

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH May 15, 2019 COUNCIL MEETING

## AGENDA

**DATE:** Wednesday, May 15, 2019 **REGULAR MEETING:** 7:00 P.M.

**CLOSED MEETING:** At the end of the meeting

#### **≠** Denotes resolution prepared

- 1. Call the Meeting to Order
- 2. Disclosure of Pecuniary Interest & the General Nature Thereof.
- 3. Adoption and Receipt of Minutes of the Previous Meeting.≠
  - (a) Council Meeting May 1, 2019
  - (b) Closed Council Meeting May 1, 2019
- 4. Business Arising Out of the Minutes.

#### 5. **PUBLIC MEETINGS**

#### 1. Community Improvement Plan Amendment

\*note this Public Information Meeting will be held on Wednesday, May 15, 2019 at 6:00 p.m. at the Township Office, Council Chambers, 7404 Wellington Road 34

#### 2. Puslinch Community Centre Park Master Plan – Phase 1 and Phase 2

\*note this Public Information Meeting will be held on Wednesday, May 22, 2019 at 7:00 p.m. at the Puslinch Community Centre, 23 Brock Road South Puslinch

#### 6. **COMMUNICATIONS**

- Responses to Harden Environmental Services Ltd. review comments on the Nestlé Waters Canada 2018 Aberfoyle Monitoring Report
  - a. Correspondence from Nestle Waters dated April 29, 2019.

#### 2. Intergovernmental Affairs≠

(a) Various correspondence for review.



# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH May 15, 2019 MEETING

## 7. **DELEGATIONS / PRESENTATIONS ≠**

7:05 p.m. – Watson & Associates Economists Ltd with respect to Development Charges

**7:25 p.m.** - Mary Tivy, Chair, Puslinch Heritage Committee, with respect to the Heritage Committee Report

#### 8. **REPORTS**

1. Puslinch Fire and Rescue Services

None

- 2. Finance Department
  - (a) FIN-2019-022 Asset Management Plan and Policy Approval
  - (b) FIN-2019-023 2019 Final Tax Levy and Rates
- 3. Administration Department

None

- 4. Planning and Building
  - (a) BLDG-2019-005 Building Department Monthly Update- April 2019
- 5. Roads & Parks Department

None

6. Recreation Department

None

7. Mayor's Updates

None



# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH May 15, 2019 MEETING

#### 9. **NOTICES OF MOTION**

None

#### 10. **COMMITTEE MINUTES**

None

#### 11. MUNICIPAL ANNOUNCEMENTS

#### 12. **UNFINISHED BUSINESS**

#### 13. **BY-LAWS** ≠

- (a) Being a By-law to establish a Site Plan Control Area, to define classes of development and to delegate Council Authority pursuant to Section 41 of the Planning Act, R.S.O. 1990 c.P13, as amended, and to repeal By-law 16/08.
- (b) A by-law to provide for the levy and collection of property taxes for the 2019 taxation year.
- (c) Being a by-law to authorize the entering into a Memorandum of Understanding with the City of Guelph for the Niska Road Reconstruction.

#### 14. **CONFIRMING BY-LAW** ≠

(a) By-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch.

#### 15. **CLOSED ITEMS** ≠

(a) Confidential Verbal Report from Peter Pickfield, Garrod Pickfield LLP regarding litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board, and advice that is subject to solicitor-client privilege, including communications necessary for that purpose and personal matters about an identifiable individual, including municipal or local board employees with respect to 4002 Highway 6.

#### 16. **ADJOURNMENT** ≠



#### **MINUTES**

<u>DATE:</u> Wednesday, May 1, 2019<u>CLOSED MEETING</u>: 12:30 P.M.<u>REGULAR MEETING</u>: 1:00 P.M.

The May 1, 2019 Regular Council Meeting was held on the above date and called to order at 12:30 p.m. in the Council Chambers, Aberfoyle.

#### 1. ATTENDANCE:

Mayor James Seeley Councillor Matthew Bulmer Councillor Jessica Goyda Councillor Ken Roth Councillor John Sepulis

#### **STAFF IN ATTENDANCE:**

- 1. Karen Landry, CAO/Clerk
- 2. Mary Hasan, Director of Finance/Treasurer
- 3. Nina Lecic, Deputy Clerk

#### **OTHERS IN ATTENDANCE**

- 1. Doug Smith
- 2. Karen Armstrong
- 3. Joe Farwell
- 4. Cyndy Forsyth
- 5. Kathy White

### 2. <u>DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:</u>

None

#### 3. **CLOSED MEETING**

Council was in closed session from 12:32 p.m. to 12:42 p.m. Council recessed from 12:42 p.m. to 1:00 p.m.

Resolution No. 2019-183: Moved by Councillor Goyda and Seconded by Councillor Sepulis

That Council shall go into closed session under Section 239 of the Municipal Act for the purpose of:

(a) Confidential Verbal Report from Karen Landry, CAO/Clerk regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose with respect to the Municipal jurisdiction on environmental matters.

**CARRIED** 

Resolution No. 2019-184: Moved by Councillor Sepulis and

Seconded by Councillor Goyda

THAT Council moves into open session.

**CARRIED** 

Council resumed into open session at 12:42 p.m.

**Resolution No. 2019-185:** Moved by Councillor Goyda and

Seconded by Councillor Sepulis



#### That Council receives the:

(a) Confidential Verbal Report from Karen Landry, CAO/Clerk regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose with respect to the Municipal jurisdiction on environmental matters;

And that staff proceeds as directed.

**CARRIED** 

#### 4. ADOPTION OF THE MINUTES:

- (a) Council Meeting April 17, 2019
- (b) Closed Council Meeting April 17, 2019

Resolution No. 2019-186: Moved by Councillor Sepulis and

Seconded by Councillor Goyda

That the minutes of the following meetings be adopted as written and distributed:

- (a) Council Meeting April 17, 2019
- (b) Closed Council Meeting April 17, 2019

**CARRIED** 

#### 5. **BUSINESS ARISING OUT OF THE MINUTES:**

#### 6. **PUBLIC MEETINGS:**

1. Community Improvement Plan Amendment

\*note this Public Information Meeting will be held on Wednesday, May 15, 2019 at 6:00 p.m. at the Township Office, Council Chambers, 7404 Wellington Road 34

2. Puslinch Community Centre Park Master Plan – Phase 1 and Phase 2

\*note this Public Information Meeting will be held on Wednesday, May 22, 2019 at 7:00 p.m. at the Puslinch Community Centre, 23 Brock Road South Puslinch

#### 7. **COMMUNICATIONS:**

- 1. Gas Tax Fund.
  - a. Correspondence from the Minister of Infrastructure and Communities dated March 27, 2019.
- 2. Monthly Monitoring Report Mill Creek Pit #5738.
  - a. Correspondence from Dufferin Aggregates dated April 11, 2019.
- 3. Niska Road Reconstruction Memorandum of Understanding

Resolution No. 2019-187: Moved by Councillor Goyda and

Seconded by Councillor Sepulis

That Council receives the Niska Road Reconstruction Memorandum of Understanding and the Meeting Minutes from the April 15, 2019 Meeting;

And that Council passes a by-law to authorize the entering into an agreement with the City of Guelph in accordance with the MOI and the April 15, 2019 Meeting Minutes.

**CARRIED** 

#### 7. Intergovernmental Affairs



Resolution No. 2019-188: Moved by Councillor Sepulis and

Seconded by Councillor Goyda

That the Intergovernmental Affairs correspondence items listed on the Council Agenda for the May 1, 2019 Council meeting be received.

