	SL028	Transportation Services	Linear Assets	n/a	18T	n/a	n/a	1988	20	2008	\$ 50,039.78	\$ -	\$ 50,039.78	\$ 50,039.78	\$ -	-	good	3	Tangible Capital Assets, Amortization Check (2012).
BO1110	Round Lake Rd	SL001	Transportation	Street Light	Bonnechere	18T	5057844	299308	1994	15	2009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1120	Bear Trail Rd	SL002X	Transportation	Street Light	Bonnechere	18T	5056846	299326		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1130	Oak Avenue	SL003X	Transportation	Street Light	Bonnechere	18T	5054785	301761		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1140	Round Lake Rd	SL004X	Transportation	Street Light	Bonnechere	18T	5054625	301824		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
TU1SL033	Turners Rd	SL033	Transportation	Street Light	Bonnechere	18T	5059431	298958		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
AN1SL01	Annie Street	5.00	Transportation	Street Light	Killaloe	18T	5046928	311410		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
AN1SL02	Annie Street	22.00	Transportation	Street Light	Killaloe	18T	5046947	311466		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
AN1SL03	Annie Street	28.00	Transportation	Street Light	Killaloe	18T	5046962	311521		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
AN1SL04	Annie Street	10.00	Transportation	Street Light	Killaloe	18T	5046981	311584		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
AN1SL05	Annie Street	2.00	Transportation	Street Light	Killaloe	18T	5047009	311648		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1SL01	Boland Street	6.020	Transportation	Street Light	Killaloe	18T	5047597	311223		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1SL02	Boland Street	11.00	Transportation	Street Light	Killaloe	18T	5047569	311192		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1SL03	Boland Street	21	Transportation	Street Light	Killaloe	18T	5047515	311134		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1SL04	Boland Street	25	Transportation	Street Light	Killaloe	18T	5047401	311039		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BO1SL05	Boland Street		Transportation	Street Light	Killaloe	18T	5047425	310957		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL01	Cameron Street		Transportation	Street Light	Killaloe	18T	5047951	311369		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL02	Cameron Street		Transportation	Street Light	Killaloe	18T	5047892	311387		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL03	Cameron Street		Transportation	Street Light	Killaloe	18T	5047787	311424		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL04	Cameron Street	6042	Transportation	Street Light	Killaloe	18T	5047739	311443		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL05	Cameron Street		Transportation	Street Light	Killaloe	18T	5047690	311461		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL06	Cameron Street		Transportation	Street Light	Killaloe	18T	5047625	311475		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL07	Cameron Street	6	Transportation	Street Light	Killaloe	18T	5047576	311488		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CA1SL08	Cameron Street		Transportation	Street Light	Killaloe	18T	5047523	311522		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CI1SL01	Civic Street	3	Transportation	Street Light	Killaloe	18T	5047305	311266		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CI1SL02	Civic Street	6005	Transportation	Street Light	Killaloe	18T	5047311	311204		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CI1SL03	Civic Street		Transportation	Street Light	Killaloe	18T	5047314	311168		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CI1SL04	Civic Street		Transportation	Street Light	Killaloe	18T	5047244	311186		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CI1SL05	Civic Street		Transportation	Street Light	Killaloe	18T	5047210	311118		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CO1SL01	Coil Street		Transportation	Street Light	Killaloe	18T	5047525	311297		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CO1SL02	Coil Street	7	Transportation	Street Light	Killaloe	18T	5047496	311264		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CO1SL03	Coil Street	15	Transportation	Street Light	Killaloe	18T	5047440	311200		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CO1SL04	Coil Street	21	Transportation	Street Light	Killaloe	18T	5047401	311159		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
EL1SL01	Elm Street		Transportation	Street Light	Killaloe	18T	5048004	311562		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
EL1SL02	Elm Street		Transportation	Street Light	Killaloe	18T	5048092	311533		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL01	Henry Street	20	Transportation	Street Light	Killaloe	18T	5047794	311477		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL02	Henry Street	53	Transportation	Street Light	Killaloe	18T	5047815	311535		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL03	Henry Street	43	Transportation	Street Light	Killaloe	18T	5047854	311603		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL04	Henry Street	65	Transportation	Street Light	Killaloe	18T	5047934	311683		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL05	Henry Street		Transportation	Street Light	Killaloe	18T	5047977	311679		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL06	Henry Street		Transportation	Street Light	Killaloe	18T	5048070	311648		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL07	Henry Street		Transportation	Street Light	Killaloe	18T	5048143	311622		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HE1SL08	Henry Street		Transportation	Street Light	Killaloe	18T	5048219	311591		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HW1SL01	Highway 60		Transportation	Street Light	Killaloe	18T	5047253	310650		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JA1SL01	James Street	6010	Transportation	Street Light	Killaloe	18T	5047072	311530		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JA1SL02	James Street		Transportation	Street Light	Killaloe	18T	5047101	311603		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JA1SL03	James Street	22	Transportation	Street Light	Killaloe	18T	5047114	311641		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JA1SL04	James Street	8	Transportation	Street Light	Killaloe	18T	5047054	311465		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	



**Table 3g**  
**Detailed Summary of Municipal Assets - Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1,2</sup>	Asset Name <sup>1,2</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1,2</sup>	Detailed Assets Description <sup>1,2</sup>	Geographic Location <sup>1,2</sup>	Location (Zone)	GPS Location (Northing Coordinate) <sup>1,2</sup>	GPS Location (Easting Coordinate) <sup>1,2</sup>	Year In Service (years) <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Capital Cost (2007) <sup>1,2</sup>	Additions (2008 to 2012) <sup>1,2</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
JA1SL05	James Street	5	Transportation	Street Light	Killaloe	18T	5047036	311410		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JO1SL01	John Street		Transportation	Street Light	Killaloe	18T	5047596	311292		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JO1SL02	John Street		Transportation	Street Light	Killaloe	18T	5047623	311260		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
JO1SL03	John Street	48	Transportation	Street Light	Killaloe	18T	5047749	311141		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
KE1SL01	Keetch Street	4	Transportation	Street Light	Killaloe	18T	5048397	311274		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
KE1SL02	Keetch Street		Transportation	Street Light	Killaloe	18T	5048418	311337		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
KI1SL01	King Street	4	Transportation	Street Light	Killaloe	18T	5047271	311523		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
KI1SL02	King Street	15	Transportation	Street Light	Killaloe	18T	5047228	311559		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
KI1SL03	King Street		Transportation	Yard Light	Killaloe	18T	5047166	311575		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL01	Lake Street		Transportation	Yard Light	Killaloe	18T	5047386	311500		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL02	Lake Street	6044	Transportation	Yard Light	Killaloe	18T	5047407	311514		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL03	Lake Street		Transportation	Yard Light	Killaloe	18T	5047449	311539		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL04	Lake Street	24	Transportation	Yard Light	Killaloe	18T	5047492	311562		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL05	Lake Street	30	Transportation	Yard Light	Killaloe	18T	5047525	311583		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL06	Lisk Street		Transportation	Street Light	Killaloe	18T	5047896	311498		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA1SL07	Lisk Street		Transportation	Street Light	Killaloe	18T	5047932	311486		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MA1SL01	Maple Street		Transportation	Street Light	Killaloe	18T	5047651	310799		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MC1SL01	McCarthy Lane	171R2	Transportation	Street Light	Killaloe	18T	5047336	311432		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MC1SL02	McCarthy Lane	171R3	Transportation	Street Light	Killaloe	18T	5047327	311412		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
ME1SL01	Meadow Drive	3	Transportation	Street Light	Killaloe	18T	5048155	311365		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
ME1SL02	Meadow Drive	9	Transportation	Street Light	Killaloe	18T	5048173	311419		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
ME1SL03	Meadow Drive		Transportation	Street Light	Killaloe	18T	5048195	311504		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL01	Mill Street		Transportation	Street Light	Killaloe	18T	5047409	311395		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL02	Mill Street		Transportation	Street Light	Killaloe	18T	5047356	311346		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL03	Mill Street		Transportation	Street Light	Killaloe	18T	5047291	311313		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL04	Mill Street		Transportation	Street Light	Killaloe	18T	5047223	311313		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL05	Mill Street	37	Transportation	Street Light	Killaloe	18T	5047182	311305		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL06	Mill Street	43	Transportation	Street Light	Killaloe	18T	5047102	311287		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL07	Mill Street	45	Transportation	Street Light	Killaloe	18T	5047055	311272		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL08	Mill Street	51	Transportation	Street Light	Killaloe	18T	5047017	311243		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL09	Mill Street	61	Transportation	Street Light	Killaloe	18T	5046999	311214		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL10	Mill Street	16	Transportation	Street Light	Killaloe	18T	5046967	311108		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL11	Mill Street	20	Transportation	Street Light	Killaloe	18T	5046938	311012		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL12	Mill Street	92	Transportation	Street Light	Killaloe	18T	5046901	310938		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL13	Mill Street	96	Transportation	Street Light	Killaloe	18T	5046838	310836		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL14	Mill Street		Transportation	Street Light	Killaloe	18T	5046799	310730		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL15	Mill Street		Transportation	Street Light	Killaloe	18T	5046758	310613		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL16	Mill Street		Transportation	Street Light	Killaloe	18T	5046735	310547		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL17	Mill Street		Transportation	Street Light	Killaloe	18T	5046712	310482		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL18	Mill Street		Transportation	Street Light	Killaloe	18T	5046689	310417		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL19	Mill Street		Transportation	Street Light	Killaloe	18T	5046700	310369		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MI1SL20	Mill Street	31	Transportation	Street Light	Killaloe	18T	5047190	311269		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
NO1SL01	North Street		Transportation	Street Light	Killaloe	18T	5047520	311429		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
NO1SL02	North Street	20	Transportation	Street Light	Killaloe	18T	5047443	311351		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
NO1SL03	North Street	28	Transportation	Street Light	Killaloe	18T	5047388	311293		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL01	Queen Street	63	Transportation	Street Light	Killaloe	18T	5048603	311137		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL02	Queen Street	67	Transportation	Street Light	Killaloe	18T	5048572	311153		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL03	Queen Street	69	Transportation	Street Light	Killaloe	18T	5048529	311167		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	



**Table 3g**  
**Detailed Summary of Municipal Assets - Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1,2</sup>	Asset Name <sup>1,2</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1,2</sup>	Detailed Assets Description <sup>1,2</sup>	Geographic Location <sup>1,2</sup>	Location (Zone)	GPS Location (Northing Coordinate) <sup>1,2</sup>	GPS Location (Easting Coordinate) <sup>1,2</sup>	Year In Service (years) <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Capital Cost (2007) <sup>1,2</sup>	Additions (2008 to 2012) <sup>1,2</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
QU1SL04	Queen Street	73	Transportation	Street Light	Killaloe	18T	5048489	311180		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL05	Queen Street	75-1	Transportation	Street Light	Killaloe	18T	5048448	311194		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL06	Queen Street	75	Transportation	Street Light	Killaloe	18T	5048412	311206		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL07	Queen Street	81	Transportation	Street Light	Killaloe	18T	5048371	311221		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL08	Queen Street	85	Transportation	Street Light	Killaloe	18T	5048324	311237		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL09	Queen Street	85-1	Transportation	Street Light	Killaloe	18T	5048285	311251		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL10	Queen Street	87	Transportation	Street Light	Killaloe	18T	5048243	311266		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL11	Queen Street	91	Transportation	Street Light	Killaloe	18T	5048193	311284		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL12	Queen Street		Transportation	Street Light	Killaloe	18T	5048150	311299		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL13	Queen Street	99	Transportation	Street Light	Killaloe	18T	5048100	311316		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL14	Queen Street	105	Transportation	Street Light	Killaloe	18T	5048047	311334		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL15	Queen Street	62	Transportation	Street Light	Killaloe	18T	5048024	311338		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL16	Queen Street	109	Transportation	Street Light	Killaloe	18T	5047995	311336		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL17	Queen Street		Transportation	Street Light	Killaloe	18T	5047921	311325		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL18	Queen Street		Transportation	Street Light	Killaloe	18T	5047873	311320	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL19	Queen Street		Transportation	Street Light	Killaloe	18T	5047821	311315	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL20	Queen Street		Transportation	Street Light	Killaloe	18T	5047777	311311	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL21	Queen Street		Transportation	Street Light	Killaloe	18T	5047718	311304	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL22	Queen Street		Transportation	Street Light	Killaloe	18T	5047666	311298	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL23	Queen Street		Transportation	Street Light	Killaloe	18T	5047630	311294	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL24	Queen Street	1	Transportation	Street Light	Killaloe	18T	5047551	311314	1991	15	2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL25	Queen Street		Transportation	Street Light	Killaloe	18T	5047514	311340		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL26	Queen Street	6008	Transportation	Street Light	Killaloe	18T	5047487	311358		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL27	Queen Street		Transportation	Street Light	Killaloe	18T	5047458	311377		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL28	Queen Street	5	Transportation	Street Light	Killaloe	18T	5047426	311400		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL29	Queen Street		Transportation	Street Light	Killaloe	18T	5047385	311431		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL30	Queen Street	171	Transportation	Street Light	Killaloe	18T	5047362	311461		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL31	Queen Street		Transportation	Street Light	Killaloe	18T	5047339	311486		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL32	Queen Street	171R1	Transportation	Street Light	Killaloe	18T	5047359	311465		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL33	Queen Street	6502	Transportation	Street Light	Killaloe	18T	5047312	311496		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL34	Queen Street	182	Transportation	Street Light	Killaloe	18T	5047278	311494		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL35	Queen Street	6009	Transportation	Street Light	Killaloe	18T	5047229	311490		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL36	Queen Street	188	Transportation	Street Light	Killaloe	18T	5047190	311498		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL37	Queen Street	190	Transportation	Street Light	Killaloe	18T	5047152	311511		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL38	Queen Street	198	Transportation	Street Light	Killaloe	18T	5047115	311525		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL39	Queen Street	208	Transportation	Street Light	Killaloe	18T	5046986	311508		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL40	Queen Street	214	Transportation	Street Light	Killaloe	18T	5046949	311503		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL41	Queen Street	220	Transportation	Street Light	Killaloe	18T	5046886	311506		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL42	Queen Street	228	Transportation	Street Light	Killaloe	18T	5046822	311505		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL43	Queen Street	230	Transportation	Street Light	Killaloe	18T	5046768	311497		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL44	Queen Street	236	Transportation	Street Light	Killaloe	18T	5046728	311487		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL45	Queen Street		Transportation	Street Light	Killaloe	18T	5046656	311471		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL46	Queen Street	248	Transportation	Street Light	Killaloe	18T	5046591	311458		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
QU1SL47	Queen Street	260	Transportation	Street Light	Killaloe	18T	5046482	311466		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RI1SL01	River Street		Transportation	Street Light	Killaloe	18T	5047211	311416		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RI1SL02	River Street	105	Transportation	Street Light	Killaloe	18T	5047167	311406		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL01	Roche Street	1	Transportation	Street Light	Killaloe	18T	5047943	311319		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL02	Roche Street		Transportation	Street Light	Killaloe	18T	5047905	311271		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	