**CARRIED** 

#### 8. <u>DELEGATIONS/PRESENTATIONS</u>

**1:05 p.m.** – Cindy Forsythe with respect to the Integrated Youth Service Hub.

Resolution No. 2019-189: Moved by Councillor Roth and

Seconded by Councillor Bulmer

That Council receives the presentation by Cindy Forsythe with respect to the Integrated Youth Service Hub.

**CARRIED** 

1:15 p.m. – Grand River Conservation Authority with respect to their budget.

**Resolution No. 2019-190:** Moved by Councillor Bulmer and

Seconded by Councillor Roth

That Council receives the presentation by the Grand River Conservation Authority with respect to their budget.

**CARRIED** 

**1:30 p.m.** – Hamilton Conservation Authority with respect to their budget.

Resolution No. 2019-191: Moved by Councillor Roth and

Seconded by Councillor Bulmer

That Council receives the presentation by the Hamilton Conservation Authority with respect to their budget.

**CARRIED** 

#### 9. **REPORTS**:

1. Puslinch Fire and Rescue Services

None

2. Finance Department

None

#### 3. Planning and Building Department

(a) Wellington County Report with respect to the Site Plan Control By-law Update

**Resolution No. 2019-192:** Moved by Councillor Bulmer and

Seconded by Councillor Roth

THAT Council receives the Wellington County Planning Report with respect to the Site Plan Control By-law Update;



And that Council passes a by-law to establish a Site Plan Control Area, to define classes of development and to delegate Council Authority pursuant to Section 41 of the Planning Act, R.S.O. 1990 c.P13, as amended, and to repeal By-law 16/08.

**CARRIED** 

#### 4. Administration Department

- (a) Report from GM Blue Plan with respect to the Municipal Development Standards.
  - Please note that the intent is for Council to provide input on this matter so that it can be brought back at a later date for adoption.

Resolution No. 2019-193: Moved by Councillor Roth and

Seconded by Councillor Bulmer

That Council receives the GM BluePlan report dated April 24, 2019 with respect to Municipal Development Standards.

**CARRIED** 

5. Roads & Parks Department

None

6. Recreation Department

None

7. Mayor's Updates

#### 10. **NOTICE OF MOTION:**

None

#### 11. COMMITTEE MINUTES

None

#### 12. MUNICIPAL ANNOUNCEMENTS

(a) Councillor Sepulis provided an overview of the green legacy Tree Days.

#### 13. <u>UNFINISHED BUSINESS</u>

#### 14. **BY-LAWS**:

(a) Being a by-law to authorize the entering into of an amending Site Plan Agreement with 2120826 Ontario Ltd. – 20 Brock Road North.

Resolution No. 2019-194: Moved by Councillor Bulmer and

Seconded by Councillor Roth

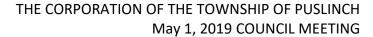
That the following By-laws be taken as read three times and finally passed in open Council:

(a) Being a by-law to authorize the entering into of an amending Site Plan Agreement with 2120826 Ontario Ltd. – 20 Brock Road North.

CARRIED

#### 15. **CONFIRMING BY-LAW**

(a) By-Law to confirm the proceedings of Council for the Corporation of the Township of Puslinch





Resolution No. 2019-195: Moved by Councillor Roth and Seconded by Councillor Bulmer

That the following By-law be taken as read three times and finally passed in open Council:

By-Law 028-2019 being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 1<sup>st</sup> day of May 2019.

**CARRIED** 

Karen Landry, CAO/Clerk

16.	ADJ	ΟU	RN	ME	NT:

Resolution No. 2019-196:	Moved by Councillor Bulmer and Seconded by Councillor Roth		
That Council hereby adjourns	at 3:44 p.m.	CARRIED	
	, <del></del>	James Seeley, Mayor	



# NOTICE OF PUBLIC MEETING COMMUNITY IMPROVEMENT PLAN AMENDMENT

**TAKE NOTICE** that pursuant to the Planning Act, R.S.O. 1990, as amended, the Township of Puslinch will hold a public meeting to present a draft amendment to the Township of Puslinch's Our Corridor Community Improvement Plan (CIP) on:

May 15, 2019 at 6:00 p.m. Puslinch Municipal Office Council Chambers 7404 Wellington Road 34

## Location of the Subject Land

The land subject to the proposed amendment includes all lands within the community improvement project area identified within the Township of Puslinch's Our Corridor CIP.

## Purpose and Effect of the Proposed Amendment

The purpose and effect of the proposed amendment is to introduce additional provisions into the Township's CIP so that the County may also provide grants and loans to eligible landowners/tenants undertaking community improvement projects in the Township.

## Oral or Written Submissions

Any person or public body is entitled to attend the public meeting and make written or oral submission in support or in opposition to the proposed CIP Amendment. Written comments should be copied to the Township Clerk at the address shown below.

**TAKE NOTICE** that if a person or public body would otherwise have an ability to appeal the decision of the Council of the Township of Puslinch to the Local Planning Appeal Tribunal (LPAT) but the person or public body does not make oral submissions at a public meeting or make written submissions to the Township of Puslinch before the CIP amendment is adopted, the person or public body is not entitled to appeal the decision.

**AND TAKE NOTICE** that if a person or public body does not make oral submissions at a public meeting, or make written submissions to the Township of Puslinch before the CIP amendment is adopted, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal (LPAT) unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

**REQUEST FOR NOTICE OF DECISION** regarding the adoption of the proposed CIP Amendment or the refusal of a request to amend the CIP, you must make a written request to the Township Clerk at the address provided below.

**ADDITIONAL INFORMATION** related to the proposed CIP Amendment, including information about appeal rights is available between regular business hours at the Township of Puslinch Municipal Office.

Dated at the Township of Puslinch on this 25th day of April, 2019

Karen Landry CAO/Clerk Township of Puslinch 7404 Wellington Road 34 Puslinch, Ontario NOB 2J0

T (519)763-1226 E admin@puslinch.ca

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH NOTICE OF PUBLIC MEETING

#### Puslinch Community Centre Park Master Plan – Phase 1 and Phase 2

You are invited to review and provide comments on a long-term vision for the Puslinch Community Centre Park. A **Public Open House** will be held on **May 22, 2019** at the Puslinch Community Centre to review the proposed plan. A presentation will commence at 7:00 pm.

Your attendance and comments at this meeting are welcome as it is your opportunity to learn more about the Puslinch Community Centre Park Master Plan.

Date: Wednesday May 22, 2019

**Time:** 7:00 p.m.

Place: Puslinch Community Centre, 23 Brock Road South Puslinch

#### **Additional Information:**

On November 26, 2015, a public open house was held at the Optimist Recreation Centre to present the draft concept plans for the Puslinch Community Centre Park to interested residents and stakeholders. The concept plans and display panels were also posted on the Township's website from late November 2015 to January 31, 2016, during which comments were welcomed by the Township. The phasing and implementation plan including all associated costs were presented to Council at its meeting held on June 28, 2017.

If you are unable to attend the session, you may submit comments to the Township no later than **June 7, 2019**. For more information or to submit written comments about the Puslinch Community Centre Park Master Plan, please contact:

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Karen Landry CAO/Clerk Township of Puslinch

Phone: 519-763-1226 ext. 214 E-mail: klandry@puslinch.ca

May 2019

#### Memorandum

Date: April 29, 2019

From: Christopher J. Neville, M.Sc., P.Eng.

To: Andreanne Simard, Ph.D., Nestlé Waters Canada

Project: SSP-0994-33

Subject: Responses to Harden Environmental Services Ltd. review comments on the Nestlé

Waters Canada 2018 Aberfoyle Monitoring Report

Per your request, we have studied carefully the review comments that Harden Environmental Services Ltd. (Harden) submitted to the Township of Puslinch on the 2018 Annual Monitoring Report for the Nestlé Waters Canada (NWC) Aberfoyle Site (Harden, April 8, 2019). We appreciate the close reading of the 2018 report and the opportunity to discuss some of the data in greater detail. We have prepared detailed responses for each of the comments. Our responses are summarized below.

#### **SUMMARY**

- 1. Our responses follow the same format as the Harden report. For completeness we have reproduced the relevant portions of the Harden comments [bolded text].
- 2. The Harden comments are minor in nature and none of them call into question the key conclusions from the NWC Aberfoyle 2018 Annual Monitoring Report. The NWC water takings from TW3-80 have had no long-term unacceptable impacts and there are <u>no</u> long-term trends that suggest the takings are not sustainable.
- 3. Harden comment #1: There have been no unacceptable declining trends in groundwater levels in the Lower Bedrock Aquifer (production aquifer). Water levels in the monitoring wells close to TW3-80 respond to pumping as expected.
- 4. Harden comment #2: The reductions in TW3-80 pumping between September and October 2018 are not unusual. Similar reductions in pumping have occurred before and are based on customer demand. During these times, the corresponding changes in water levels have been similar to past observations with groundwater levels changing in response to changes in pumping from TW3-80.



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5. Harden comment #3: Monitoring well MW10C-09 is a "fringe" well at the outer limits of pumping influence from TW3-80. As Harden indicates, the trends at the well cannot be explained by pumping from TW3-80.

- 6. Harden comment #4: The water level data for the Aberfoyle Creek gauging station SW2 do not suggest a declining trend in the water level in SW2 between 2014 and 2018. Rather, the data suggest that there was a decline in the average water level over 2014, water levels were similar between 2015 and 2017, and there was a decline in the level during the summer of 2018. The changes in water levels in SW2 cannot be attributed to changes in TW3-80 pumping. The changes may be related to changes in stream hydraulics and potentially decreased infiltration.
- 7. Harden comment #5: The hydrographs for the Township of Puslinch monitoring wells show that water levels in the area upgradient of water taking by Nestlé Waters Canada are stable.



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#### DETAILED RESPONSES TO HARDEN COMMENTS

1.0 Harden Environmental Comment #1

General comments on regional influence of water taking by Nestlé Waters Canada

Reproduced from Harden Environmental (April 8, 2019; Page 2):

Groundwater potentials declined 2011 through to 2015 and with the stable pumping rates 2015 through to 2017, groundwater potentials have also stabilized. This makes it more apparent that declining groundwater potentials are the result of increased taking by Nestlé Waters Canada rather than due to an external change such as decreased precipitation. This is manifest in 2018 by the water level increase in the aquifer to an unusual decrease in pumping between September and December 2018.

#### Response:

The Harden comment is generally consistent with the interpretations of NWC; however, the Harden comment could be misinterpreted and must therefore be qualified carefully. The Harden comment should not be interpreted as a suggestion that there has been an unacceptable declining trend in groundwater potentials between 2011 and 2015.

NWC well TW3-80 pumps from the Lower Bedrock Aquifer. Wells in the Lower Bedrock Aquifer that respond to pumping show larger declines in water levels when pumping rates are higher, and smaller declines in water levels when pumping rates are lower. Water levels rebound (recover) when pumping stops temporarily. At Lower Bedrock Aquifer monitoring wells that are relatively close to TW3-80, for example MW2A-07, the changes in water levels follow the changes in pumping closely (for example, compare Figures D1a and D2 of the 2018 Annual Monitoring Report). In summary, variations in the water levels in the Lower Bedrock Aquifer are due to corresponding changes in the NWC water takings. The magnitudes of the changes in water levels decrease with distance away from TW3-80. These variations also decrease moving upward through the aquifer/aquitard sequence with no impacts of pumping observed in surface water features.

As shown in Figure D1a of the 2018 Annual Monitoring Report and Figure 1 here, for the three years 2015-2017, the total annual takings were similar and the average monthly water levels in TW3-80 followed nearly identical patterns. In 2018, the annual takings were smaller and the average water levels increased. The important point is that there is <u>no</u> evidence that pumping of TW3-80 has caused long-term declining trends in water levels in the Lower Bedrock Aquifer.



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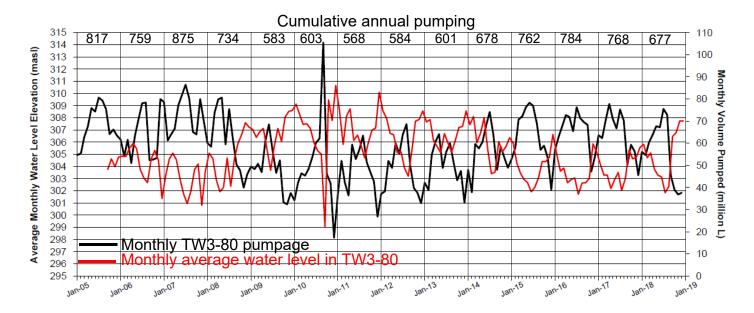


Figure 1. TW3-80 pumpage and water levels
Adapted from Figure D1b of the 2018 Aberfoyle 2018 Annual Monitoring Report



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# 2.0 Harden Environmental Comment #2 Comment on Aquifer Response to Change in Pumping Rates

Reproduced from Harden Environmental (April 8, 2019; Page 2):

An unusual decrease in pumping rate between September and October 2018 results in a noticeably different seasonal response in groundwater levels. We have attached the hydrograph for Fireflow Well as an example of the observed response. The rising water levels between September and December 2018 are in response to the rate change and represent the highest water levels in that well since 2014 when the pumping rate was similar. This exemplifies the ability of the aquifer to recover when pumping rates are decreased. The rapid recovery is mainly due to the fact that the aquifer is depressurized, but not dewatered.

#### Response:

The Harden comment is generally consistent with the interpretations of NWC; however, the Harden comment requires some qualification.

It is normal for water levels to decline around a well when it is pumped. The recovery of water levels when the well is not pumped or pumped less is a clear indication that the pumping is sustainable.

The reductions in TW3-80 pumping between September and October 2018 are not "unusual". Similar reductions in pumping have occurred before and are based on customer demand. During these times, the corresponding changes in water levels have been similar. Referring to Table C1 of the 2018 Annual Monitoring Report, the average pumping rate during December 2018 was 845 L/min. The corresponding average water level in TW3-80 estimated from Figure D1b is about 307.7 m. As shown in Figure 2, this data point plots close to a line that is representative of historical well performance. This is important for two reasons: First, the consistency of the well performance data serves as one line of evidence that the takings from TW3-80 are not causing long-term declines in aquifer levels. Second, the rebound, or recovery, in the Lower Bedrock Aquifer water levels observed between September and December 2018 to water levels observed in 2014 when TW3-80 was pumped at a similar rate is another line of evidence that the takings from TW3-80 are sustainable. In summary, water levels in the Lower Bedrock Aquifer respond to changes in pumping and when pumping is reduced the water levels recover indicating there is no long-term drainage of the aquifer.