**Table 3g**  
**Detailed Summary of Municipal Assets - Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1,2</sup>	Asset Name <sup>1,2</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1,2</sup>	Detailed Assets Description <sup>1,2</sup>	Geographic Location <sup>1,2</sup>	Location (Zone)	GPS Location (Northing Coordinate) <sup>1,2</sup>	GPS Location (Easting Coordinate) <sup>1,2</sup>	Year In Service (years) <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Capital Cost (2007) <sup>1,2</sup>	Additions (2008 to 2012) <sup>1,2</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
RO1SL03	Roche Street		Transportation	Street Light	Killaloe	18T	5047858	311219		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL04	Roche Street		Transportation	Street Light	Killaloe	18T	5047809	311164		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL05	Roche Street		Transportation	Street Light	Killaloe	18T	5047759	311111		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL06	Roche Street	15	Transportation	Street Light	Killaloe	18T	5047694	311038		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL07	Roche Street		Transportation	Street Light	Killaloe	18T	5047669	311008		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL08	Roche Street	13	Transportation	Street Light	Killaloe	18T	5047645	310985		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL09	Roche Street		Transportation	Street Light	Killaloe	18T	5047576	310908		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL10	Roche Street	10	Transportation	Street Light	Killaloe	18T	5047517	310844		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RY1SL01	Ryan Street		Transportation	Street Light	Killaloe	18T	5047691	311158		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RY1SL02	Ryan Street		Transportation	Street Light	Killaloe	18T	5047693	311193		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RY1SL03	Ryan Street	23	Transportation	Street Light	Killaloe	18T	5047641	310991		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RY1SL04	Ryan Street	31	Transportation	Street Light	Killaloe	18T	5047591	311066		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RY1SL05	Ryan Street	33	Transportation	Street Light	Killaloe	18T	5047559	311033		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
W11SL01	William Street		Transportation	Street Light	Killaloe	18T	5047642	310843		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
W11SL02	William Street	9	Transportation	Street Light	Killaloe	18T	5047719	310872		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
W11SL03	William Street	17	Transportation	Street Light	Killaloe	18T	5047795	310899		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
ZU1SL01	Zummach Drive		Transportation	Street Light	Killaloe	18T	5047058	311684		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
ZU1SL02	Zummach Drive	30	Transportation	Street Light	Killaloe	18T	5047026	311690		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
ZU1SL03	Zummach Drive		Transportation	Street Light	Killaloe	18T	5046982	311710		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
BE1SL02X	Round Lake Rd	SL002	Transportation	Street Light	Round Lake Centre	18T	5054334	303357		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
OA1SL03X	Round Lake Rd	SL003	Transportation	Street Light	Round Lake Centre	18T	5054317	303208		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL04X	Round Lake Rd	SL004	Transportation	Street Light	Round Lake Centre	18T	5054308	303084		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1180	Round Lake Rd	SL005	Transportation	Street Light	Round Lake Centre	18T	5054290	302949		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1210	Round Lake Rd	SL006	Transportation	Street Light	Round Lake Centre	18T	5054280	302834		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1220	Round Lake Rd	SL007	Transportation	Street Light	Round Lake Centre	18T	5054267	302519		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1240	Round Lake Rd	SL008	Transportation	Street Light	Round Lake Centre	18T	5054388	302319		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1250	Round Lake Rd	SL009	Transportation	Street Light	Round Lake Centre	18T	5054484	302184		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1260	Round Lake Rd	SL010	Transportation	Street Light	Round Lake Centre	18T	5054559	302105		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL11	Simpson Pit Rd	SL011	Transportation	Street Light	Round Lake Centre	18T	5054264	302690		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL12	Simpson Pit Rd	SL012	Transportation	Street Light	Round Lake Centre	18T	5054160	302731		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL13	Simpson Pit Rd	SL013	Transportation	Street Light	Round Lake Centre	18T	5054060	302760		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL14	Simpson Pit Rd	SL014	Transportation	Street Light	Round Lake Centre	18T	5053916	302819		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL15	Simpson Pit Rd	SL015	Transportation	Street Light	Round Lake Centre	18T	5053754	302874		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LA2SL29	Lake Street (RL)	SL029	Transportation	Street Light	Round Lake Centre	18T	5054306	302678		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL31	Simpson Pit Rd	SL031	Transportation	Street Light	Round Lake Centre	18T	5053698	302896		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SI2SL32	Round Lake Rd	SL032	Transportation	Street Light	Round Lake Centre	18T	5054425	303718		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
AL1SL34	Albert Street	SL034	Transportation	Street Light	Round Lake Centre	18T	5054207	303572		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
RO1SL36	Round Lake Rd	SL036	Transportation	Street Light	Round Lake Centre	18T	5054325	302408		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
SH1SL16	Shrine Hill Drive	SL016	Transportation	Street Light	Wilno	18T	5043762	302059		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL17	Highway 60	SL017	Transportation	Street Light	Wilno	18T	5043712	301904		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL18	Highway 60	SL018	Transportation	Street Light	Wilno	18T	5043668	301788		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL19	Highway 60	SL019	Transportation	Street Light	Wilno	18T	5043611	301623		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL20	Highway 60	SL020	Transportation	Street Light	Wilno	18T	5043572	301501		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL21	Highway 60	SL021	Transportation	Street Light	Wilno	18T	5043526	301360		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL22	Highway 60	SL022	Transportation	Street Light	Wilno	18T	5043493	301285		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI60SL23	Highway 60	SL023	Transportation	Street Light	Wilno	18T	5043448	301131		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CH1SL24	Church Street	SL024	Transportation	Street Light	Wilno	18T	5043381	301323		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CH1SL25	Church Street	SL025	Transportation	Street Light	Wilno	18T	5043247	301370		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	





**Table 3g**  
**Detailed Summary of Municipal Assets - Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1,2</sup>	Asset Name <sup>1,2</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1,2</sup>	Detailed Assets Description <sup>1,2</sup>	Geographic Location <sup>1,2</sup>	Location (Zone)	GPS Location (Northing Coordinate) <sup>1,2</sup>	GPS Location (Easting Coordinate) <sup>1,2</sup>	Year In Service (years) <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Capital Cost (2007) <sup>1,2</sup>	Additions (2008 to 2012) <sup>1,2</sup>	Total Cost <sup>3</sup>	Accumulated Amortization (2012) <sup>1,2</sup>	Net Book Value (2012) <sup>1,2</sup>	Replacement Cost <sup>4</sup>	Condition (good / fair / poor) <sup>4</sup>	Level of Service (1 to 5) <sup>5</sup>	Comments
CH1SL26	Church Street	SL026	Transportation	Street Light	Wilno	18T	5043125	301408		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CH1SL27	Church Street	SL027	Transportation	Street Light	Wilno	18T	5042998	301449		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
WBSL29	Wilno North Rd	SL028	Transportation	Street Light	Wilno	18T	5043309	300035		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
HI1SL30	Hillcrest Ave	SL030	Transportation	Street Light	Wilno	18T	5043651	302096	1994	15	2009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
CH1SL35	Church Street	SL035	Transportation	Street Light	Wilno	18T	5042882	301488		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
MO1SL01	Mountain View Rd	AJ9 KJC	Transportation	Street Light	Wilno	18T	5043856	308473		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL01	Station Park		Transportation	Street Light	Killaloe Park	18T	5047323	311475		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL02	Station Park		Transportation	Street Light	Killaloe Park	18T	5047334	311464		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL03	Station Park		Transportation	Street Light	Killaloe Park	18T	5047319	311460		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL04	Station Park		Transportation	Street Light	Killaloe Park	18T	5047313	311439		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL05	Station Park		Transportation	Street Light	Killaloe Park	18T	5047304	311417		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL06	Station Park		Transportation	Street Light	Killaloe Park	18T	5047296	311396		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL07	Station Park		Transportation	Street Light	Killaloe Park	18T	5047284	311376		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL08	Station Park		Transportation	Street Light	Killaloe Park	18T	5047271	311355		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA1YL09	Station Park		Transportation	Street Light	Killaloe Park	18T	5047264	311338		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL01	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL02	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL03	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL04	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL05	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL06	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL07	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
PA2YL08	Killaloe Rink		Transportation	Street Light	Killaloe Rink	18T				15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	
LH1SL01	Lions Lane		Transportation	Street Light	Killaloe	18T	5048585	311297		15	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00	good	3	

Notes:  
 1. Streetlight Database (2013).  
 2. Tangible Capital Assets, Amortization Check (2012).  
 3. Total Cost of Surface/Base equals sum of Cost of Surface When Laid/Estimated Original Base, and Additions.  
 4. From information supplied by Township of Killaloe, Hagarty, and Richards.  
 5. Level of Service: 1 = very low priority, 5 = very high priority.

Additional Information Required  
 Selected Focus Items





Table 4a - Roads  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Roads (gravel)	Grading	As required	1x every 4 weeks	Same as current	Same as current	Complete annual internal review of gravel road conditions (good/fair/poor) and update Asset Management Plan. Complete an Road Needs Study to MTO standards once every 5 years. Review road budget on annual basis and increase maintenance budget if possible. Calcium treatment increase to 2x per year, review of operating/maintenance cost were decreased. Review complaints - frequency and magnitude.
	Resurfacing	As required	As required	Same as current	Same as current	
	Calcium Treatment	In Spring	1x per year	As required	2x per year (spring & early summer)	
	Brushing	As required	1x every 3 years	As required	1x every 2 years	
	Ditching	As required	As required	As required	10 days per year	
	Winter Plowing	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	
	Winter Sanding/Salting	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	
	Washout Repairs	As required	As required/ immediately	Same as current	Same as current	
	Shoulder Maintenance	As required	As required	Same as current	Same as current	
Roads (CM/HM/DS)	Sweeping	In Spring	1x per year	Same as current	Same as current	Complete annual internal review of gravel road conditions (good/fair/poor) and update Asset Management Plan. Complete an Road Needs Study to MTO standards once every 5 years. Review road budget on annual basis and increase maintenance budget if possible. Performing maintenance (sealant) activities in advance of ongoing treatment deterioration of road surface concurrent with ditching and shoulder maintenance. Review complaints - frequency and magnitude.
	Patching/Potholes	As required	As required	Same as current	Same as current	
	Shoulder Maintenance	As required	As required	Same as current	Same as current	
	Resurfacing/Sealant	As required	As required	Same as current	Same as current	
	Brushing	As required	1x every 3 years	As required	1x every 2 years	
	Winter Plowing	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	
	Winter Sanding/Salting	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	Per Township Road Class Requirements	
	Ditching	As required	As required	As required	10 days per year	
	Washout Repairs	As required	As required	Same as current	Same as current	



Table 4b - Water Supply  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Building (water supply)	Minor issues	Within 2 days	Within 1 week	Within 2 days	Within 3 days	Perform building reviews in accordance with appropriate legislation.  Perform engineering review of building once every 5 years (ie. Structural / Mechanical).  Operation, maintenance , and replacement of assets related to water supply services in accordance with the following:
	Major issues	Within 4 hours	Within 1 day	Within 4 hours	ASAP	
Process System & Chemical Feed System	Minor issues and Major issues (ie: broken, pump failure, adequate dosage)	Within 1 hour	Within 24 hours	Same as current	Same as current	1. Safe Drinking Water Act (SDWA) 2. Ontario Water Resources Act (OWRA) 3. Health Protection and Promotion Act 4. Procedure for Disinfection of Dinking Water in Ontario 5. Technical Support Document for Ontario Drinking Water Standards, Objective and Guidelines. 6. Environmental Protection Act 7. Any other applicable legislation  Review complaints - frequency and magnitude.
Mechanical & Electrical Systems	Minor issues and Major issues (ie: pump pressure, generator)	Within 1 hours	Within 24 hours	Same as current	Same as current	Review complaints - frequency and magnitude.
Wells, Water Mains, Hydrants, and Service Connection	Minor issues and Major issues (ie: hole in well screen, siltfracation, leaks, breaks, malfunctions)	Assess within 1 hour, switch to backup within 1 hour	Within 24 hours	Same as current	Same as current	
Pumps, Valves, and Related Equipment	Minor issues and Major issues (ie: leaks, breaks, blockages, temperature, malfunctions)	Within 1 hour	Within 24 hours	Same as current	Same as current	



Table 4c - Wastewater  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Waste Water Treatment Building	Minor issues	Within 2 days	Within 1 week	Same as current	Within 3 days	Perform building reviews in accordance with appropriate legislation.  Perform engineering review of building once every 5 years minimum (ie. Structural / Mechanical).  Perform annual visual inspection program for sections of sanitary sewer.  Operation, maintenance, and replacement of assets related to wastewater services in accordance with the following:  1. Environmental Protection Act 2. Ontario water Resources Act 3. Any other relevant legislation  Review complaints - frequency and magnitude.
	Major issues	Within 4 hours	Within 1 day	Same as current	ASAP	
Sanitary Sewers	Minor & Major issues (ie. Breaks, blockages, leaks, malfunctions)					
		Within 1 hour	Within 24 hours	Same as current	Same as current	
Process and Chemical Feed System	Minor & Major issues (ie. Broken chemical line, adequate dosage, pump)					
		Within 1 hour	Within 12 - 24 hours	Same as current	Same as current	
Mechanical & Electrical Systems	Minor & Major issues (ie: pump pressure, generator, etc.)					
		Within 1 hour	Within 12 - 24 hours	Same as current	Same as current	
Service Connections	Minor & Major issues (ie. Breaks, blockages, leaks, malfunctions)					
		Within 24 hours	ASAP	Same as current	Same as current	
Pumps, Valves, and related equipment	Minor & Major issues (ie: leaks, brakes, malfunctions, etc.)					
		Within 1 hour	Within 24 hours	Same as current	Same as current	



Table 4d - Building & Parks  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Building (General Government)	Minor issues	Within 2 days	Within 1 week	Same as current	Within 3 days	Perform detailed building / park inspections minimum once per year.  Perform engineering review minimum once every 5 years (ie. Structural / mechanical, etc.).  Revise "Condition Rating" (good, fair, poor) for buildings and parks Asset Management Plan on annual basis.
	Major issues	Within 4 hours	Within 1 day	Same as current	ASAP	
Building (Protection Services)	Minor issues	Within 2 day	Within 1 week	Same as current	same as current	Review accessibility / safety standards / requirements for building and parks, and annual basis and or as required by related legislation.  Review need to upgrade / update signage at building / parks on annual basis and / or as required.
	Major issues	Within 4 hours	ASAP	Same as current	Immediately	
Building (Recreational Services)	Minor issues	Within 2 days	Within 1 week	Same as current	Within 3 days	Review complaints - frequency and magnitude.
	Major issues	Within 4 hours	Within 1 day	Same as current	ASAP	
Building (Transportation Services)	Minor issues	Within 2 days	Within 1 week	Same as current	Within 3 days	
	Major issues	Within 4 hours	Within 1 day	Same as current	ASAP	
Parks / Land Improvements (Recreational Services)	Minor issues	Within 1 day	Within 1 week	Same as current	Within 3 days	
	Major issues	Within 4 hours	ASAP	Same as current	Same as current	



Table 4e - Vehicles and Equipment  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Vehicles (Transportation)	Minor issues	Within 3 days	Within 1 week	Same as current	Same as current	Circle checks - 1x per day.  Maintenance review - 1x every three months (ie. Oil, filters, tire pressure).  Annual safety inspection - 1x per year.
	Major issues	Immediately	ASAP	Same as current	Same as current	
Vehicles (Environmental)	Minor issues	Within 3 days	Within 1 week	Same as current	Same as current	Seasonal safety inspection / equipment changes (ie. Snow/summer tires, washer fluid).  Revise "Condition Rating" of vehicles and equipment (good, fair, poor) in Asset Management Plans.  On an annual basis, review whether vehicle or equipment assets are meeting current / expected performance and determined whether asset maintenance / upgrades / or replacement are required.
	Major issues	Immediately	ASAP	Same as current	Same as current	
Vehicles (Protection Services)	Minor issues	Within 1 day	Within 1 week	Same as current	Same as current	Review complaints - frequency and magnitude.
	Major issues	Immediately	Immediately	Same as current	Same as current	
Equipment (General Government)	Minor issues	Within 3 days	Within 1 week	Same as current	Same as current	
	Major issues	Within 1 day	ASAP	Same as current	Same as current	
Equipment (Transportation)	Minor issues	Within 1 day	ASAP	Same as current	Same as current	
	Major issues	ASAP	ASAP	Same as current	Same as current	
Equipment (Protection Services)	Minor issues	Within 1 day	ASAP	Same as current	Same as current	
	Major issues	Within 1 day	ASAP	Same as current	Same as current	