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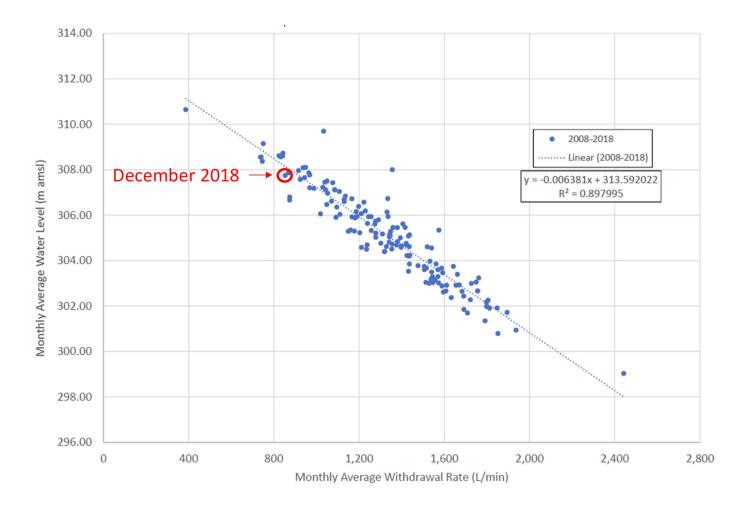


Figure 2. Relationship between TW3-80 pumping and water level Adapted from the Appendix I, Figure 1 of the 2018 Annual Monitoring Report



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The distinction between "depressurized" and "dewatered" conditions is important, and in Figure 3 we have presented a sketch to illustrate that the Lower Bedrock Aquifer is depressurized around TW3-80, not dewatered. Depressurized conditions refer to water levels declining above non-pumping levels but remaining above the top of the Lower Bedrock Aquifer. Dewatered conditions refer to a decline in water levels below the top of the aquifer, with drainage of the fractures in the rock. As shown in Figure 3, at all times during 2018 the instantaneous and monthly-averaged water levels in TW3-80 remained above the top of the Lower Bedrock Aquifer. This is also true for all of the Aberfoyle monitoring wells. This is important, as water levels remaining above the top of the Lower Bedrock Aquifer is a requirement of sustainable operation of TW3-80.

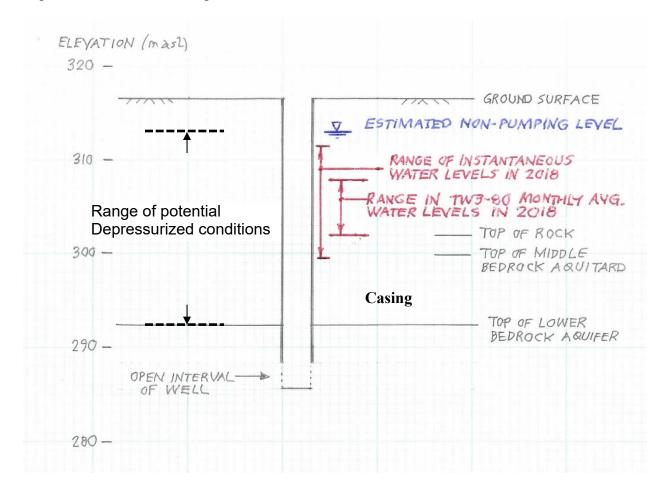


Figure 3. Confirmation that the water levels in TW3-80 have remained within the range or pressurized conditions



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#### **3.0** Harden Environmental Comment #3

Comment on Apparent Decline in Groundwater Levels at OW10C-09 [MW10C-09] and others

Reproduced from Harden Environmental (April 8, 2019; Page 2):

The water levels in monitor OW10C-09 located on the Gilmour Property at a distance of approximately 1200 metres from the pumping well are shown on the attached figure. The water level has an apparent decline from an elevation of 318 metres above mean sea level (m AMSL) in 2014 to 317 m AMSL in 2018. This cannot be explained by the historical pumping. A similar decline is noted in OW10D-09 and there may be other, more subtle, examples. Our comment is that, visually, it is difficult to determine if long-term water level changes at specific locations in the aquifer are due to pumping at TW3-80 or from an external influence. We recommend that more analysis be conducted that separates pumping influence on water levels to determine if this apparent decline can be related to pumping from TW3-80.

#### Response:

A key line of evidence that the NWC water takings are sustainable is that there is no long-term declining *trends* in water levels in monitoring wells. As part of their ongoing evaluation of this line of evidence, NWC and its experts carefully review the water level records assembled in the Aberfoyle Annual Report. NWC examines both the absolute water levels and the trends, and seeks to identify changes caused by NWC pumping, other pumping influences, and natural climatic variations. It is important to note that NWC is the only groundwater taker that engages in this significant effort to ensure that its takings are sustainable. NWC is in fact the steward of the local aquifer systems, as it has the most at stake. It is also important to note that professional staff of the Ontario Ministry of the Environment, Conservation and Parks (MECP) continuously review NWC data.

The hydrographs for MW10C-09 and MW10D-09 are reproduced here in Figures 4a and 4b. The water levels in MW10C-09 and MW10D-09 declined by about 0.5 m between the beginning of 2014 and the end of 2015. It is important to place any inferred declines in water levels at specific monitoring locations. This one-time decline, with subsequent stabilization observed since the beginning of 2017 is relatively small compared with magnitudes of the fluctuations that have been recorded in the long-term hydrographs. For example, in 2013 the water level in MW10C-09 fluctuated by almost 2 m. In 2018, the maximum and minimum water levels were about 317.7 and 316.5 m asl, a range of about observed 1.2 m.



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Although the decline in the water levels in MW10C-09 and MW10D-09 between 2013 and 2015 are not significant, it is possible to identify their cause. The decline can be attributed to the increased pumping between 2013 and 2015, from 601 ML to 762 ML. Cumulative annual takings have been similar between 2015 and 2017 and the average water levels in MW10C-09 and MW10D-09 have been stable at about 317.0 m and 316.5 m, respectively. As indicated by the dashed red lines in Figures 4a and 4b, there have not been any *declining trends* in water levels in the last three years.

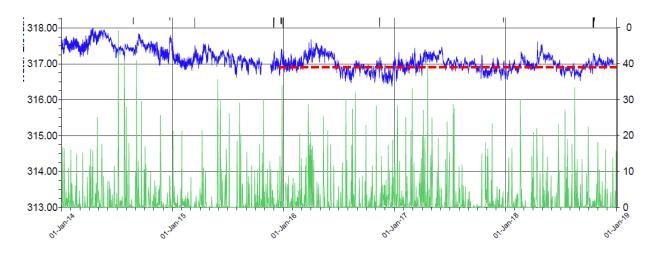


Figure 4a. MW10C-09 hydrograph

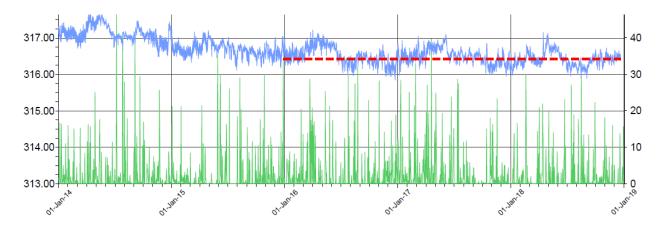


Figure 4b. MW10D-09 hydrograph



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Further evidence of the stability of current water levels at MW10 is provided in the plot of the vertical gradient between the MW10C-09 and the Upper Bedrock Aquifer well at this location, MW10B-09 presented in Figure D41 of the 2018 Annual Monitoring Report. As shown in the excerpt from this figure presented in Figure 5, since 2014 the vertical hydraulic gradient between the two wells has been nearly constant.

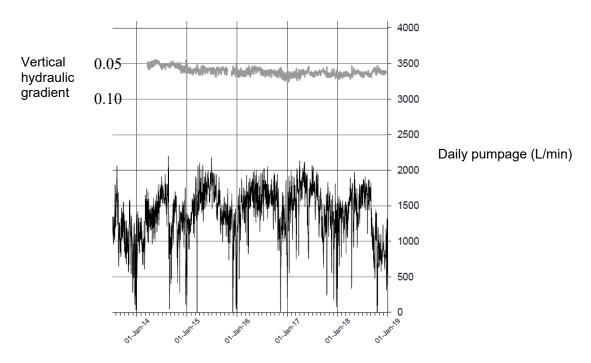


Figure 5. Vertical gradient between MW10B-09 and MW10C-09 Excerpt from Figure D41 of the 2018 Annual Monitoring Report



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Harden indicates that it is difficult to determine if long-term water level changes at specific locations in the aquifer are due to pumping at TW3-80 or from external influence. Comparing the water level records for the production well TW3-80 and monitoring well MW10C-09 we note the following:

- The water level changes in the Lower Bedrock Aquifer at TW3-80 have a strong correlation with changes in pumping (see Figure 2) with instantaneous changes in pumping resulting in instantaneous changes in water levels;
- There is a correlation of changes in water levels at MW10C-09 with changes in cumulative annual pumping; however, changes due to daily fluctuations in pumping or even seasonal changes in pumping (i.e., increased pumping in the summer) are not observed in the water level record of MW10C-09;
- The rise in water levels at the end of 2018 observed in some wells, during the time of decreased pumping at TW3-80, is not observed at MW10C-09. MW10C-09 is inferred to be on the "fringe" of the area of influence of pumping from TW3-80. As such, there is some influence from pumping TW3-80 but there are also other external influences. This is shown on Figure 6, where there is no clear correlation between pumping rates at TW3-80 and water levels at MW10C-09; and

In summary, the effects of pumping from TW3-80 diminish with distance away from the well, and at sufficient distance water levels are predominantly affected by other factors such as regional recharge and pumping at other locations. This is the case at MW10C-09.



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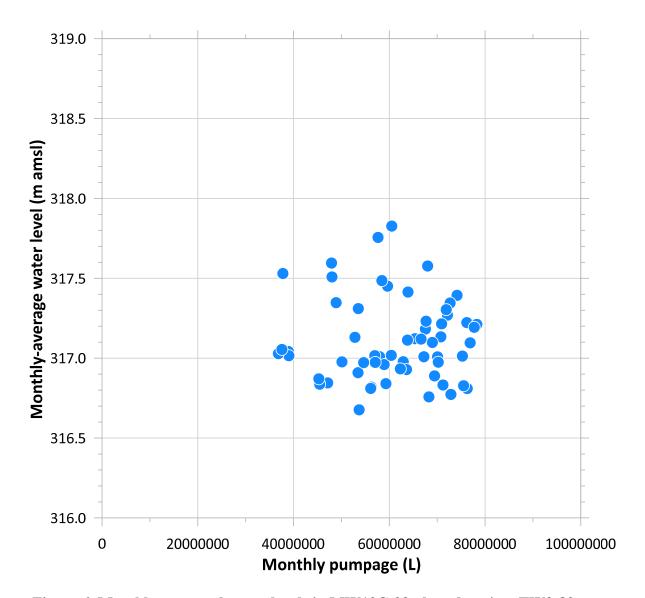


Figure 6. Monthly-averaged water levels in MW10C-09 plotted against TW3-80 pumpage



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4.0 Harden Environmental Comment #4 – Part 1
 Comment on Apparent Decline in Surface Water Levels at SW2 – Part 1

Reproduced from Harden Environmental (April 8, 2019; Page 2):

Similar to some groundwater levels, the water level at Station SW2 in Aberfoyle Creek appears to be declining between 2014 and 2018. The reason for this apparent decline should be investigated.

#### Response:

Before discussing the surface water levels at SW2, it is important to note that the stream water levels themselves are not important *per se*. Rather, periodic measurements of flows in Aberfoyle Creek are used in conjunction with site-specific stage:discharge relations to derive continuous records of flows from the water level records. Stream water levels at SW2 may be affected by changes in stream geometry and hydraulic characteristics. However, when converted to stream flow there is no declining trend in the surface water flows. This is illustrated in the first of the figures in the Appendix.

The complexity of the hydraulics of Aberfoyle Creek is illustrated by the fact that it has been necessary to update the stage:discharge relations at SW1 and SW2 through time. Changing stream conditions have required the following evolution of the stage:discharge relation at SW2:

- A common stage: discharge curve was applied between 2011 and 2014;
- An updated stage: discharge curve was applied for the 2015 and 2016 stream water levels;
- An updated stage: discharge curve was applied for the 2017 data; and
- An updated stage: discharge curve was applied for the 2018.

The largest change to the stage: discharge relation was required for the 2018 stream water levels.



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#### Examination of a trends in SW1 and SW2 stream water levels

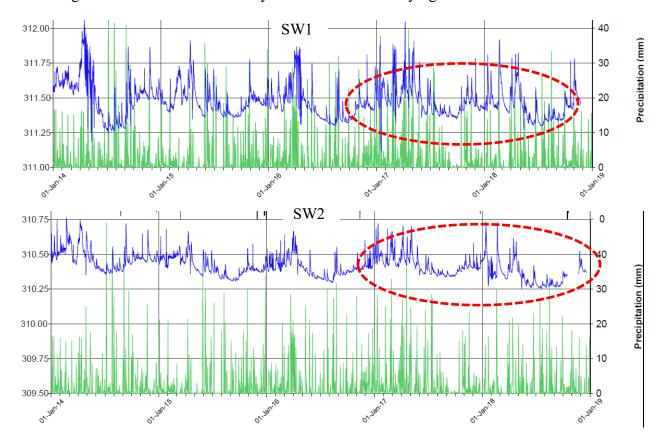
The hydrographs for the Aberfoyle Creek monitoring station SW2 is presented in Figures E15a and E15b of the Aberfoyle 2018 Annual Monitoring Report. The data presented in Figure E15a do not suggest a declining trend in the water level in SW2 between 2014 and 2018. Rather, the data suggest the following:

- There was a decline in the average surface water level over 2014;
- The patterns of fluctuations in surface water levels through 2015 and 2017 were similar; and
- There was a decline in the surface water level during the summer of 2018.

Water levels in SW2 did not rebound during the decrease in pumping that occurred in 2018. This suggests these changes in surface water levels <u>cannot</u> be attributed to changes in TW3-80 pumping.

#### Examination of a potential cause of the recent declining trend in SW1 and SW2 water levels

For completeness, excerpts from the hydrographs for SW1 and SW2 Figures E14a and E15a are shown below. As shown in the hydrographs, the recent declining trend at SW2 that is noted in the Harden Environmental comment is also evident in the SW1 data. This suggests that the apparent declining trends at SW1 and SW2 may have the same underlying cause.





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The most likely cause of the apparent declines in surface water levels at SW1 and SW2 is changing hydraulic conditions in Aberfoyle Creek. However, we have also conducted an additional preliminary analysis to examine whether there might be a physical cause.

As part of the NWC Aberfoyle 2018 Annual Monitoring Report, an analysis of infiltration was undertaken to assess the likely variability in annual infiltration and how the infiltration is distributed across the area around the NWC production well TW3-80. The results of the analysis can be used to test the hypothesis that the recent declining trends in water levels at SW1 and SW2 might be due to changes in infiltration patterns.

Complete documentation of the infiltration analysis is included in Appendix I of the 2018 Annual Report. The additional analysis was intended to supplement the presentation of the annual precipitation data, as it is recognized that shallow groundwater levels and streamflows are not affected exclusively by changes in precipitation. In addition to being affected by daily precipitation and when that precipitation occurs, infiltration is affected by temperature and soil water holding capacity. The analysis was conducted with a modified Thornthwaite-Mather daily soil-water balance analysis implemented by the United States Geological Survey in the SWB model (Westenbroek et al., 2010)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup>Westenbroek, S.M., V.A. Kelson, W.R. Dripps, R.J. Hunt, and K.R. Bradbury, 2010: SWB—A modified Thornthwaite-Mather Soil-Water-Balance code for estimating groundwater recharge, U.S. Geological Survey Techniques and Methods 6–A31, 60 p.