Table 4f - Solid Waste  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Waste Disposal Site and Equipment	Noise	Within 24 hours	Within 3 days	Same as current	Same as current	Complete annual capacity survey.  Annual Diversion Review (ie. Waste Diversion Ontario Datacall or equivalent).  Daily / weekly / monthly site inspections(per MOE and Environmental Compliance Approval Requirements).  Annual groundwater / surface water / landfill gas monitoring programs.  Revise " Condition Rating" (good/fair/poor) for assets in Asset Management Plan on annual basis.  Operation, maintenance, and replacement of assets in accordance with:  1. Environmental Protection Act  2. Ontario Water Resources Act
	Spills	ASAP	ASAP	Same as current	Same as current	
	Complaints	Within 24 hours	Within 1 week	Same as current	Same as current	
	Fire	ASAP	ASAP	Same as current	Same as current	
	Environmental	ASAP	ASAP	Same as current	Same as current	
	Dust	Within 24 hours	Within 1 week	Same as current	Same as current	
	Breaks / Malfunctions	Within 1 day	Within 3 days	Same as current	Same as current	
	Maintenance	Within 1 day	Within 1 week	Same as current	Same as current	
	Litter	Within 24 hours	Within 3 days	Same as current	Same as current	



Table 4g - Street Lights  
 Level of Service and Performance Measures  
 Asset Management Plan  
 Township of Killaloe, Hagarty, and Richards  
 107.13.007

Asset Type	Service Issue	Current Level of Service		Desired Level of Service		Performance Measures and Review
		Assess Time	Repair Time	Assess Time	Repair Time	
Street Lights	Does light turn on?	Within 1 week	Within 1 month	Same as current	Same as current	Perform annual visual inspection (at night). Perform maintenance activities as required. Review annually options for energy saving (ie. New technologies). Revise "Condition Rating" (good, fair, poor) in Asset Management Plan on annual basis. Review complaints - frequency and magnitude.
	Does light turn off?	Within 1 week	Within 1 month	Same as current	Same as current	
	Is light too bright / too dim?	Within 1 week	Within 1 month	Same as current	Same as current	



Table 5a - Roads  
 Risk Assessment and Management Strategy  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset Type	Risk Factor 1. Very Low 2. Low 3. Medium 4. High 5. Very High	Risk Elements	Planned Actions					
			Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Roads (Gravel)	3	Winter road condition	n/a	Sanding/ Salt	n/a	n/a	n/a	n/a
		Washboards / potholes	Speed limit reduction / load restrictions	Grading / calcium treatment	Calcium treatment / new gravel	n/a	n/a	Straighten road / new gravel
		Dust	Speed limit reduction	Calcium treatment	Calcium treatment	n/a	n/a	n/a
		Washouts	n/a	Upgrade culverts / removal of beaver dams	Upgrade culverts	Upgrade culvert / engineered backfill	n/a	Upgrade Culvert
		Steep embankments	Speed limit reduction	Repair guiderails	Upgrade guiderails	regrade slope	n/a	Upgrade guide rails / regrade slope
		Drainage	n/a	Ditching / grading / culverts	Additional gravel / ditching	n/a	n/a	Ditching / culverts
		Site lines	n/a	Brushing	New signage	Brushing / blasting	Chipping of brush	
Roads (CM/HM/DS)	4	Hazards	Speed limit reduction	Signage	Signage	Removal of hazards	n/a	
		Dust	n/a	Sweeping	Sweeping	n/a	n/a	n/a
		Washouts	n/a	Sweeping	Upgrade culvert / road replacement	Upgrade culvert / road replacement	n/a	n/a
		Steep embankments	n/a	Sweeping	Upgrade culvert / road replacement	Upgrade culvert / road replacement	n/a	n/a
		Drainage	n/a	Ditching / culvert	Ditching / Culverts	Road replacement	n/a	Ditching / culverts / road replacement
		Potholes	Load restrictions	Patching	Patching	Road replacement	n/a	Road replacement
Winter road condition	n/a	Sanding/ Salt	Sweeping	n/a	n/a	n/a		





Table 5b - Water Supply Services  
 Risk Assessment and Management Strategy  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset Type	Risk Factor 1. Very Low 2. Low 3. Medium 4. High 5. Very High	Risk Elements	Planned Actions					
			Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Building (water supply)	2	Structural	Inspection / review	cleaning / drainage evaluation	Insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Mechanical	Inspection / review	Cleaning / inspection	Upgraded heating / cooling	Replace with new technology	Recycle	Additions / upgrades
		Electrical	Inspection / review	Inspections	Upgrade	Replace with new technology	Recycle	Additions / upgrades
Process System & Chemical Feed System	5	Breaks / failures	Inspection / review	Repair as required	Replace	Replace	Dispose at Waste Disposal Site / recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace / reprogram	Dispose at Waste Disposal Site / recycle	New technologies
		Over dosage	Inspection / review	Repair as required	Reprogram	n/a	Dispose at Waste Disposal Site / recycle	New technologies
		Blockage	Inspection / review	Repair as required	Replace / repair	Replace / repair	Dispose at Waste Disposal Site / recycle	New technologies
Mechanical & Electrical Systems	5	Malfunctions	Inspection / review	Repair as required	Replace	Replace	Dispose at Waste Disposal Site / recycle	New technologies
		Power outage	Inspection / review	Generator	Replace generator	Replace generator	Dispose at Waste Disposal Site / recycle	Upgrade size of generator
		Breaks / failures	Inspection / review	Repair as required	Replace	Replace	Dispose at Waste Disposal Site / recycle	New technologies
Wells, Water Mains, Hydrants, and Service Connection	5	Breaks / failures	Inspection / review	Patching / replace	Replace	Replace	Dispose or recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace	Dispose or recycle	New technologies
		Pressure issues / Leaks	Inspection / review	Reprogram / replace	Flushing / repair / lining of water mains	n/a	Dispose or recycle	n/a
Pumps, Valves, and Related Equipment	5	Breaks / failures	Inspection / review	Patching / replace	Replace	Replace	Dispose or recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace	Dispose or recycle	New technologies
		Pressure issues	Inspection / review	Reprogram / replace	Flushing / repair / lining of water mains	n/a	Dispose or recycle	n/a
		Leaks	Inspection / review	Reprogram / replace	Replace / repair	Replace / repair	Dispose or recycle	n/a



**Table 5c - Wastewater Services  
Risk Assessment and Management Strategy  
Asset Management Plan  
The Township of Killaloe - Hagarty - Richards  
107.13.007**

Asset Type	Risk Factor 1. Very Low 2. Low 3. Medium 4. High 5. Very High	Risk Elements	Planned Actions					
			Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Building (waste water treatment)	2	Structural	Inspection / review	cleaning / drainage evaluation	insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Mechanical	Inspection / review	Cleaning / inspection	Upgraded heating / cooling	Replace with new technology	Recycle	Additions / upgrades
		Electrical	Inspection / review	Inspections	Upgrade	Replace with new technology	Recycle	Additions / upgrades
Sanitary Sewers	5	Breaks / failures	Inspection / review	Patching / replace	Replace	Replace	Dispose or recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace	Dispose or recycle	New technologies
		Leaks	Inspection / review	Reprogram / replace	Replace / repair	Replace / repair	Dispose or recycle	n/a
Process System & Chemical Feed System	5	Breaks / failures	Inspection / review	Repair as required	Replace	Replace	Dispose at Waste Disposal Site / recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace / reprogram	Dispose at Waste Disposal Site / recycle	New technologies
		Over dosage	Inspection / review	Repair as required	Reprogram	n/a	Dispose at Waste Disposal Site / recycle	New technologies
		Blockage	Inspection / review	Repair as required	Replace / repair	Replace / repair	Dispose at Waste Disposal Site / recycle	New technologies
Mechanical & Electrical Systems	5	Malfunctions	Inspection / review	Repair as required	Replace	Replace	Dispose at Waste Disposal Site / recycle	New technologies
		Power outage	Inspection / review	Generator	Replace generator	Replace generator	Dispose at Waste Disposal Site / recycle	Upgrade size of generator
		Breaks / failures	Inspection / review	Repair as required	Replace	Replace	Dispose at Waste Disposal Site / recycle	New technologies
Service Connections	5	Breaks / failures	Inspection / review	Patching / replace	Replace	Replace	Dispose or recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace	Dispose or recycle	New technologies
Pumps, Valves, and Related Equipment	5	Breaks / failures	Inspection / review	Patching / replace	Replace	Replace	Dispose or recycle	New technologies
		Malfunctions	Inspection / review	Repair as required	Replace / reprogram	Replace	Dispose or recycle	New technologies
		Leaks	Inspection / review	Reprogram / replace	Replace / repair	Replace / repair	Dispose or recycle	n/a



**Table 5d - Buildings and Parks  
Risk Assessment and Management Strategy  
Asset Management Plan  
The Township of Killaloe - Hagarty - Richards  
107.13.007**

Asset Type	Risk Factor	Risk Elements	Planned Actions					
	1. Very Low 2. Low 3. Medium 4. High 5. Very High		Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Building (General Government)	5	Structural	Inspection / review / training	Cleaning / drainage evaluation	Insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Mechanical	Inspection / review / training	Cleaning	Upgraded heating / cooling	Replace with new technology	Recycle	Additions / upgrades
		Electrical	Inspection / review / training	Inspection	Upgrade	Replace with new technology	Recycle	Additions / upgrades
		Safety	Training	Training	Training	Update Training	n/a	n/a
Building (Protective Services)	5	Structural	Inspection / review / training	Cleaning / drainage evaluation	Insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Mechanical	Inspection / review / training	Cleaning	Upgraded heating / cooling	Replace with new technology	Recycle	Additions / upgrades
		Electrical	Inspection / review / training	Inspection	Upgrade	Replace with new technology	Recycle	Additions / upgrades
		Safety	Training	Training	Training	Update Training	n/a	n/a
Building (Recreational Services)	3	Structural	Inspection / review / training	Cleaning / drainage evaluation	Insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Mechanical	Inspection / review / training	Cleaning	Upgraded heating / cooling	Replace with new technology	Recycle	Additions / upgrades
		Electrical	Inspection / review / training	Inspection	Upgrade	Replace with new technology	Recycle	Additions / upgrades
		Safety	Training	Training	Training	Update Training	n/a	n/a
Building (Transportation Services)	4	Structural	Inspection / review / training	Cleaning / drainage evaluation	Insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Mechanical	Inspection / review / training	Cleaning	Upgraded heating / cooling	Replace with new technology	Recycle	Additions / upgrades
		Electrical	Inspection / review / training	Inspection	Upgrade	Replace with new technology	Recycle	Additions / upgrades
		Safety	Training	Training	Training	Update Training	n/a	n/a
		Hazardous Materials	Training / review / inspection	Proper storage	Secure storage	Use less hazardous materials or alternatives	Recycle at hazardous waste event days (MHSW)	Secured storage
Land Improvements (Recreational Services)	3	Structural	Inspection / review / training	Cleaning / drainage evaluation	Insulation / upgrade supports / eavestrough	Replace roof / underpinning / structural support	Dispose at Waste Disposal Site	Additions / renovations
		Safety	Training	Training	Training	Update Training	n/a	n/a



**Table 5e - Vehicles and Equipment**  
**Risk Assessment and Management Strategy**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**107.13.007**

Asset Type	Risk Factor	Risk Elements	Planned Actions					
	1. Very Low 2. Low 3. Medium 4. High 5. Very High		Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Vehicles (Transportation)	4	Severe weather	Monitoring forecast	Snow tires / plows / sanding	n/a	Replace snow tires / truck	Recycle	n/a
		Breaks / failure / malfunction	Circle checks	Regular maintenance schedule / annual inspections	Repair as required	Replace as required	Recycle / sell	n/a
		Accidents	Training	n/a	n/a	n/a	n/a	n/a
Vehicles (Environmental)	3	Severe weather	Monitoring forecast	Snow tires / plows / sanding	n/a	Replace snow tires / truck	Recycle	n/a
		Breaks / failure / malfunction	Circle checks	Regular maintenance schedule / annual inspections	Repair as required	Replace as required	Recycle / sell	n/a
		Accidents	Training	n/a	n/a	n/a	n/a	n/a
		Leaks / spills	n/a	Repair as required	Rebuild / liquid retention system	Replace as required	Recycle / sell	n/a
Vehicles (Protection Services)	5	Severe weather	Monitoring forecast	Snow tires / plows / sanding	n/a	Replace snow tires / truck	Recycle	n/a
		Breaks / failure / malfunction	Circle checks	Regular maintenance schedule / annual inspections	Repair as required	Replace as required	Recycle / sell	n/a
		Accidents	Training	n/a	n/a	n/a	n/a	n/a
Equipment (General Government)	2	Severe weather	n/a	n/a	n/a	n/a	n/a	n/a
		Breaks / failure / malfunction	Circle checks	Regular maintenance schedule / annual inspections	Repair as required	Replace as required	Recycle / sell	n/a
		Accidents	Training	n/a	n/a	n/a	n/a	n/a
Equipment (Transportation)	3	Severe weather	n/a	n/a	n/a	n/a	n/a	n/a
		Breaks / failure / malfunction	Circle checks	Regular maintenance schedule / annual inspections	Repair as required	Replace as required	Recycle / sell	n/a
		Accidents	Training	n/a	n/a	n/a	n/a	n/a
Equipment (Protection Services)	5	Severe weather	Monitoring forecast	Snow tires / plows / sanding	n/a	Replace snow tires / truck	Recycle	n/a
		Breaks / failure / malfunction	Circle checks	Regular maintenance schedule / annual inspections	Repair as required	Replace as required	Recycle / sell	n/a
		Accidents	Training	n/a	n/a	n/a	n/a	n/a
		Challenging terrain	Training	n/a	Training	n/a	n/a	n/a



Table 5f - Solid Waste  
 Risk Assessment and Management Strategy  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset Type	Risk Factor 1. Very Low 2. Low 3. Medium 4. High 5. Very High	Risk Elements and Proposed Actions	Planned Actions					
			Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Waste Disposal Site	3	Public safety	Training / public education	Signage / hazard removal	Signage / secured storage	n/a	n/a	Public education
		Noise	Modification of operation hours	n/a	n/a	n/a	n/a	Modification of operation hours
		Dust	Speed limit reduction	Watering / calcium treatment	Watering / calcium treatment	Pave site roads	n/a	Pave roads
		Vector / vermin	Improvements to noise diversion	Pest control / cover application	Cover application	Bear fencing	n/a	Cover application
		Fire	Training	Fire extinguisher / on-site water truck	Fire extinguisher / on-site water truck	n/a	n/a	On-site fire control system
		Spills	Training	Spill catamite measure	Contaminant areas	Contaminant areas / cover application	n/a	Containment areas
		Litter	Regular cleanup schedule	Regular cleanup schedule	Litter control fencing	n/a	n/a	Litter control fencing / cover application
Equipment	4	Environmental	Annual monitoring (ground/surface water)	Cover application / surveying	Progression closure	n/a	n/a	Contaminant attenuation zone lands acquisition
		Public safety	Training / public education	Signage / hazard removal	Signage / secured storage	n/a	n/a	Public education
		Noise	Modification of operation hours	n/a	n/a	n/a	n/a	Modification of operation hours
		Vector / vermin	Improvements to noise diversion	Equipment modifications	Equipment modifications	Bear fencing	n/a	Cover application
		Fire	Training	Fire extinguisher / on-site water truck	Fire extinguisher / on-site water truck	n/a	n/a	On-site fire control system
		Spills	Training	Liquid retention upgrades	Liquid retention upgrades	Contaminant areas / cover application	n/a	Containment areas
Litter	Regular cleanup schedule	Regular cleanup schedule	Litter control fencing	n/a	n/a	Litter control fencing / cover application		



Table 5g -Street Lights  
 Risk Assessment and Management Strategy  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset Type	Risk Factor	Risk Elements	Planned Actions					
	1. Very Low 2. Low 3. Medium 4. High 5. Very High		Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities
Street Lights	1	Safety / accidents	Inspections	Inspections / maintenance	Maintenance	New technologies	Recycle	New technologies