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The results of the infiltration analysis for a location between SW1 and SW2 are presented in Figure 7. The results were obtained from the analysis documented in Appendix I of the 2018 Annual Report. The results of the analysis suggest that there has been a decline in infiltration between 2016 and 2018, consistent with the inferred declining trend in the average water level at SW2. Over the past three years, relatively long periods of zero infiltration are predicted with increasing frequency and that the periods of intense infiltration are being predicted earlier in each year.

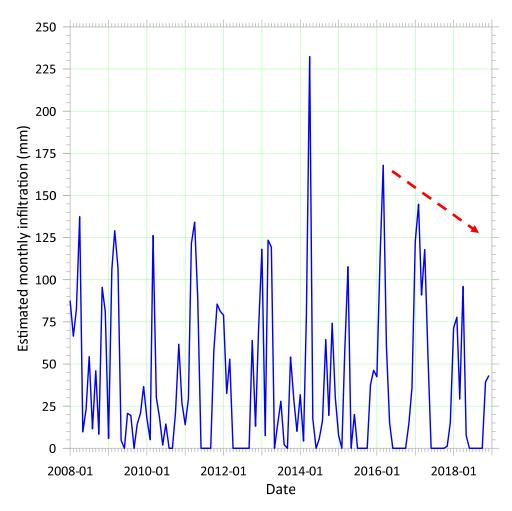


Figure 7. Simulated monthly infiltration between SW1 and SW2



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4.0 Harden Environmental Comment #4 – Part 2
 Comment on Apparent Decline in Surface Water Levels at SW2 – Part 2

Reproduced from Harden Environmental (April 8, 2019; Page 3):

There are also periods of time when Aberfoyle Creek is losing water, specifically February, June, July and September of 2018 and in the summer months of 2015. The measured losses are within the expected error of the measurement method; however, Aberfoyle Creek should be a gaining stream given the interpretation of overburden water levels on Figure 2.6 of the Golder Report. The fisheries work done by Portt and Associates determines that the temperature conditions in this reach of Aberfoyle Creek are not suitable for Brook or Brown trout, mainly as a result of warm water discharged from the Mill Pond. Harden Environmental is not qualified to comment on the fisheries aspect and we recommend that a fisheries expert comment on this matter on behalf of the Township of Puslinch.

#### Response:

The differences in flow between SW1 and SW2 are within the range of the expected accuracy of the flow measurements (typically cited as being about 10% of the measured flow at any location)<sup>2</sup>. As shown in Figure 8, the measurements of streamflows in 2018 suggest that the flows in Aberfoyle Creek at SW2 are typically higher or the same as at SW1. The interpreted vertical hydraulic gradients vary during the year between up and down and are generally small (i.e., close to no gradient), and the changes in gradient do not correlate with changes in TW3-80 pumping.

NWC has had a fisheries expert, Portt and Associates, conduct professional work for years and the Ontario Ministry of the Environment, Conservation and Parks (MECP) has been reviewing the work for years as well and NWC highlights/reiterates the following:

- Stream temperature is influenced by the air temperature and the temperature of the water coming from the pond; and
- There is no increase in stream temperature in Aberfoyle Creek from year to year.

<sup>2</sup>Cook, P.G., 2015: Quantifying river gain and loss at regional scales, *Journal of Hydrology*, vol. 531, pp. 749-758.



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It is important to note that although pumping has negligible effect on Aberfoyle Creek, changes in conditions elsewhere may affect the water level and stream flow measurements at SW2. Modifications of the channel of Aberfoyle Creek that have been carried out downstream from the NWC property may have had the potential to alter surface water elevations, and thus the stage:discharge relationship, at SW2. The potential effect of deepening the center of the channel would be lowering of the surface water levels at SW2. To understand the causes of any additional changes at SW2 it would also be necessary to investigate whether there were any changes in 2018 to the amount of flow diverted from Mill Creek through Mini Lakes. We understand that this happened in 2015 and 2016. Although *stream water levels* at SW1 and SW2 may be affected by changes in stream geometry and hydraulic characteristics, there is no declining trend in surface water *flows* at the Aberfoyle Creek stations.



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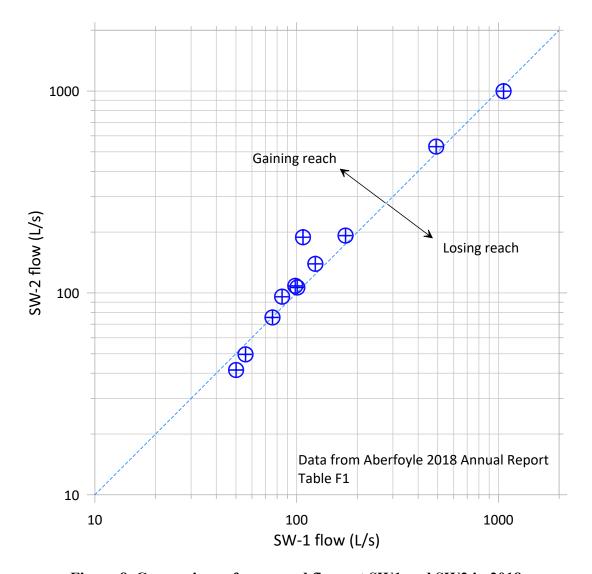


Figure 8. Comparison of measured flows at SW1 and SW2 in 2018



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#### **5.0** Harden Environmental Comment #5

Comment on Ambient Groundwater Levels in Paris Moraine and Aberfoyle Outwash from Puslinch Groundwater Monitoring Network

Reproduced from Harden Environmental (April 8, 2019; Page 3):

The state of water levels in the headwater areas of this area was an area of concern at the March 7, 2019 meeting. As part of the Township of Puslinch Groundwater Monitoring Network we have attached hydrographs for MW6, MW4 and MW5. These monitors are representative of ambient groundwater levels either on the Paris Moraine (MW5), Galt Moraine (MW4) or the outwash deposits (MW6) found between the moraines. The hydrographs show that water levels in the area upgradient of water taking by Nestlé Waters Canada are stable, showing no overall decline. The hydrograph for MW6 also shows that there is no long-term change in the upward hydraulic gradient between the shallow and deep intervals at MW6.

#### Response:

The Harden comment further validates NWC's interpretations and conclusions that pumping from TW3-80 is not causing regional declining trends in water levels. It is important to note that during the March 7, 2019 meeting a general question was raised regarding the state of water levels in the headwater areas of the Aberfoyle area. The state of water levels was <u>not</u> raised as an area of concern.

For completeness, it is useful to identify the locations of the Township of Puslinch monitoring wells identified in the Harden comment. In response to an e-mail inquiry on April 16, 2018, Harden provided a map showing the locations of the wells in the Township monitoring program. The red boxes in Figure 9 indicate the locations of MW4, MW5 and MW6. Harden Environmental indicated that no annual monitoring report is prepared for the Township, but updated water levels are presented at <a href="https://www.hardenv.com">www.hardenv.com</a> under the *MillCreek Monitoring* Tab.