**Table 6a**  
**Financial Assessment and Projections - Roads**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Surface Type (GS/CM/DS/HM) <sup>2</sup>	Surface or Base <sup>1</sup>	Quantity (Length in km) <sup>2</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (Road Class) <sup>3</sup>	Proposed Annual Contribution to Reserves <sup>4</sup>																Total Reserve (30 Year)	Total Required Reserve (Replacement Cost) <sup>5</sup>	Estimated Borrowing Cost (Replacement Cost) <sup>6</sup>	Difference (Borrowing - Savings) <sup>4</sup>
												Years 1 to 5					Years 6 to 10					Years 11 to 15	Years 16 to 20	Years 21 to 25	Years 26 to 30						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033	2034 to 2038	2038 to 2042						
WH1	White Church Rd	50% CM/ 50% GS	Surface	2142	1998	15	2013	0	poor	\$ 86,761	4	\$ 86,761													\$ 86,761	\$ 86,761	\$ 116,397	\$ 29,636			
CH12	Church Street	CM	Surface	1522	2008	15	2023	10	fair	\$ 121,760	5	\$ 12,176	\$ 12,176	\$ 12,176	\$ 12,176	\$ 12,176	\$ 12,176	\$ 12,176	\$ 12,176	\$ 12,176					\$ 121,760	\$ 121,760	\$ 163,351	\$ 41,591			
CH11	Church Street	CM	Surface	811	2009	15	2024	11	good	\$ 64,880	4	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898	\$ 5,898				\$ 64,880	\$ 64,880	\$ 87,042	\$ 22,162			
H31	Hillcrest Avenue	CM	Surface	20	2012	20	2032	19	good	\$ 1,600	5	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 421	\$ 337			\$ 1,600	\$ 1,600	\$ 2,399	\$ 799			
H32	Hillcrest Avenue	CM	Surface	501	2007	20	2027	14	good	\$ 40,080	5	\$ 2,863	\$ 2,863	\$ 2,863	\$ 2,863	\$ 2,863	\$ 2,863	\$ 2,863	\$ 2,863	\$ 2,863	\$ 11,451				\$ 40,080	\$ 40,080	\$ 60,085	\$ 20,005			
MO21	Mountain View Rd	CM	Surface	475	2007	20	2027	14	fair	\$ 38,000	4	\$ 2,714	\$ 2,714	\$ 2,714	\$ 2,714	\$ 2,714	\$ 2,714	\$ 2,714	\$ 2,714	\$ 2,714	\$ 10,857				\$ 38,000	\$ 38,000	\$ 56,967	\$ 18,967			
RO21	Rochefort Rd	CM	Surface	833	1995	20	2015	2	poor	\$ 66,640	4	\$ 33,320	\$ 33,320												\$ 66,640	\$ 66,640	\$ 99,902	\$ 33,262			
RO22	Rochefort Rd	CM	Surface	1267	2012	5	2017	4	poor	\$ 101,360	4	\$ 25,340	\$ 25,340	\$ 25,340	\$ 25,340										\$ 101,360	\$ 101,360	\$ 109,087	\$ 7,727			
GR2	Greens Rd	CM / GS	Surface	906	2012	20	2032	19	fair	\$ 40,770	5	\$ 2,146	\$ 2,146	\$ 2,146	\$ 2,146	\$ 2,146	\$ 2,146	\$ 2,146	\$ 2,146	\$ 2,146	\$ 10,729	\$ 8,583		\$ 40,770	\$ 40,770	\$ 61,120	\$ 20,350				
HA11	Harrington Rd	CM / GS	Surface	718	2007	20	2027	14	good	\$ 32,310	5	\$ 2,308	\$ 2,308	\$ 2,308	\$ 2,308	\$ 2,308	\$ 2,308	\$ 2,308	\$ 2,308	\$ 2,308	\$ 9,231			\$ 32,310	\$ 32,310	\$ 48,437	\$ 16,127				
AL1	Albert Street	DS	Surface	280	1998	16	2014	1	fair	\$ 11,200	4	\$ 11,200												\$ 11,200	\$ 11,200	\$ 16,790	\$ 5,590				
BE1	Bear Trail Rd	DS	Surface	1812	2007	20	2027	14	fair	\$ 72,480	4	\$ 5,177	\$ 5,177	\$ 5,177	\$ 5,177	\$ 5,177	\$ 5,177	\$ 5,177	\$ 5,177	\$ 5,177	\$ 20,709			\$ 72,480	\$ 72,480	\$ 108,657	\$ 36,177				
BU11	Buck Hill Rd	DS	Surface	1471	2008	15	2023	10	fair	\$ 58,840	5	\$ 5,884	\$ 5,884	\$ 5,884	\$ 5,884	\$ 5,884	\$ 5,884	\$ 5,884	\$ 5,884	\$ 5,884				\$ 58,840	\$ 58,840	\$ 78,939	\$ 20,099				
BY1	Byers Creek Rd	DS	Surface	1432	2008	15	2023	10	fair	\$ 57,280	4	\$ 5,728	\$ 5,728	\$ 5,728	\$ 5,728	\$ 5,728	\$ 5,728	\$ 5,728	\$ 5,728	\$ 5,728				\$ 57,280	\$ 57,280	\$ 76,846	\$ 19,566				
DE11	Dear Trail Rd	DS	Surface	811	1998	17	2015	2	fair	\$ 32,440	5	\$ 16,220	\$ 16,220											\$ 32,440	\$ 32,440	\$ 48,632	\$ 16,192				
DI11	Division Rd	DS	Surface	342	2007	15	2022	9	good	\$ 13,680	4	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520					\$ 13,680	\$ 13,680	\$ 18,353	\$ 4,673				
MA32	Mask Rd	DS	Surface	2032	1998	17	2015	2	good	\$ 81,280	4	\$ 40,640	\$ 40,640											\$ 81,280	\$ 81,280	\$ 121,849	\$ 40,569				
MA33	Mask Rd	DS	Surface	2040	1998	17	2015	2	fair	\$ 748,680	4	\$ 374,340	\$ 374,340											\$ 748,680	\$ 748,680	\$ 1,122,369	\$ 373,689				
MA34	Mask Rd	DS	Surface	2047	1998	18	2016	3	good	\$ 81,880	4	\$ 27,293	\$ 27,293	\$ 27,293										\$ 81,880	\$ 81,880	\$ 122,749	\$ 40,869				
MA35	Mask Rd	DS	Surface	1646	2008	15	2023	10	good	\$ 65,840	4	\$ 6,584	\$ 6,584	\$ 6,584	\$ 6,584	\$ 6,584	\$ 6,584	\$ 6,584	\$ 6,584	\$ 6,584				\$ 65,840	\$ 65,840	\$ 88,330	\$ 22,490				
MA36	Mask Rd	DS	Surface	1735	2007	20	2027	14	good	\$ 69,400	4	\$ 4,957	\$ 4,957	\$ 4,957	\$ 4,957	\$ 4,957	\$ 4,957	\$ 4,957	\$ 4,957	\$ 4,957	\$ 19,829			\$ 69,400	\$ 69,400	\$ 104,040	\$ 34,640				
MO1	Mockingbird Rd	DS	Surface	390	2007	20	2027	14	good	\$ 15,600	5	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 1,114	\$ 4,457			\$ 15,600	\$ 15,600	\$ 23,386	\$ 7,786				
PE1	Pecoskie Drive	DS	Surface	884	2007	20	2027	14	good	\$ 35,360	5	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 10,103			\$ 35,360	\$ 35,360	\$ 53,009	\$ 17,649				
PI1	Pine View Drive	DS	Surface	108	1997	15	2012	-1	poor	\$ 4,320	5	\$ 4,320												\$ 4,320	\$ 4,320	\$ 5,796	\$ 1,476				
RE12	Red Rock Rd	DS	Surface	934	2012	20	2032	19	good	\$ 37,360	4	\$ 1,966	\$ 1,966	\$ 1,966	\$ 1,966	\$ 1,966	\$ 1,966	\$ 1,966	\$ 1,966	\$ 1,966	\$ 9,832	\$ 7,865		\$ 37,360	\$ 37,360	\$ 56,008	\$ 18,648				
RE11	Red Rock Rd	DS	Surface	1359	2010	15	2025	12	fair	\$ 54,360	4	\$ 4,530	\$ 4,530	\$ 4,530	\$ 4,530	\$ 4,530	\$ 4,530	\$ 4,530	\$ 4,530	\$ 4,530	\$ 9,060			\$ 54,360	\$ 54,360	\$ 72,928	\$ 18,568				
RE15	Red Rock Rd	DS	Surface	39	2007	20	2027	14	good	\$ 1,560	4	\$ 111	\$ 111	\$ 111	\$ 111	\$ 111	\$ 111	\$ 111	\$ 111	\$ 111	\$ 446			\$ 1,560	\$ 1,560	\$ 2,339	\$ 779				
RE16	Red Rock Rd	DS	Surface	284	2007	20	2027	14	good	\$ 11,360	4	\$ 811	\$ 811	\$ 811	\$ 811	\$ 811	\$ 811	\$ 811	\$ 811	\$ 811	\$ 3,246			\$ 11,360	\$ 11,360	\$ 17,030	\$ 5,670				
RE13	Red Rock Rd	DS	Surface	218	2012	20	2032	19	good	\$ 8,720	4	\$ 459	\$ 459	\$ 459	\$ 459	\$ 459	\$ 459	\$ 459	\$ 459	\$ 459	\$ 2,295	\$ 1,836		\$ 8,720	\$ 8,720	\$ 13,072	\$ 4,352				
SU12	Sunrise Rd	DS	Surface	725	1998	17	2015	2	fair	\$ 29,000	5	\$ 14,500	\$ 14,500											\$ 29,000	\$ 29,000	\$ 43,475	\$ 14,475				
TR11	Tramore Rd	DS	Surface	655	2010	15	2025	12	good	\$ 26,200	4	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 4,367			\$ 26,200	\$ 26,200	\$ 35,149	\$ 8,949				
TR14	Tramore Rd	DS	Surface	4214	1997	18	2015	2	poor	\$ 168,560	4	\$ 84,280	\$ 84,280											\$ 168,560	\$ 168,560	\$ 252,693	\$ 84,133				
TR13	Tramore Rd	DS	Surface	2064	2009	15	2024	11	fair	\$ 82,560	4	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505	\$ 7,505			\$ 82,560	\$ 82,560	\$ 110,761	\$ 28,201				
TR12	Tramore Rd	DS	Surface	1436	2011	15	2026	13	good	\$ 57,440	4	\$ 4,418	\$ 4,418	\$ 4,418	\$ 4,418	\$ 4,418	\$ 4,418	\$ 4,418	\$ 4,418	\$ 4,418	\$ 13,255			\$ 57,440	\$ 57,440	\$ 77,060	\$ 19,620				
TU11	Turners Rd	DS	Surface	1867	2000	17	2017	4	good	\$ 74,680	4	\$ 18,670	\$ 18,670	\$ 18,670	\$ 18,670									\$ 74,680	\$ 74,680	\$ 111,955	\$ 37,275				
TU12	Turners Rd	DS	Surface	1249	2000	15	2015	2	fair	\$ 49,960	4	\$ 24,980	\$ 24,980											\$ 49,960	\$ 49,960	\$ 67,025	\$ 17,065				
TU13	Turners Rd	DS	Surface	1271	2000	15	2015	2	fair	\$ 50,840	4	\$ 25,420	\$ 25,420											\$ 50,840	\$ 50,840	\$ 68,206	\$ 17,366				
TU14	Turners Rd	DS	Surface	1889	2013	15	2028	15	good	\$ 75,560	4	\$ 5,037	\$ 5,037	\$ 5,037	\$ 5,037	\$ 5,037	\$ 5,037	\$ 5,037	\$ 5,037	\$ 5,037	\$ 25,187			\$ 75,560	\$ 75,560	\$ 101,370	\$ 25,810				
YA1	Yantha Drive	DS	Surface	129	2000	17	2017	4	fair	\$ 5,160	4	\$ 1,290	\$ 1,290	\$ 1,290	\$ 1,290									\$ 5,160	\$ 5,160	\$ 7,736	\$ 2,576				
CA3	Cardinal Rd	DS / GS	Surface	2241	2009	15	2024	11	fair	\$ 56,025	5	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093	\$ 5,093			\$ 56,025	\$ 56,025	\$ 75,162	\$ 19,137				
ST12	Stone Church Rd	DS / GS	Surface	1725	2007	20	2027	14	fair	\$ 43,800	4	\$ 3,129	\$ 3,129	\$ 3,129	\$ 3,129	\$ 3,129	\$ 3,129	\$ 3,129	\$ 3,129	\$ 3,129	\$ 12,514			\$ 43,800	\$ 43,800	\$ 65,662	\$ 21,862				
AN3	Antoine Rd	GS	Surface	966	2007	20	2027	14	fair	\$ 9,660	5	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 2,760			\$ 9,660	\$ 9,660	\$ 14,482	\$ 4,822				
BE2	Beaver Rd	GS	Surface	1224	2007	20	2027	14	fair	\$ 446,760	5	\$ 31,911	\$ 31,911	\$ 31,911	\$ 31,911	\$ 31,911	\$ 31,911	\$ 31,911	\$ 31,911	\$ 31,911	\$ 127,646			\$ 446,760	\$ 446,760	\$ 669,751	\$ 222,991				
BE3	Beechnut Lake Rd	GS	Surface	330	2007	20	2027	14	fair	\$ 120,450	6(b)	\$ 8,604	\$ 8,604	\$ 8,604	\$ 8,604	\$ 8,604	\$ 8,604	\$ 8,604	\$ 8,604	\$ 8,604	\$ 34,414			\$ 120,450	\$ 120,450	\$ 180,570	\$ 60,120				
BU12	Buck Hill Rd	GS	Surface	4575	2007	20	2027	14	poor	\$ 45,750	5	\$ 3,268	\$ 3,268	\$ 3,268	\$ 3,268	\$ 3,268	\$ 3,268	\$ 3,268	\$ 3,268	\$ 3,268	\$ 13,071			\$ 45,750	\$ 45,750	\$ 68,585	\$ 22,835				
BY2	Byers Creek Rd	GS	Surface	1993	2007	20	2027	14	fair	\$ 19,930	6(b)	\$ 1,424	\$ 1,424	\$ 1,424	\$ 1,424	\$ 1,424	\$ 1,424	\$ 1,424	\$ 1,424	\$ 1,424	\$ 5,694			\$ 19,930	\$ 19,930	\$ 29,878	\$ 9,948				
DE12	Dear Trail Rd	GS	Surface	1493	2007	20	2027	14	fair	\$ 14,930	5	\$ 1,066	\$ 1,066	\$ 1,066	\$ 1,066	\$ 1,066	\$ 1,066	\$ 1,066	\$ 1,066	\$ 1,066	\$ 4,266			\$ 14,930	\$ 14,930	\$ 22,382	\$ 7,452				









**Table 6a**  
**Financial Assessment and Projections - Roads**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Surface Type (GS/CM/DS/HM) <sup>2</sup>	Surface or Base <sup>1</sup>	Quantity (Length in km) <sup>2</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (Road Class) <sup>3</sup>	Proposed Annual Contribution to Reserves <sup>4</sup>																Total Reserve (30 Year)	Total Required Reserve (Replacement Cost) <sup>5</sup>	Estimated Borrowing Cost (Replacement Cost) <sup>6</sup>	Difference (Borrowing - Savings) <sup>6</sup>
												Years 1 to 5					Years 6 to 10					Years 11 to 15	Years 16 to 20	Years 21 to 25	Years 26 to 30						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033	2034 to 2038	2038 to 2042						
LI21	Lisk Street	HM	Surface	314	1993	25	2018	5	fair	\$ 34,540	5	\$ 6,908	\$ 6,908	\$ 6,908	\$ 6,908	\$ 6,908										\$ 34,540	\$ 34,540	\$ 57,576	\$ 23,036		
MA11	Maple Street	HM	Surface	82	1993	24	2017	4	fair	\$ 9,020	5	\$ 2,255	\$ 2,255	\$ 2,255	\$ 2,255											\$ 9,020	\$ 9,020	\$ 15,036	\$ 6,016		
MA12	Maple Street	HM	Surface	78	1993	24	2017	4	fair	\$ 8,580	5	\$ 2,145	\$ 2,145	\$ 2,145	\$ 2,145											\$ 8,580	\$ 8,580	\$ 14,302	\$ 5,722		
MA21	Mary Street	HM	Surface	100	1995	20	2015	2	poor	\$ 11,000	5	\$ 5,500	\$ 5,500												\$ 11,000	\$ 11,000	\$ 16,490	\$ 5,490			
MA22	Mary Street	HM	Surface	100	1995	20	2015	2	poor	\$ 11,000	5	\$ 5,500	\$ 5,500												\$ 11,000	\$ 11,000	\$ 16,490	\$ 5,490			
MC1	McCarthy Lane	HM	Surface	74	1995	25	2020	7	good	\$ 8,140	5	\$ 1,163	\$ 1,163	\$ 1,163	\$ 1,163	\$ 1,163	\$ 1,163								\$ 8,140	\$ 8,140	\$ 13,569	\$ 5,429			
ME11	Meadow Drive	HM	Surface	200	2000	20	2020	7	good	\$ 22,000	5	\$ 3,143	\$ 3,143	\$ 3,143	\$ 3,143	\$ 3,143	\$ 3,143	\$ 3,143								\$ 22,000	\$ 22,000	\$ 32,981	\$ 10,981		
ME12	Meadow Drive	HM	Surface	152	2000	20	2020	7	good	\$ 16,720	5	\$ 2,389	\$ 2,389	\$ 2,389	\$ 2,389	\$ 2,389	\$ 2,389									\$ 16,720	\$ 16,720	\$ 25,065	\$ 8,345		
MI11	Mill Street	HM	Surface	153	1995	20	2015	2	fair	\$ 16,830	5	\$ 8,415	\$ 8,415													\$ 16,830	\$ 16,830	\$ 25,230	\$ 8,400		
MI12	Mill Street	HM	Surface	326	1995	20	2015	2	fair	\$ 35,860	5	\$ 17,930	\$ 17,930													\$ 35,860	\$ 35,860	\$ 53,759	\$ 17,899		
MI13	Mill Street	HM	Surface	141	1995	20	2015	2	fair	\$ 15,510	5	\$ 7,755	\$ 7,755													\$ 15,510	\$ 15,510	\$ 23,252	\$ 7,742		
MI14	Mill Street	HM	Surface	822	1995	20	2015	2	fair	\$ 90,420	5	\$ 45,210	\$ 45,210													\$ 90,420	\$ 90,420	\$ 135,551	\$ 45,131		
NO11	North Street	HM	Surface	163	1993	20	2013	0	poor	\$ 17,930	5	\$ 17,930														\$ 17,930	\$ 17,930	\$ 26,879	\$ 8,949		
NO12	North Street	HM	Surface	135	1993	20	2013	0	poor	\$ 14,850	5	\$ 14,850														\$ 14,850	\$ 14,850	\$ 22,262	\$ 7,412		
OA11	Oak Avenue	HM	Surface	144	2000	20	2020	7	fair	\$ 15,840	5	\$ 2,263	\$ 2,263	\$ 2,263	\$ 2,263	\$ 2,263	\$ 2,263									\$ 15,840	\$ 15,840	\$ 23,746	\$ 7,906		
OA12	Oak Avenue	HM	Surface	255	2000	20	2020	7	fair	\$ 28,050	5	\$ 4,007	\$ 4,007	\$ 4,007	\$ 4,007	\$ 4,007	\$ 4,007									\$ 28,050	\$ 28,050	\$ 42,051	\$ 14,001		
RI3	River Street	HM	Surface	176	1995	20	2015	2	fair	\$ 19,360	5	\$ 9,680	\$ 9,680													\$ 19,360	\$ 19,360	\$ 29,023	\$ 9,663		
RO11	Roche Street	HM	Surface	272	2006	20	2026	13	good	\$ 29,920	5	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 2,302	\$ 6,905			\$ 29,920	\$ 29,920	\$ 44,854	\$ 14,934		
RO12	Roche Street	HM	Surface	300	2006	20	2026	13	good	\$ 33,000	5	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 2,538	\$ 7,615			\$ 33,000	\$ 33,000	\$ 49,471	\$ 16,471		
RO13	Roche Street	HM	Surface	118	2006	20	2026	13	good	\$ 12,980	5	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 998	\$ 2,995			\$ 12,980	\$ 12,980	\$ 19,459	\$ 6,479		
RY11	Ryan Street	HM	Surface	162	1995	22	2017	4	good	\$ 17,820	5	\$ 4,455	\$ 4,455	\$ 4,455	\$ 4,455											\$ 17,820	\$ 17,820	\$ 29,705	\$ 11,885		
RY12	Ryan Street	HM	Surface	156	1995	22	2017	4	good	\$ 17,160	5	\$ 4,290	\$ 4,290	\$ 4,290	\$ 4,290											\$ 17,160	\$ 17,160	\$ 28,605	\$ 11,445		
RY13	Ryan Street	HM	Surface	87	1995	22	2017	4	good	\$ 9,570	5	\$ 2,393	\$ 2,393	\$ 2,393	\$ 2,393											\$ 9,570	\$ 9,570	\$ 15,953	\$ 6,383		
SU11	Sunrise Rd	HM	Surface	113	1998	17	2015	2	good	\$ 12,430	5	\$ 6,215	\$ 6,215													\$ 12,430	\$ 12,430	\$ 18,634	\$ 6,204		
WI21	William Street	HM	Surface	280	1995	20	2015	2	fair	\$ 30,800	5	\$ 15,400	\$ 15,400													\$ 30,800	\$ 30,800	\$ 46,173	\$ 15,373		
ZU11	Zummach Drive	HM	Surface	104	1995	20	2015	2	fair	\$ 11,440	5	\$ 5,720	\$ 5,720													\$ 11,440	\$ 11,440	\$ 17,150	\$ 5,710		
ZU12	Zummach Drive	HM	Surface	67	1995	20	2015	2	fair	\$ 7,370	5	\$ 3,685	\$ 3,685													\$ 7,370	\$ 7,370	\$ 11,049	\$ 3,679		
<b>TOTALS</b>										\$ 6,571,485	-	\$ 1,769,359	\$ 1,346,907	\$ 414,152	\$ 386,859	\$ 300,914	\$ 291,696	\$ 291,696	\$ 277,034	\$ 277,034	\$ 275,514	\$ 915,668	\$ 24,653	\$ -	\$ -	\$ 6,571,485	\$ 6,571,485	\$ 9,683,507	\$ 3,112,022		

Notes:

- Road Surface Amortization Calculations, Township of Killaloe, Hagarty and Richards (2013).
- From information supplied by Township of Killaloe, Hagarty, Richards.
- Level of Service (Road Classes) from by-law #13-2011.
- Proposed Annual Contribution to Reserve calculated based on replacement Cost divided by Remaining Useful Life (from 2013).
- Estimated Borrowing Cost (Replacement Cost) calculated from Infrastructure Ontario Lending Rates and Loan Payment Calculator, based on five - year to thirty year payment term (as applicable) and an annual payment schedule, as of September 17, 2013
- Difference (Saving vs. Borrowing) calculated as Estimated Borrowing Cost (Replacement Cost) - Total Required Reserve (Replacement Cost).
- Any grant/subsidies (Federal or Provincial) would be used to reduce Annual Contributions to Reserves and/or borrowing amounts.
- Proposed Annual Contributions to Reserves assumes Interest Rate on savings for Reserves equals Inflation Rate on cost of asset purchases.

Assumptions:

- GS (Gravel) surface replacement estimated at \$10000 per kilometer.
- DS (Double Surface Treatment) surface replacement estimated at \$40000 per kilometer.
- CM (Cold Mix) surface replacement estimated at \$80000 per kilometer.
- HM (Hot Mix) surface replacement estimated at \$110000 per kilometre.

Selected Focus Items





Table 6b  
Financial Assessment and Projections - Water Supply Services  
Asset Management Plan  
The Township of Killaloe - Hagarty - Richards  
107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Year in Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>1</sup>	Proposed Annual Contribution to Reserves <sup>3</sup>																Total Reserve (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost) <sup>4</sup>	Difference (Borrowing - Savings) <sup>5</sup>
												Years 1 to 5					Years 6 to 10					Years 11 to 15	Years 16 to 20	Years 21 to 25	Years 26 to 30						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033	2034 to 2038	2038 to 2042						
112936	ALARM DIALER WTP	Environmental Services	Equipment	CONTRO	2013	5	2018	5	good	\$ 1,500	5	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300									\$ 1,500	\$ 1,500	\$ 1,614	\$ 114			
112937	ACTUATOR ELECTRIC VALVE 06 BW	Environmental Services	Equipment	ACTUAT	2007	20	2027	14	good	\$ 2,000	5	\$ 143	\$ 143	\$ 143	\$ 143	\$ 143	\$ 143	\$ 143	\$ 143	\$ 143	\$ 714.29					\$ 2,143	\$ 2,000	\$ 2,998	\$ 998		
140056	ANALYZER COLORIMETER	Environmental Services	Equipment	INSTRU	2007	10	2017	4	good	\$ 3,000	5	\$ 750	\$ 750	\$ 750	\$ 750										\$ 3,000	\$ 3,000	\$ 3,600	\$ 600			
140106	PUMP CENT JOCKEY HIGH LIFT	Environmental Services	Equipment	PUMP	2011	15	2026	13	good	\$ 1,500	5	\$ 115	\$ 115	\$ 115	\$ 115	\$ 115	\$ 115	\$ 115	\$ 115	\$ 115	\$ 346.15				\$ 1,500	\$ 1,500	\$ 2,012	\$ 512			
140125	METER FLOW RAW WATER TO FILTER	Environmental Services	Equipment	INSTRU	1993	30	2023	10	good	\$ 2,000	5	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200					\$ 2,000	\$ 2,000	\$ 3,683	\$ 1,683			
140164	TANK FUEL DIESEL	Environmental Services	Equipment	TANKPR	2013	10	2023	10	good	\$ 3,000	5	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300					\$ 3,000	\$ 3,000	\$ 3,600	\$ 600			
140190	ANALYZER HYDROGEN PEROXIDE	Environmental Services	Equipment	INSTRU	2012	10	2022	9	good	\$ 3,000	5	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333					\$ 3,000	\$ 3,000	\$ 3,600	\$ 600			
140191	ANALYZER HYDROGEN PEROXIDE	Environmental Services	Equipment	INSTRU	2012	10	2022	9	good	\$ 3,000	5	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333					\$ 3,000	\$ 3,000	\$ 3,600	\$ 600			
140192	ANALYZER HYDROGEN PEROXIDE	Environmental Services	Equipment	INSTRU	2012	10	2022	9	good	\$ 3,000	5	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333					\$ 3,000	\$ 3,000	\$ 3,600	\$ 600			
140193	ANALYZER CHLORINE	Environmental Services	Equipment	INSTRU	2012	10	2022	9	good	\$ 3,000	5	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333					\$ 3,000	\$ 3,000	\$ 3,600	\$ 600			
191420	ANALYZER CHLORINE FREE	Environmental Services	Equipment	INSTRU	2012	10	2022	9	good	\$ 2,000	5	\$ 222	\$ 222	\$ 222	\$ 222	\$ 222	\$ 222	\$ 222	\$ 222	\$ 222					\$ 2,000	\$ 2,000	\$ 2,400	\$ 400			
191460	TANL CLEARWELL #2	Environmental Services	Equipment	TANKPR	1993	30	2023	10	good	\$ 50,000	5	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000					\$ 50,000	\$ 50,000	\$ 92,087	\$ 42,087			
191519	ANALYZER TURBIDITY PORTABLE 21	Environmental Services	Equipment	INSTRU	1993	30	2023	10	good	\$ 5,000	5	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500					\$ 5,000	\$ 5,000	\$ 9,209	\$ 4,209			
191893	PUMP WELL	Environmental Services	Equipment	PUMP	2007	20	2027	14	good	\$ 5,000	5	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 1,428.57				\$ 5,000	\$ 5,000	\$ 7,496	\$ 2,496			
<b>TOTALS</b>											\$ 7,816,500.00	-	\$ 764,147	\$ 764,147	\$ 764,147	\$ 764,147	\$ 763,022	\$ 762,722	\$ 762,722	\$ 762,722	\$ 760,055	\$ 68,080	\$ 45,019	\$ 38,269	\$ 6,154	\$ 7,788,071	\$ 7,816,500	\$ 14,390,674	\$ 6,574,174		

- Notes:
- From Tangible Capital Assets, Amortization Check (2012) and information supplied by Ontario Clean Water Agency.
  - Replacement Cost from information supplied by Ontario Clean Water Agency.
  - Proposed Annual Contribution to Reserve calculated based on replacement Cost divided by Remaining Useful Life (from 2013).
  - Estimated Borrowing Cost (Replacement Cost) calculated from Infrastructure Ontario and Loan Payment Calculator, based on five-year to thirty year payment term (as applicable) and an annual payment schedule, as of September 17, 2013.
  - Difference (Saving vs. Borrowing) calculated as Estimated Borrowing Cost (Replacement Cost) - Total Required Reserve (Replacement Cost).
  - Any grant/subsidies (Federal or Provincial) would be used to reduce Annual Contributions to Reserves and/or borrowing amounts.
  - Proposed Annual Contributions to Reserves assumes Interest Rate on savings for Reserves equals Inflation Rate on cost of asset purchases.