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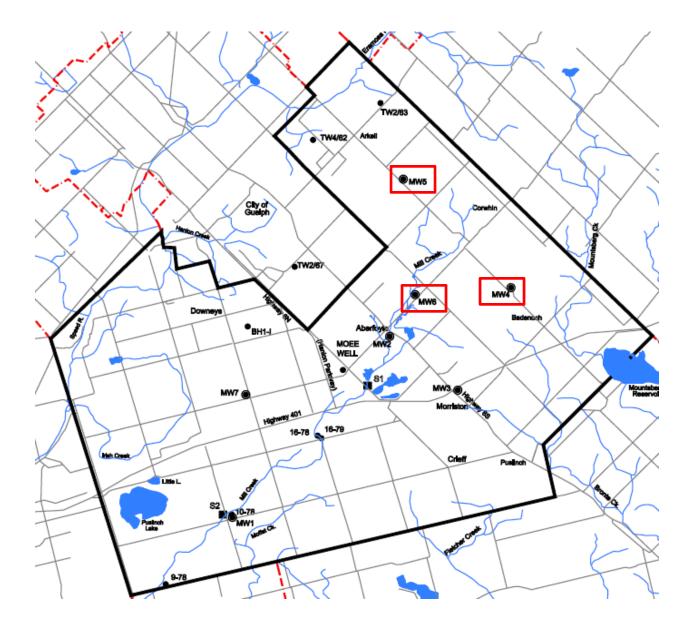


Figure 9. Map showing locations of wells in the Township of Puslinch monitoring network
Map provided by Harden Environmental, April 16, 2018



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#### CONCLUSIONS

None of the Harden Environmental comments call into question the key conclusions from the NWC Aberfoyle 2018 Annual Monitoring Report. We understand that the sustainable management of water resources in the Aberfoyle area is of critical importance to NWC. To be considered sustainable, pumping from TW3-80 must "maintain ecological, environmental, and hydrological integrity" (American Society of Civil Engineers, 1998). All of the lines of evidence from the 2018 monitoring data confirm that Nestlé's water takings at Aberfoyle are sustainable.

- 1. Ongoing pumping from the production well TW3-80 has not led to a long-term declining trend in the water levels in the well. The variations in water levels in TW3-80 observed in 2018 were due mainly to short-term changes in the pumping rate and are within the historical ranges of observed water levels.
- 2. Water levels measured within the Lower Bedrock Aquifer in 2018 are similar to water levels measured in the aquifer between 2014 and 2017. The variations in water levels observed over the long-term do not reveal any long-term declining trends. The aquifer levels observed in 2018 are similar to historical water levels when TW3-80 was pumped at similar rates.
- 3. The water supply aquifer is overlain by rocks of the Guelph Formation. In 2018, water levels measured in the Guelph Formation were within the ranges measured over the past five years, with water levels in the spring consistent with the higher water levels observed in spring 2014 2017.
- 4. The Guelph Formation is overlain by sediments that are referred to as "overburden". Water levels measured in overburden monitoring wells in 2018 were within the ranges measured over the past five years, with no overall increasing or decreasing trends.
- 5. Interactions between the overburden and streams are assessed with shallow "mini piezometers". Water levels measured in the mini-piezometers in 2018 were within the ranges measured over the past five years.
- 6. Streamflows as measured at the SW1 and SW2 upstream and downstream of the Aberfoyle facility have not been measurably affected by pumping TW3-80. Surface water levels in the streams near the Aberfoyle facility have been relatively stable over time, with no overall increasing or decreasing trends observed.



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#### **CLOSING**

We hope that our responses to the Harden Environmental review comments are clear and comprehensive. If, after studying our responses, Harden Environmental considers that the review comments have not been addressed completely we would gladly meet as a full team to address any concerns.

The sustainability of the water resources in the Aberfoyle area is of critical concern to Nestlé Waters Canada. Multiple lines of evidence from the 2018 monitoring data confirm that Nestlé's water takings at Aberfoyle are sustainable.

Christopher J. Neville, M.Sc., P.Eng.