Selected Focus Items



**Table 6c**  
**Financial Assessment and Projections - Wastewater Services**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID	Asset Name	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1</sup>	Assets Class <sup>1</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5)	Proposed Annual Contribution to Reserves <sup>3</sup>																Total Reserve (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost) <sup>4</sup>	Difference (Borrowing - Savings) <sup>5</sup>
												Years 1 to 5					Years 6 to 10					Years 11 to 15	Years 16 to 20	Years 21 to 25	Years 26 to 30						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033	2034 to 2038	2038 to 2042						
B032	Sewage Treatment Plant	Environmental Services	Buildings	Facilities	1979	40	2019	6	good	\$ 500,000	5	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333	\$ 83,333							\$ 500,000	\$ 500,000	\$ 1,086,863	\$ 586,863				
SanSewers	Infrastructure Sanitary Sewers Killaloe 1979	Environmental Services	Linear Assets	Infrastructure	1979	40	2019	6	good	\$ 1,000,000	5	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667							\$ 1,000,000	\$ 1,000,000	\$ 2,173,726	\$ 1,173,726				
-	Sanitary Sewer System (Length in Kilometres)	Environmental Services	Linear Assets	Infrastructure	1979	40	2019	6	good	\$ 240,000	5	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000							\$ 240,000	\$ 240,000	\$ 521,694	\$ 281,694				
80410	ENGINE DIESEL WWTP KILLALOE	Environmental Services	Equipment	GENERA	2000	20	2020	7	good	\$ 10,000	5	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429						\$ 10,000	\$ 10,000	\$ 14,991	\$ 4,991				
107998	ANALYZER GAS TRI-DETECTOR (SP)	Environmental Services	Equipment	INSTRU	2005	10	2015	2	good	\$ 2,000	2	\$ 1,000	\$ 1,000											\$ 2,000	\$ 2,000	\$ 2,400	\$ 400				
108381	GENERATOR ELECTRIC STDBY POWER	Environmental Services	Equipment	GENERA	2000	20	2020	7	good	\$ 10,000	5	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429	\$ 1,429						\$ 10,000	\$ 10,000	\$ 14,991	\$ 4,991				
108420	PUMP DIAPH CL2(SPARE)	Environmental Services	Equipment	CHEMIC	2007	10	2017	4	good	\$ 1,500	5	\$ 375	\$ 375	\$ 375	\$ 375									\$ 1,500	\$ 1,500	\$ 1,800	\$ 300				
112805	PANEL TRANSFER GENSET	Environmental Services	Equipment	GENERA	1979	40	2019	6	good	\$ 5,000	5	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833						\$ 5,833	\$ 5,000	\$ 10,869	\$ 5,869				
112807	GEAR DRIVE CLARIFIER	Environmental Services	Equipment	GEAR	1979	40	2019	6	good	\$ 20,000	5	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333						\$ 23,333	\$ 20,000	\$ 43,475	\$ 23,475				
112809	LIFTING DEVICE JIB	Environmental Services	Equipment	LIFTIN	1979	40	2019	6	good	\$ 2,000	1	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333						\$ 2,333	\$ 2,000	\$ 4,347	\$ 2,347				
112811	PUMP SUBM SLUDGE 3 INCH	Environmental Services	Equipment	PUMP	2000	30	2030	17	good	\$ 2,500	2	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 735.29	\$ 294.12	\$ 2,500	\$ 2,500	\$ 4,604	\$ 2,104		
112812	SAMPLER PORTABLE RAW SEWAGE	Environmental Services	Equipment	INSTRU	2010	10	2020	7	good	\$ 2,500	2	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357	\$ 357						\$ 2,500	\$ 2,500	\$ 3,000	\$ 500			
112813	MCC 01 PLANT MAIN CONTROL	Environmental Services	Equipment	ELECTR	1979	40	2019	6	good	\$ 25,000	5	\$ 4,167	\$ 4,167	\$ 4,167	\$ 4,167	\$ 4,167	\$ 4,167	\$ 4,167						\$ 25,000	\$ 25,000	\$ 54,343	\$ 29,343				
112814	ALARM DIALER PLANT	Environmental Services	Equipment	CONTRO	2005	10	2015	2	good	\$ 1,500	5	\$ 750	\$ 750											\$ 1,500	\$ 1,500	\$ 1,800	\$ 300				
112817	BLOWER POS DISP 01 AERATION	Environmental Services	Equipment	BLOWER	1979	40	2019	6	good	\$ 7,500	5	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250						\$ 7,500	\$ 7,500	\$ 16,303	\$ 8,803				
112818	MOTOR BLOWER 01 AERATION	Environmental Services	Equipment	MOTOR	1979	40	2019	6	good	\$ 2,000	5	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333						\$ 2,000	\$ 2,000	\$ 4,347	\$ 2,347				
112819	BLOWER POS DISP 02 AERATION	Environmental Services	Equipment	BLOWER	2009	20	2029	16	good	\$ 7,500	5	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 469	\$ 2,343.75	\$ 7,031	\$ 7,500	\$ 11,243	\$ 3,743			
112820	MOTOR BLOWER 02 AERATION	Environmental Services	Equipment	MOTOR	2009	20	2029	16	good	\$ 2,000	5	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 625	\$ 1,875	\$ 2,000	\$ 2,998	\$ 998			
112828	CLARIFIER SECONDARY	Environmental Services	Equipment	TANKPR	2004	20	2024	11	good	\$ 2,000,000	5	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818	\$ 181,818.18	\$ 2,000,000	\$ 2,000,000	\$ 2,998,260	\$ 998,260			
112833	PUMP DIAPH CL2	Environmental Services	Equipment	CHEMIC	2005	20	2025	12	good	\$ 1,500	3	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 250	\$ 1,500	\$ 1,500	\$ 2,249	\$ 749				
112834	PUMP DIAPH PHAS 8	Environmental Services	Equipment	CHEMIC	2013	5	2018	5	good	\$ 2,000	3	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400								\$ 2,000	\$ 2,000	\$ 2,152	\$ 152				
112835	TANK AERATION DIGESTER	Environmental Services	Equipment	TANKPR	1979	45	2024	11	good	\$ 500,000	5	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,455	\$ 45,454.55	\$ 500,000	\$ 500,000	\$ 1,174,545	\$ 674,545			
112846	PANEL CONTROL HENRY ST SPS	Environmental Services	Equipment	CONTRO	1979	40	2019	6	good	\$ 5,000	5	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833						\$ 5,000	\$ 5,000	\$ 10,869	\$ 5,869				
112847	TANK WETWELL HENRY ST	Environmental Services	Equipment	TANKPR	1979	50	2029	16	good	\$ 75,000	5	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 23,437.50	\$ 4,687.50	\$ 75,000	\$ 75,000	\$ 189,758	\$ 114,758		
112848	PUMP SUBM 01 HENRY ST SPS	Environmental Services	Equipment	PUMP	2008	10	2018	5	good	\$ 5,000	5	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000								\$ 5,000	\$ 5,000	\$ 6,000	\$ 1,000				
112849	PUMP SUBM 02 HENRY ST SPS	Environmental Services	Equipment	PUMP	1979	40	2019	6	good	\$ 5,000	5	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833						\$ 5,000	\$ 5,000	\$ 10,869	\$ 5,869				
140085	PUMP SUBM SPARE HENRY ST SPS	Environmental Services	Equipment	PUMP	1979	40	2019	6	good	\$ 5,000	3	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833	\$ 833						\$ 5,000	\$ 5,000	\$ 10,869	\$ 5,869				
191529	ANALYZER DO PORTABLE	Environmental Services	Equipment	INSTRU	2005	25	2030	17	good	\$ 2,500	2	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 147	\$ 735.29	\$ 294.12	\$ 2,500	\$ 2,500	\$ 4,167	\$ 1,667		
191643	PUMP SUBM 02 PLANT PS	Environmental Services	Equipment	PUMP	1979	40	2019	6	good	\$ 2,000	3	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333						\$ 2,000	\$ 2,000	\$ 4,347	\$ 2,347				
<b>TOTALS</b>											\$ 4,444,000.00	-	\$ 542,796	\$ 542,796	\$ 541,046	\$ 541,046	\$ 540,671	\$ 539,271	\$ 240,687	\$ 232,973	\$ 232,973	\$ 232,973	\$ 232,973	\$ 255,400	\$ 5,276	\$ -	\$ -	\$ 4,447,906	\$ 4,444,000	\$ 8,387,881	\$ 3,943,881

Notes:  
 1. From Tangible Capital Assets, Amortization Check (2012) and information supplied by Ontario Clean Water Agency.  
 2. Replacement Cost from information supplied by Ontario Clean Water Agency.  
 3. Proposed Annual Contribution to Reserve calculated based on replacement Cost divided by Remaining Useful Life (from 2013).  
 4. Estimated Borrowing Cost (Replacement Cost) calculated from Infrastructure Ontario and Loan Payment Calculator, based on five - year to thirty year payment term (as applicable) and an annual payment schedule, as of September 17, 2013.  
 5. Difference (Saving vs. Borrowing) calculated as Estimated Borrowing Cost (Replacement Cost) - Total Required Reserve (Replacement Cost).  
 6. Any grant/subsidies (Federal or Provincial) would be used to reduce Annual Contributions to Reserves and/or borrowing amounts.  
 7. Proposed Annual Contributions to Reserves assumes Interest Rate on savings for Reserves equals Inflation Rate on cost of asset purchases.

Selected Focus Items



**Table 6d**  
**Detailed Summary of Municipal Assets - Buildings and Parks**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Detailed Asset Description <sup>1</sup>	Operating Department <sup>1</sup>	Division <sup>1</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Upgrade/ Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Proposed Annual Contribution to Reserves <sup>4</sup>												Total Reserve (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost) <sup>5</sup>	Difference (Borrowing - Savings) <sup>6</sup>			
												Years 1 to 5					Years 6 to 10					Years 11 to 15	Years 16 to 20					Years 21 to 25	Years 26 to 30	
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033					2034 to 2038	2038 to 2042	
B022	Municipal Office Building	Buildings	General Government	Office Buildings	1993	30	2020	7	fair	\$ 200,000.00	4	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571								\$ 200,000	\$ 200,000	\$ 368,349	\$ 168,349	
B022	Municipal Office Building	Buildings	General Government	Office Buildings	1993	30	2020	7	fair	\$ -	4																\$ -	\$ -	\$ -	\$ -
B022	Municipal Office Building	Buildings	General Government	Office Buildings	2000	30	2020	7	fair	\$ -	4																\$ -	\$ -	\$ -	\$ -
B027	Killaloe and District Medical Centre Provincial Courthouse	Buildings	General Government	Office Buildings	1976	30	2020	7	fair	\$ 100,000.00	5	\$ 14,286	\$ 14,286	\$ 14,286	\$ 14,286	\$ 14,286	\$ 14,286	\$ 14,286	\$ 14,286								\$ 100,000	\$ 100,000	\$ 184,175	\$ 84,175
B011	Firehall Round Lake Centre	Buildings	Protection Services	Garages	1990	30	2023	10	good	\$ 20,000.00	5	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000						\$ 20,000	\$ 20,000	\$ 36,835	\$ 16,835
B011	Firehall Round Lake Centre	Buildings	Protection Services	Garages	1999	30	2023	10	good	\$ -	5																\$ -	\$ -	\$ -	\$ -
B029	Firehall Killaloe	Buildings	Protection Services	Garages	1955	30	2014	1	poor	\$ 150,000.00	5	\$ 150,000															\$ 150,000	\$ 150,000	\$ 276,262	\$ 126,262
B029	Firehall Killaloe	Buildings	Protection Services	Garages	1991	15	2014	1	poor	\$ -	5																\$ -	\$ -	\$ -	\$ -
B029	Firehall Killaloe	Buildings	Protection Services	Garages	1995	11	2014	1	poor	\$ -	5																\$ -	\$ -	\$ -	\$ -
B008A	Round Lake Recreation Centre Clubhouse	Buildings	Recreation Services	Park Buildings	2002	20	2023	10	good	\$ 100,000.00	3	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000					\$ 100,000	\$ 100,000	\$ 149,913	\$ 49,913	
B008B	Round Lake Recreation Centre Rink Clubhouse	Buildings	Recreation Services	Park Buildings	2003	20	2023	10	good	\$ -	4																\$ -	\$ -	\$ -	\$ -
B008B	Round Lake Recreation Centre Rink Clubhouse	Buildings	Recreation Services	Park Buildings	2004	19	2023	10	good	\$ -	4																\$ -	\$ -	\$ -	\$ -
B020	Tourist Information Booth Public Washrooms Emerson Lepine Memorial	Buildings	Recreation Services	Park Buildings	1998	15	2023	10	good	\$ 10,000.00	4	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000					\$ 10,000	\$ 10,000	\$ 13,416	\$ 3,416	
B020	Tourist Information Booth Public Washrooms Emerson Lepine Memorial	Buildings	Recreation Services	Park Buildings	1999	15	2023	10	good	\$ -	4																\$ -	\$ -	\$ -	\$ -
TBD	Killaloe and District Public Library	Buildings	Recreation Services	Library	n/a	30	2013	0	poor	\$ 1,000,000.00	4	\$ 1,000,000															\$ 1,000,000	\$ 1,000,000	\$ 1,841,746	\$ 841,746
B023	Killaloe Rink and Skateboard Park (Recreational Centre)	Buildings	Recreation Services	Park Buildings	1969	3	2023	10	fair	\$ 150,000.00	3	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000					\$ 150,000	\$ 150,000	\$ 170,844	\$ 20,844	
B023	Killaloe Rink and Skateboard Park (Rink)	Buildings	Recreation Services	Park Buildings	2010	8	2023	10	good	\$ 20,000.00	3	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000					\$ 20,000	\$ 20,000	\$ 24,000	\$ 4,000	
B033A	Hoch Park Farmhouse	Buildings	Recreation Services	Park Buildings	2005	19	2013	0	poor	\$ -	2																\$ -	\$ -	\$ -	\$ -
B033A	Hoch Park Farmhouse	Buildings	Recreation Services	Park Buildings	2007	17	2013	0	poor	\$ -	2																\$ -	\$ -	\$ -	\$ -
B033B	Hoch Park Barn	Buildings	Recreation Services	Park Buildings	1999	25	2014	1	fair	\$ 25,000.00	4	\$ 25,000														\$ 25,000	\$ 25,000	\$ 41,673	\$ 16,673	
B006A	Municipal Garage	Buildings	Transportation Services	Garages	1961	15	2023	10	fair	\$ 50,000.00	4	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000					\$ 50,000	\$ 50,000	\$ 67,079	\$ 17,079	
B006B	Quonset Hut	Buildings	Transportation Services	Garages	1976	15	2018	5	poor	\$ 75,000.00	3	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000										\$ 75,000	\$ 75,000	\$ 100,619	\$ 25,619	
B006C	Steel Salt Shed	Buildings	Transportation Services	Garages	1993	15	2018	5	fair	\$ 40,000.00	4	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000										\$ 40,000	\$ 40,000	\$ 53,663	\$ 13,663	
B015A	Station Park Gazebo	Buildings	Recreation Services	Park Buildings	2000	15	2023	10	good	\$ 5,000.00	3	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500					\$ 5,000	\$ 5,000	\$ 6,708	\$ 1,708	
B015B	Station Park Covered Bridge	Buildings	Recreation Services	Park Buildings	1995	15	2023	10	fair	\$ 40,000.00	3	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000					\$ 40,000	\$ 40,000	\$ 53,663	\$ 13,663	
LI013A	Sheryl Boyle Park Land Improvements	Land Improvements	Recreation Services	Landscaping	1992	10	2002	-11	fair	\$ 30,000.00	3	\$ 30,000														\$ 30,000	\$ 30,000	\$ 36,000	\$ 6,000	
LI015A	Station Park Landscaping and Parking Lot	Land Improvements	Recreation Services	Landscaping	1999	10	2019	6	fair	\$ 150,000.00	3	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000									\$ 150,000	\$ 150,000	\$ 179,999	\$ 29,999	
LI023A	Killaloe Rink and Skateboard Park (Rink)	Land Improvements	Recreation Services	Rink Surface	2007	10	2023	10	fair	\$ -	3															\$ -	\$ -	\$ -	\$ -	
L004	Red Rock Corridor Part 1	Vacant Land	Other	Vacant Land	1980	-	-	-	good	-	1															\$ -	\$ -	\$ -	\$ -	
L005	Red Rock Corridor Part 2	Vacant Land	Other	Vacant Land	1980	-	-	-	good	-	1															\$ -	\$ -	\$ -	\$ -	
<b>TOTALS</b>										\$ 2,165,000	-	\$ 1,335,357	\$ 130,357	\$ 130,357	\$ 130,357	\$ 130,357	\$ 130,357	\$ 107,357	\$ 82,357	\$ 39,500	\$ 39,500	\$ 39,500	\$ -	\$ -	\$ -	\$ -	\$ 2,165,000	\$ 2,165,000	\$ 3,604,943	\$ 1,439,943

- Notes:
1. Tangible Capital Assets, Amortization Check (2012).
  2. Based on structural and mechanical inspection completed by Greenview Environmental Management Limited (August 2013).
  3. Level of Service: 1 = very low priority, 5 = very high priority.
  4. Proposed Annual Contribution to Reserve calculated based on replacement Cost divided by Remaining Useful Life (from 2013).
  5. Estimated Borrowing Cost (Replacement Cost) calculated from Infrastructure Ontario and Loan Payment Calculator, based on five - year to thirty year payment term (as applicable) and an annual payment schedule, as of September 17, 2013.
  6. Difference (Saving vs. Borrowing) calculated as Estimated Borrowing Cost (Replacement Cost) - Total Required Reserve (Replacement Cost).
  7. Any grant/subsidies (Federal or Provincial) would be used to reduce Annual Contributions to Reserves and/or borrowing amounts.
  8. Proposed Annual Contributions to Reserves assumes Interest Rate on savings for Reserves equals Inflation Rate on cost of asset purchases.

Selected Focus Items





**Table 6e**  
**Detailed Summary of Municipal Assets - Vehicles and Equipment**  
**Asset Management Plan**  
**The Township of Killaloe - Hagarty - Richards**  
**10/7/13/007**

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Detailed Asset Description <sup>1</sup>	Operating Department <sup>1</sup>	Asset Class <sup>1</sup>	Year In Service	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Proposed Annual Contribution to Reserves <sup>4</sup>																	Total Reserve (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost) <sup>5</sup>	Difference (Borrowing - Savings) <sup>6</sup>	
												Years 1 to 5					Years 6 to 10					Years 11 to 15		Years 16 to 20		Years 21 to 25		Years 26 to 30					
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033	2034 to 2038	2038 to 2042								
V-T02	2008 Ford 4x4 SRW 3/4 Ton Truck 02 Road Supervisor	Vehicles	Building Department	Trucks - Medium Duty	2007	7	2014	1	good	\$ 40,000.00	3	\$ 40,000													\$ 40,000	\$ 40,000	\$ 48,000	\$ 8,000					
V-D01	2001 John Deere 700H Dozer used 2004	Vehicles	Environmental Services	Off Road - Heavy	2004	15	2019	6	good	\$ 200,000.00	3	\$ 33,333	\$ 33,333	\$ 33,333	\$ 33,333	\$ 33,333	\$ 33,333									\$ 200,000	\$ 200,000	\$ 268,316	\$ 68,316				
V-W03	1996 Western Star Model CNV 3 axle Diesel Garbage Truck	Vehicles	Environmental Services	Trucks - Heavy Duty	2007	10	2017	4	fair	\$ 200,000.00	4	\$ 50,000	\$ 50,000	\$ 50,000												\$ 200,000	\$ 200,000	\$ 239,998	\$ 39,998				
E-AdmComputers	Admin Computers and Software	Equipment	General Government	Computers & Software	2009	5	2014	1	good	\$ 2,000.00	3	\$ 2,000														\$ 2,000	\$ 2,000	\$ 2,152	\$ 152				
E-AdmCopier	Admin Photocopier	Equipment	General Government	Equipment	2009	5	2014	1	fair	\$ 15,000.00	4	\$ 15,000														\$ 15,000	\$ 15,000	\$ 16,144	\$ 1,144				
-	Generator - Municiple Office	Equipment	General Government	Equipment	1999	20	2019	6	good	\$ 20,000.00	5	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333	\$ 3,333									\$ 20,000	\$ 20,000	\$ 29,883	\$ 9,883				
-	Generator - Roads	Equipment	General Government	Equipment	1999	20	2019	6	good	\$ -	2															\$ -	\$ -	\$ -	\$ -				
-	Killaloe Fire Hall - Generator	Equipment	Protection Services	Equipment	1999	20	2019	6	good	\$ 10,000.00	5	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667									\$ 10,000	\$ 10,000	\$ 14,991	\$ 4,991				
-	Round Lake Fire Hall - Generator	Equipment	Protection Services	Equipment	2013	20	2033	20	good	\$ 9,000.00	5	\$ 450	\$ 450	\$ 450	\$ 450	\$ 450	\$ 450	\$ 450	\$ 450	\$ 450	\$ 450	\$ 2,250	\$ 2,250			\$ 9,000	\$ 9,000	\$ 13,492	\$ 4,492				
-	Radio and Repeater	Equipment	Protection Services	Equipment	1999	10	2009	-4	fair	\$ 10,000.00	5	\$ 10,000														\$ 10,000	\$ 10,000	\$ 12,000	\$ 2,000				
-	Generator - Portable Fire	Equipment	Protection Services	Equipment	1999	20	2019	6	good	\$ -	2															\$ -	\$ -	\$ -	\$ -				
E-Prot2006	Bunker Gear (X 10 units)	Equipment	Protection Services	Pooled Equipment	2006	10	2016	3	good	\$ 16,000.00	5	\$ 5,333	\$ 5,333	\$ 5,333												\$ 16,000	\$ 16,000	\$ 19,200	\$ 3,200				
E-Prot2007	Bunker Gear (X 9 units)	Equipment	Protection Services	Pooled Equipment	2007	10	2017	4	good	\$ 144,000.00	5	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000											\$ 144,000	\$ 144,000	\$ 172,799	\$ 28,799				
E-Prot2012	2012 Compressor and Filling Station	Equipment	Protection Services	Compressor & Filling station	2012	30	2042	29	good	\$ 60,000.00	5	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 2,069	\$ 10,345	\$ 10,345	\$ 10,345	\$ 8,276	\$ 60,000	\$ 60,000	\$ 110,505	\$ 50,505		
VF3	1986 Ford Fire Pumper used 1995	Vehicles	Protection Services	Fire Trucks	1995	20	2015	2	fair	\$ 250,000.00	5	\$ 125,000	\$ 125,000													\$ 250,000	\$ 250,000	\$ 374,783	\$ 124,783				
VF4	1993 International 40S Fire Triple Combination Pumper	Vehicles	Protection Services	Fire Trucks	1993	20	2013	0	fair	\$ 250,000.00	5	\$ 250,000														\$ 250,000	\$ 250,000	\$ 374,783	\$ 124,783				
VF5	1999 Ford CTV F450 Rescue Van used 2003	Vehicles	Protection Services	Fire - Light	2003	10	2013	0	fair	\$ 110,000.00	5	\$ 110,000														\$ 110,000	\$ 110,000	\$ 131,999	\$ 21,999				
VF6	2007 International Fire Tanker - Truck	Vehicles	Protection Services	Fire Trucks	2007	20	2027	14	good	\$ 250,000.00	5	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 17,857	\$ 71,429	\$ 250,000	\$ 250,000	\$ 374,783	\$ 124,783					
VF6	2007 International Fire Tanker - Pump	Vehicles	Protection Services	Pump	2011	15	2026	13	good	\$ -	5															\$ -	\$ -	\$ -	\$ -				
VJ7	2011 Ford Rapid Response Vehicle	Vehicles	Protection Services	Fire Trucks	2011	20	2031	18	good	\$ 110,000.00	5	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 6,111	\$ 30,556	\$ 18,333	\$ 110,000	\$ 110,000	\$ 164,904	\$ 54,904					
E-R1	Gardner Denver 150 Compressor used 1983	Equipment	Transportation Services	Tools	1983	10	1993	-20	fair	\$ -	1															\$ -	\$ -	\$ -	\$ -				
E-R6	2008 Snowblower Attachment Trackless 51 inch	Equipment	Transportation Services	Attachments	2008	7	2015	2	fair	\$ 8,000.00	4	\$ 4,000	\$ 4,000													\$ 8,000	\$ 8,000	\$ 9,600	\$ 1,600				
E-R7	2008 Tanks for Dust Control	Equipment	Transportation Services	Attachments	2008	10	2018	5	fair	\$ 15,000.00	3	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000										\$ 15,000	\$ 15,000	\$ 18,000	\$ 3,000				
E-R8	2009 Back Blade Installed on V-T1 Truck 1	Equipment	Transportation Services	Attachments	2009	7	2016	3	good	\$ 15,000.00	5	\$ 5,000	\$ 5,000	\$ 5,000												\$ 15,000	\$ 15,000	\$ 18,000	\$ 3,000				
E-TA	1989 Tag-a-long Trailer	Equipment	Transportation Services	Trailers	1989	10	1999	-14	fair	\$ 20,000.00	2	\$ 20,000														\$ 20,000	\$ 20,000	\$ 24,000	\$ 4,000				
E-TC	2004 Recycling Trailer	Equipment	Transportation Services	Trailers	2004	10	2014	1	good	\$ 6,000.00	4	\$ 6,000														\$ 6,000	\$ 6,000	\$ 7,200	\$ 1,200				
V-B01	2001 John Deere 310SG Tractor Backhoe used 2007	Vehicles	Transportation Services	Off Road - Medium	2007	12	2019	6	fair	\$ 90,000.00	3	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000									\$ 90,000	\$ 90,000	\$ 120,742	\$ 30,742				
V-E01	2003 DAI-WOO SOLAR 170W-III Excavator with Brushing Attachment	Vehicles	Transportation Services	Off Road - Heavy	2003	15	2018	5	fair	\$ 150,000.00	2	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000										\$ 150,000	\$ 150,000	\$ 201,237	\$ 51,237				
V-E01	2003 DAI-WOO SOLAR 170W-III Excavator with Brushing Attachment	Vehicles	Transportation Services	Off Road - Heavy	2008	15	2023	10	fair	\$ 30,000.00	2	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000						\$ 30,000	\$ 30,000	\$ 40,247	\$ 10,247				
V-G03	Roanoke Roberts brush cutter mounted on 440 Adams Grader used 1992	Vehicles	Transportation Services	Off Road - Heavy	1992	15	2007	-6	poor	\$ -	1															\$ -	\$ -	\$ -	\$ -				
V-G06	1990 Champion 740A-VHP Motor Grader	Vehicles	Transportation Services	Off Road - Heavy	1999	15	2014	1	fair	\$ 250,000.00	4	\$ 250,000														\$ 250,000	\$ 250,000	\$ 335,395	\$ 85,395				
V-L02	1989 John Deere Model 544E Front End Loader	Vehicles	Transportation Services	Off Road - Heavy	1989	12	2001	-12	fair	\$ 120,000.00	2	\$ 120,000														\$ 120,000	\$ 120,000	\$ 160,990	\$ 40,990				
V-S02	1992 Trackless MTS Tractor Sidewalk Plow with sweeper used 2005	Vehicles	Transportation Services	Off Road - Light	2005	10	2015	2	poor	\$ 70,000.00	4	\$ 35,000	\$ 35,000													\$ 70,000	\$ 70,000	\$ 83,999	\$ 13,999				
V-S03	2000 Elgin Pelican Sweeper used 2008	Vehicles	Transportation Services	Trucks - Heavy Duty	2008	8	2016	3	fair	\$ 120,000.00	2	\$ 40,000	\$ 40,000	\$ 40,000												\$ 120,000	\$ 120,000	\$ 143,999	\$ 23,999				
V-T11	2010 Ford 1/2 ton with snow plow	Vehicles	Transportation Services	Trucks - Medium Duty	2010	7	2017	4	good	\$ 40,000.00	4	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000											\$ 40,000	\$ 40,000	\$ 48,000	\$ 8,000				
V-T11	Fisher Plow - for 2010 Ford 1/2 ton	Vehicles	Transportation Services	Fisher Plow	2011	6	2017	4	good	\$ 6,000.00	3	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500											\$ 6,000	\$ 6,000	\$ 7,200	\$ 1,200				
V-T1	2006 International 7600 SBA 6X4	Vehicles	Transportation Services	Trucks - Heavy Duty	2006	10	2016	3	fair	\$ 220,000.00	4	\$ 73,333	\$ 73,333	\$ 73,333												\$ 220,000	\$ 220,000	\$ 263,998	\$ 43,998				
V-T10	2009 Chevrolet Silverado 4x4 half ton Silver	Vehicles	Transportation Services	Trucks - Light Duty	2009	5	2014	1	fair	\$ 30,000.00	4	\$ 30,000														\$ 30,000	\$ 30,000	\$ 32,287	\$ 2,287				
V-T3	2006 International 7600 SBA 6X4 Buyout Lease 2009	Vehicles	Transportation Services	Trucks - Heavy Duty	2009	7	2016	3	-	\$ -	-															\$ -	\$ -	\$ -	\$ -				
V-T3	Back Blade for 2006 International 7600 SBA 6X4 Buyout Lease 2009 (V-T1)	Vehicles	Transportation Services	Back Blade	2011	5	2016	3	good	\$ 15,000.00	4	\$ 5,000	\$ 5,000	\$ 5,000												\$ 15,000	\$ 15,000	\$ 16,144	\$ 1,144				
V-T5	1995 International Plow Truck	Vehicles	Transportation Services	Trucks - Heavy Duty	1995	10	2005	-8	fair	\$ -	2															\$ -	\$ -	\$ -	\$ -				
V-T8	2009 International Tandem Plow Truck	Vehicles	Transportation Services	Trucks - Heavy Duty	2009	10	2019	6	good	\$ 220,000.00	4	\$ 36,667	\$ 36,667	\$ 36,667	\$ 36,667	\$ 36,667	\$ 36,667									\$ 220,000	\$ 220,000	\$ 263,998	\$ 43,998				
V-T9	1995 GMC 4x4 SIE 1500 half ton GRN used 2004	Vehicles	Transportation Services	Trucks - Light Duty	2004	5	2009	-4	poor	\$ -	1															\$ -	\$ -	\$ -	\$ -				
V-T12	Ford 250 4X4 - 3/4 ton	Vehicles	Transportation Services	Trucks - Light Duty	2012	7	2019	6	good	\$ 40,000.00																							



**Table 6**  
**Financial Assessment and Projections - Solid Waste**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Operating Department <sup>1</sup>	Detailed Asset Description (WDS / WTS) <sup>1,2</sup>	Remaining Capacity <sup>2</sup>	Year In Service <sup>1,2</sup>	Asset Life Expectancy (years) <sup>1,2</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>3</sup>	Level of Service (1 to 5) <sup>4</sup>	Proposed Annual Contribution to Reserves <sup>5</sup>																Total Reserve (30 Year)	Total Required Reserve (Replacement Cost)	Estimated Borrowing Cost (Replacement Cost) <sup>6</sup>	Difference (Borrowing - Savings) <sup>7</sup>
												Years 1 to 5					Years 6 to 10					Years 11 to 15	Years 16 to 20	Years 21 to 25	Years 26 to 30						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 to 2028	2029 to 2033	2034 to 2038	2039 to 2042						
E-W1	1993 Recycling Bin, 46 Cu Yd	Environmental Services	Equipment	-	1993	10	2003	-10	good	\$ 10,000	4	\$ 10,000												\$ 10,000	\$ 10,000	\$ 12,000	\$ 2,000				
E-W2	1995 Waste Site Cardboard Compactor	Environmental Services	Equipment	-	1995	10	2005	-8	fair	\$ 60,000	4	\$ 60,000													\$ 60,000	\$ 60,000	\$ 71,999	\$ 11,999			
E-W3	2001 Cart, Recycling, 360L (95 Gal) Qty 82	Environmental Services	Equipment	-	2001	10	2011	-2	good	\$ -	4	\$ -													\$ -	\$ -	\$ -	\$ -			
E-W4	2006 Recycling Bin, 46 Cu Yd	Environmental Services	Equipment	-	2006	10	2016	3	good	\$ 10,000	4	\$ 3,333	\$ 3,333	\$ 3,333											\$ 10,000	\$ 10,000	\$ 12,000	\$ 2,000			
E-W5	2008 Precast Concrete Barriers	Environmental Services	Equipment	-	2008	10	2018	5	good	\$ 10,000	2	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000									\$ 10,000	\$ 10,000	\$ 12,000	\$ 2,000			
E-W6	2008 Killaloe Waste Site Attendants Shelter	Environmental Services	Equipment	-	2008	10	2018	5	good	\$ 9,000	3	\$ 1,800	\$ 1,800	\$ 1,800	\$ 1,800	\$ 1,800									\$ 9,000	\$ 9,000	\$ 10,800	\$ 1,800			
E-W7	2008 Killaloe Waste Site MOLOK Organics Equipment	Environmental Services	Equipment	-	2008	10	2018	5	good	\$ 12,000	3	\$ 2,400	\$ 2,400	\$ 2,400	\$ 2,400	\$ 2,400									\$ 12,000	\$ 12,000	\$ 14,400	\$ 2,400			
-	Round Lake WDS	Environmental Services	WDS	n/a	1967	0	2019	6	good	\$ -	4														\$ -	\$ -	\$ -	\$ -			
-	Killaloe WDS	Environmental Services	WDS	1355	1970	2.6	2015	2	good	\$ -	5														\$ -	\$ -	\$ -	\$ -			
-	Red Rock WDS	Environmental Services	WDS	7550	1979	10	2021	8	good	\$ -	3														\$ -	\$ -	\$ -	\$ -			
-	Closure Cost - Round Lake WDS	Environmental Services	WDS	n/a	1967	6	2018	5	good	\$ 149,000	4	\$ 29,800	\$ 29,800	\$ 29,800	\$ 29,800	\$ 29,800									\$ 149,000	\$ 149,000	\$ 170,246	\$ 21,246			
-	Closure Cost - Killaloe WDS	Environmental Services	WDS	1355	1970	2	2015	2	good	\$ 185,000	4	\$ 92,500	\$ 92,500												\$ 185,000	\$ 185,000	\$ 199,103	\$ 14,103			
-	Closure Cost - Red Rock WDS	Environmental Services	WDS	7550	1979	7	2020	7	good	\$ 134,000	3	\$ 19,143	\$ 19,143	\$ 19,143	\$ 19,143	\$ 19,143	\$ 19,143	\$ 19,143							\$ 134,000	\$ 134,000	\$ 160,799	\$ 26,799			
<b>TOTALS</b>										\$ 579,000	-	\$ 220,976	\$ 150,976	\$ 58,476	\$ 55,143	\$ 55,143	\$ 19,143	\$ 19,143	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 579,000	\$ 579,000	\$ 663,347	\$ 84,347	

- Notes:
1. Tangible Capital Assets, Amortization Check (2012).
  2. From Annual Report (Greenview, 2013).
  3. From information supplied by Township of Killaloe, Hagarty, and Richards and/or Greenview Environmental Management Limited.
  4. Level of Service: 1 = very low priority, 5 = very high priority.
  5. Proposed Annual Contribution to Reserve calculated based on replacement Cost divided by Remaining Useful Life (from 2013).
  6. Estimated Borrowing Cost (Replacement Cost) calculated from Infrastructure Ontario and Loan Payment Calculator, based on five - year to thirty year payment term (as applicable) and an annual payment schedule, as of September 17, 2013.
  7. Difference (Saving vs. Borrowing) calculated as Estimated Borrowing Cost (Replacement Cost) - Total Required Reserve (Replacement Cost).
  8. Any grant/subsidies (Federal or Provincial) would be used to reduce Annual Contributions to Reserves and/or borrowing amounts.
  9. Proposed Annual Contributions to Reserves assumes Interest Rate on savings for Reserves equals Inflation Rate on cost of asset purchases.

Selected Focus Items





**Table 6g**  
**Tracking Sheet - Maintenance of Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1,2</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Tracking Sheet - Maintenance Completed per Year <sup>4</sup>										Total Maintenance Per Street Light (10 Year)	
												Years 1 to 5					Years 6 to 10						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
I_SLights	Infrastructure Street Lights	SL028	Transportation	Linear Assets	1988	20	2008	-5	good	-	3												
BO1110	Round Lake Rd	SL001	Transportation	Street Light	1994	15	2009	-4	good	\$ 5,000.00	3												\$ -
BO1120	Bear Trail Rd	SL002X	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1130	Oak Avenue	SL003X	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1140	Round Lake Rd	SL004X	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
TU1SL033	Turners Rd	SL033	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
AN1SL01	Annie Street	5	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
AN1SL02	Annie Street	22	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
AN1SL03	Annie Street	28	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
AN1SL04	Annie Street	10	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
AN1SL05	Annie Street	2	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1SL01	Boland Street	6020	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1SL02	Boland Street	11	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1SL03	Boland Street	21	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1SL04	Boland Street	25	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BO1SL05	Boland Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL01	Cameron Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL02	Cameron Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL03	Cameron Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL04	Cameron Street	6042	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL05	Cameron Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL06	Cameron Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL07	Cameron Street	6	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CA1SL08	Cameron Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CI1SL01	Civic Street	3	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CI1SL02	Civic Street	6005	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CI1SL03	Civic Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CI1SL04	Civic Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CI1SL05	Civic Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CO1SL01	Coll Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CO1SL02	Coll Street	7	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CO1SL03	Coll Street	15	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CO1SL04	Coll Street	21	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
EL1SL01	Elm Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
EL1SL02	Elm Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL01	Henry Street	20	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL02	Henry Street	53	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL03	Henry Street	43	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL04	Henry Street	65	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL05	Henry Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL06	Henry Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL07	Henry Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HE1SL08	Henry Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HW1SL01	Highway 60	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
JA1SL01	James Street	6010	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
JA1SL02	James Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
JA1SL03	James Street	22	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -



**Table 6g**  
**Tracking Sheet - Maintenance of Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1,2</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Tracking Sheet - Maintenance Completed per Year <sup>4</sup>										Total Maintenance Per Street Light (10 Year)	
												Years 1 to 5					Years 6 to 10						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
JA1SL04	James Street	8	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3											\$ -	
JA1SL05	James Street	5	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
JO1SL01	John Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
JO1SL02	John Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
JO1SL03	John Street	48	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
KE1SL01	Keetch Street	4	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
KE1SL02	Keetch Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
KI1SL01	King Street	4	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
KI1SL02	King Street	15	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
KI1SL03	King Street	0	Transportation	Yard Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL01	Lake Street	0	Transportation	Yard Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL02	Lake Street	6044	Transportation	Yard Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL03	Lake Street	0	Transportation	Yard Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL04	Lake Street	24	Transportation	Yard Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL05	Lake Street	30	Transportation	Yard Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL06	Lisk Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA1SL07	Lisk Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MA1SL01	Maple Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MC1SL01	McCarthy Lane	171R2	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MC1SL02	McCarthy Lane	171R3	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
ME1SL01	Meadow Drive	3	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
ME1SL02	Meadow Drive	9	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
ME1SL03	Meadow Drive	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL01	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL02	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL03	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL04	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL05	Mill Street	37	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL06	Mill Street	43	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL07	Mill Street	45	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL08	Mill Street	51	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL09	Mill Street	61	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL10	Mill Street	16	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL11	Mill Street	20	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL12	Mill Street	92	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL13	Mill Street	96	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL14	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL15	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL16	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL17	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL18	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL19	Mill Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MI1SL20	Mill Street	31	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
NO1SL01	North Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
NO1SL02	North Street	20	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
NO1SL03	North Street	28	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL01	Queen Street	63	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -



**Table 6g**  
**Tracking Sheet - Maintenance of Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1,2</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Tracking Sheet - Maintenance Completed per Year <sup>4</sup>										Total Maintenance Per Street Light (10 Year)	
												Years 1 to 5					Years 6 to 10						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
QU1SL02	Queen Street	67	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3											\$ -	
QU1SL03	Queen Street	69	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL04	Queen Street	73	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL05	Queen Street	75-1	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL06	Queen Street	75	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL07	Queen Street	81	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL08	Queen Street	85	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL09	Queen Street	85-1	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL10	Queen Street	87	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL11	Queen Street	91	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL12	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL13	Queen Street	99	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL14	Queen Street	105	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL15	Queen Street	62	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL16	Queen Street	109	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL17	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL18	Queen Street	0	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL19	Queen Street	0	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL20	Queen Street	0	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL21	Queen Street	0	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL22	Queen Street	0	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL23	Queen Street	0	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL24	Queen Street	1	Transportation	Street Light	1991	15	2006	-7	good	\$ 5,000.00	3												\$ -
QU1SL25	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL26	Queen Street	6008	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL27	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL28	Queen Street	5	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL29	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL30	Queen Street	171	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL31	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL32	Queen Street	171R1	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL33	Queen Street	6502	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL34	Queen Street	182	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL35	Queen Street	6009	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL36	Queen Street	188	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL37	Queen Street	190	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL38	Queen Street	198	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL39	Queen Street	208	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL40	Queen Street	214	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL41	Queen Street	220	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL42	Queen Street	228	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL43	Queen Street	230	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL44	Queen Street	236	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL45	Queen Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL46	Queen Street	248	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
QU1SL47	Queen Street	260	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
R1SL01	River Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -



**Table 6g**  
**Tracking Sheet - Maintenance of Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1,2</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Tracking Sheet - Maintenance Completed per Year <sup>4</sup>										Total Maintenance Per Street Light (10 Year)	
												Years 1 to 5					Years 6 to 10						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
RH1SL02	River Street	105	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3											\$ -	
RO1SL01	Roche Street	1	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL02	Roche Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL03	Roche Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL04	Roche Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL05	Roche Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL06	Roche Street	15	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL07	Roche Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL08	Roche Street	13	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL09	Roche Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL10	Roche Street	10	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RY1SL01	Ryan Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RY1SL02	Ryan Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RY1SL03	Ryan Street	23	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RY1SL04	Ryan Street	31	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RY1SL05	Ryan Street	33	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
WH1SL01	William Street	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
WH1SL02	William Street	9	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
WH1SL03	William Street	17	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
ZU1SL01	Zummach Drive	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
ZU1SL02	Zummach Drive	30	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
ZU1SL03	Zummach Drive	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
BE1SL02X	Round Lake Rd	SL002	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
OA1SL03X	Round Lake Rd	SL003	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL04X	Round Lake Rd	SL004	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1180	Round Lake Rd	SL005	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1210	Round Lake Rd	SL006	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1220	Round Lake Rd	SL007	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1240	Round Lake Rd	SL008	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1250	Round Lake Rd	SL009	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1260	Round Lake Rd	SL010	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL11	Simpson Pit Rd	SL011	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL12	Simpson Pit Rd	SL012	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL13	Simpson Pit Rd	SL013	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL14	Simpson Pit Rd	SL014	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL15	Simpson Pit Rd	SL015	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LA2SL29	Lake Street (RL)	SL029	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL31	Simpson Pit Rd	SL031	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SI2SL32	Round Lake Rd	SL032	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
AL1SL34	Albert Street	SL034	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
RO1SL36	Round Lake Rd	SL036	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
SH1SL16	Shrine Hill Drive	SL016	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
H160SL17	Highway 60	SL017	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
H160SL18	Highway 60	SL018	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
H160SL19	Highway 60	SL019	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
H160SL20	Highway 60	SL020	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
H160SL21	Highway 60	SL021	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -



**Table 6g**  
**Tracking Sheet - Maintenance of Street Lights**  
 Asset Management Plan  
 The Township of Killaloe - Hagarty - Richards  
 107.13.007

Asset ID <sup>1</sup>	Asset Name <sup>1</sup>	Pole No. <sup>1,2</sup>	Operating Department <sup>1</sup>	Detailed Assets Description <sup>1,2</sup>	Year In Service <sup>1</sup>	Asset Life Expectancy (years) <sup>1</sup>	Projected Replacement or Upgrade Year	Remaining Useful Life (from 2013)	Condition Rating (good/fair/poor) <sup>2</sup>	Replacement Cost <sup>2</sup>	Level of Service (1 to 5) <sup>3</sup>	Tracking Sheet - Maintenance Completed per Year <sup>4</sup>										Total Maintenance Per Street Light (10 Year)	
												Years 1 to 5					Years 6 to 10						
												2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
HI60SL22	Highway 60	SL022	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3											\$ -	
HI60SL23	Highway 60	SL023	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CH1SL24	Church Street	SL024	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CH1SL25	Church Street	SL025	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CH1SL26	Church Street	SL026	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
CH1SL27	Church Street	SL027	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
WI3SL29	Wilno North Rd	SL028	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
HI1SL30	Hillcrest Ave	SL030	Transportation	Street Light	1994	15	2009	-4	good	\$ 5,000.00	3												\$ -
CH1SL35	Church Street	SL035	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
MO1SL01	Mountain View Rd	AJ9 KJC	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL01	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL02	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL03	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL04	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL05	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL06	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL07	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL08	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA1YL09	Station Park	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL01	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL02	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL03	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL04	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL05	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL06	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL07	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
PA2YL08	Killaloe Rink	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
LI1SL01	Lions Lane	0	Transportation	Street Light	0	15	15	-1998	good	\$ 5,000.00	3												\$ -
<b>TOTALS</b>										\$ 1,075,000	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

- Notes:
1. Streetlight Database (2013).
  2. Tangible Capital Assets, Amortization Check (2012). And/or information supplied by Township of Killaloe, Hagarty, and Richards
  3. Level of Service: 1 = very low priority, 5 = very high priority.
  4. Proposed Annual Contribution to Reserve calculated based on replacement Cost divided by Remaining Useful Life (from 2013).
  5. Estimated Borrowing Cost (Replacement Cost) calculated from Infrastructure Ontario and Loan Payment Calculator, based on five - year to thirty year payment term (as applicable) and an annual payment schedule, as of September 17, 2013
  6. Difference (Saving vs. Borrowing) calculated as Estimated Borrowing Cost (Replacement Cost) - Total Required Reserve (Replacement Cost).
  7. Any grant/subsidies (Federal or Provincial) would be used to reduce Annual Contributions to Reserves and/or borrowing amounts.
  8. Proposed Annual Contributions to Reserves assumes Interest Rate on savings for Reserves equals Inflation Rate on cost of asset purchases.

Selected Focus Items

## **APPENDIX B**

### **Statement of Service Conditions and Limitations**



## **GREENVIEW ENVIRONMENTAL MANAGEMENT LIMITED - STATEMENT OF SERVICE CONDITIONS AND LIMITATIONS**

### **Provision of Services and Payment**

Upon documented acceptance of Greenview's proposed services, costs and associated terms by the client, Greenview may commence work on the proposed services directly. Upon retention of Greenview's services related to this project, the client agrees to remit payment for the services rendered for the specified period within (30) days of receipt as invoiced by Greenview on a typical monthly basis, unless otherwise arranged between the client and Greenview. In the event of non-payment by the client, Greenview reserves the right, without external influence or expense, to discontinue services and retain any documentation, data, reports, or other project information until such time as payment is received by Greenview.

### **Warranty, Limitations, and Reliance**

Greenview relies on background and historical information from the client to determine the appropriate scope of services to meet the client's objectives, in accordance with applicable legislation, guidelines, industry practices, and accepted methodologies.

Greenview provides its services under the specific terms and conditions of a specific proposal (and where necessary formal contract), in accordance with the above requirements and the *Limitations Act 2002*, only.

The hypotheses, results, conclusions, and recommendations presented in documentation authored by Greenview are founded on the information provided by the client to Greenview in preparation for the work. Facts, conditions, and circumstances discovered by Greenview during the performance of the work requested by the client are assumed by Greenview to be part of preparatory information provided by the client as part of the proposal stage of the project. Greenview assumes that, until notified or discovered otherwise, that the information provided by, or obtained by Greenview from, the client is factual, accurate, and represents a true depiction of the circumstances that exist related to the time of the work.

Greenview relies on its clients to inform Greenview if there are changes to any related information to the work. Greenview does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Greenview will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Greenview during the period that services, work, or documentation preparation was performed by Greenview.

Facts, conditions, information and circumstances may vary with time and locations and Greenview's work is based on a review of such matters as they existed at the particular time and location indicated in its documentation. No assurance is made by Greenview that the facts, conditions, information, circumstances or any underlying assumptions made by Greenview in connection with the work performed will not change after the work is completed and documentation is submitted. If any such changes occur or additional information is obtained, Greenview should be advised and requested to consider if the changes or additional information affect its findings or results.

When preparing documentation, Greenview considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Greenview is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations,

governmental guidelines, and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

Greenview's services, work and reports are provided solely for the exclusive use of the client which has retained the services of Greenview and to which its reports are addressed. Greenview is not responsible for the use of its services, work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Greenview without Greenview's express written consent. Any party that uses, relies on, or makes a decision based on services or work performed by Greenview or a report prepared by Greenview without Greenview's express written consent, does so at its own risk. Except as set out herein, Greenview specifically disclaims any liability or responsibility to any third party for any loss, damage, expense, fine, penalty or other such thing which may arise or result from the use of, reliance on or decision based on any information, recommendation or other matter arising from the services, work or reports provided by Greenview.

### **Site Assessments**

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Greenview's work or report considers any locations or times other than those from which information, sample results and data were specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those based on extrapolations.

Only conditions, and substances, at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site that were not chosen for study by the client, or any other matter not specifically addressed in a report prepared by Greenview, are beyond the scope of the work performed by Greenview and such matters have not been investigated or addressed.

### **Confidentiality**

Greenview provides proposals, reports, assessments, designs, and any other work for the sole party identified as the client or potential client in the case of proposals.

For proposals specifically, the information contained therein is confidential, proprietary information, and shall not be reproduced or disclosed to any other party than to that of the addressee of the original proposal submission, without prior written permission of Greenview.