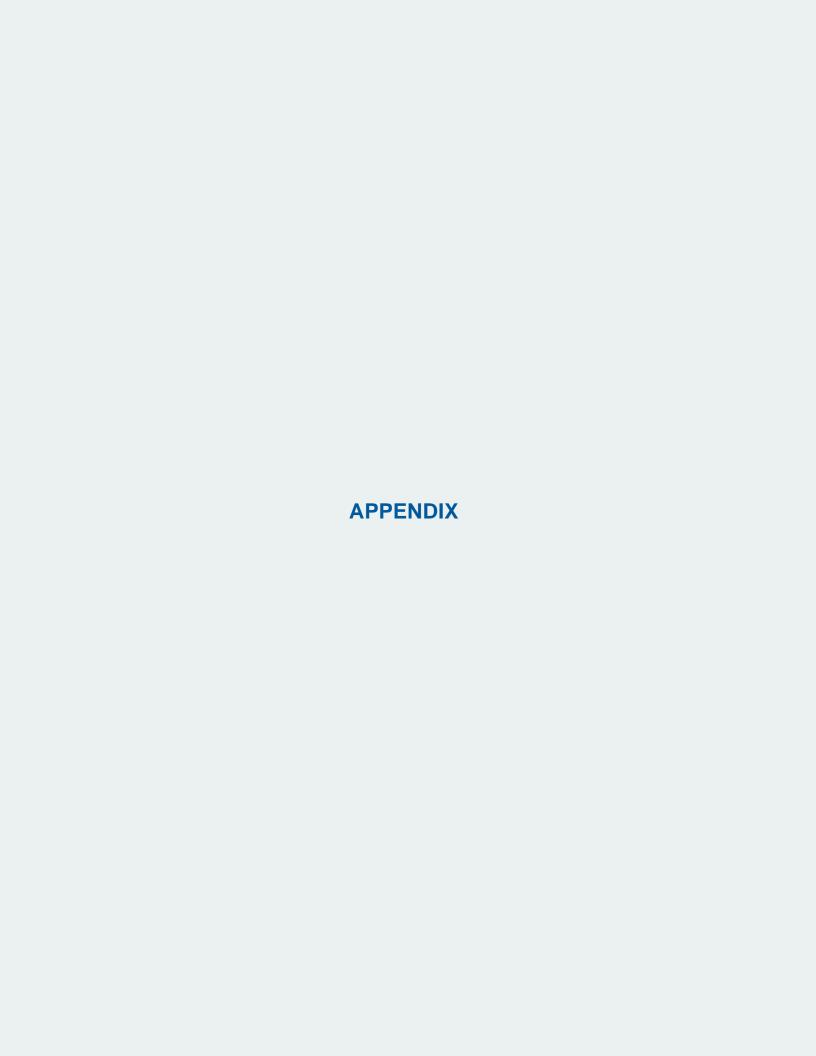
Chief Hydrogeologist

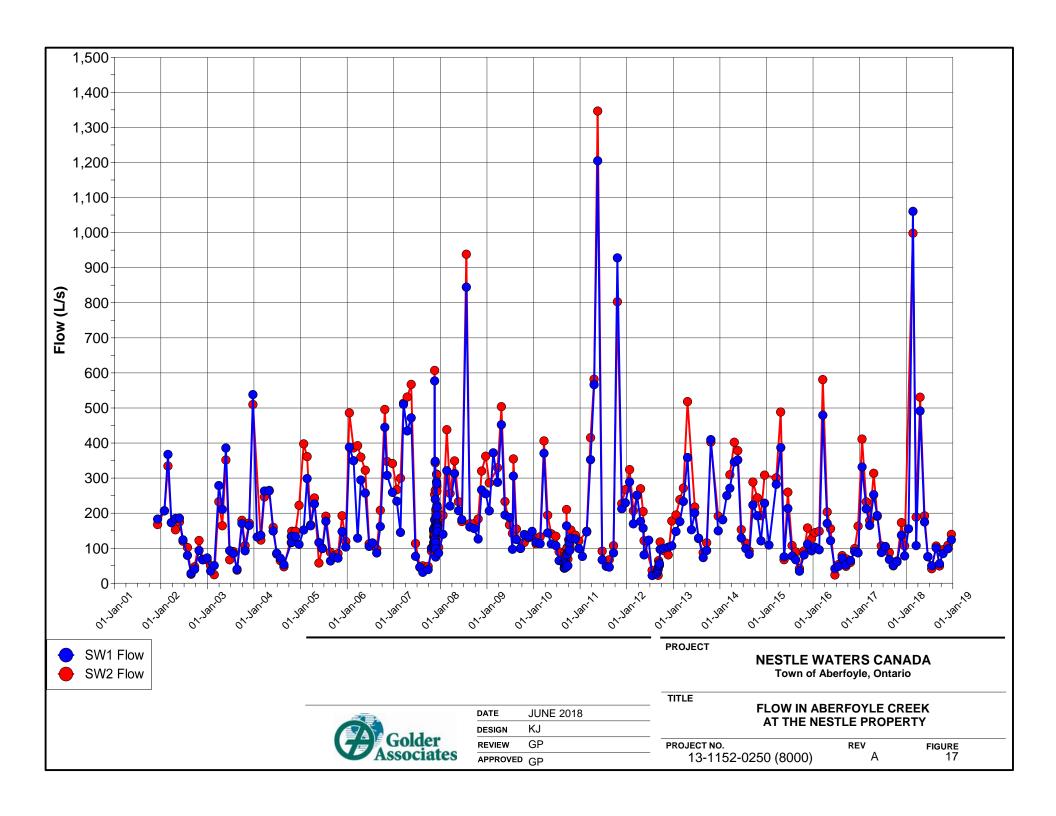
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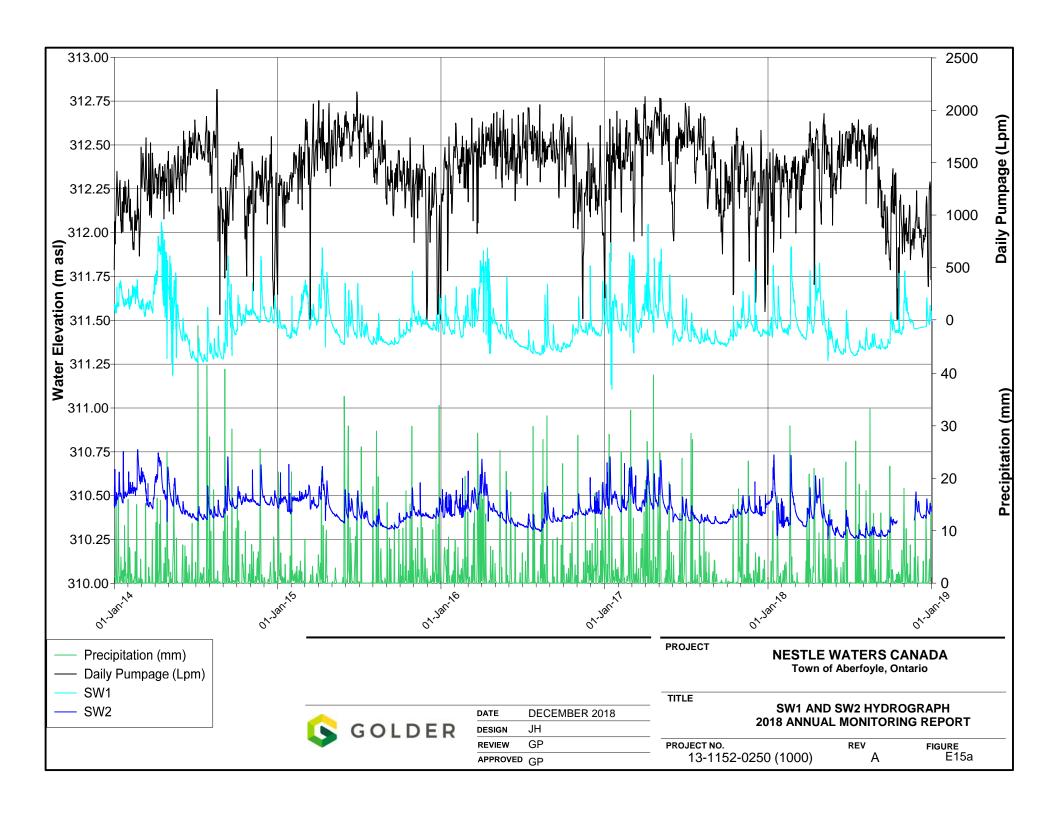
S.S. Papadopulos & Associates, Inc.



- Christopher J. Neville: PEO #100013705 (valid through December 31, 2019)
- S.S. Papadopulos & Associates, Inc.: PEO Certificate of Authorization #100077381 (valid through June 30, 2019)









April **2019** 

**REPORT TO:** Board of Directors

**REPORT NO:** # CHBD 05 19 12

FROM: Moya Johnson & Mike Cluett

**DATE:** April 25, 2019

SUBJECT: Provincial Cutbacks to Conservation Authorities for Flood Forecasting

and Control

### Recommendation

THAT the Conservation Halton Board of Directors direct the **Chair of Conservation Halton to write** to the Honorable John Yakabuski, Minister of Natural Resources and Forestry to express his and the Board of Directors concerns related to the loss of provincial funding and request that the Province of Ontario reinvest in Conservation Authority Flood Forecasting, Operations and Natural Hazards management core programs,

And

THAT the Conservation Halton Board of Directors direct the CAO to provide a copy of this letter and resolution to the Honourable Steve Clark, Minister of Municipal Affairs and Housing, the Honourable Rod Phillips, the Ministry of the Environment, Conservation and Parks, and to the Towns of Halton Hills, Milton, Puslinch and Oakville, the Cities of Burlington, Hamilton, Mississauga, and the Regions of Halton and Peel and all Halton MPPs and MPs.

### Report

This report summarizes the impact of the Provincial transfer payments reduction by 50% for 2019 announced by the Province of Ontario through the Minister of Natural Resources and Forestry 2019 Budget allocations.

The Chief Administrative Officer of Conservation Halton received a letter signed by Monique Rolf von den Baumen, Assistant Deputy Minister (dated April 12 and attached to this report) that the Halton Region Conservation Authority will receive \$155,034.34 in funding for the 2019-20 fiscal year, for Section 39 Eligible Natural Hazard Management Grant. The reduced provincial funding will result in a 2019 budget variance of \$145,277, and an increase of 1.5%. The announcement comes after CA's budgets have already been approved.

Conservation Authorities have a mandate to prevent, mitigate and forecast flooding within their respective watersheds. Provincial funding (transfer payments) have traditionally been provided to assist CAs with addressing their core mandate, namely flood forecasting and hazard area management.

Impacts (decreases) to CA budgets regarding flood forecasting would result in an increased risk to members of the public associated with property damage, personal injury and possibly, loss of life.



April **2019** 

CAs sources of funding have been a combination of the Province and municipalities within their watersheds, and the loss in Conservation Halton's budget would transfer to the Municipal (Regional) levy and result in a 1.5% increase in its budget request from its watershed funding Municipalities.

### **Impact on Strategic Goals**

This report supports the Metamorphosis strategic theme of Taking care of our growing communities.

### **Financial Impact**

Conservation Halton will see an increase of budget needs of 1.5% in the coming years and to mitigate the impact to the 2019 Budget the funds will have to be transferred from reserves. Other cost mitigation options will be considered during the budget variance and projection reporting to minimize the need for the full amount of the reserve transfer.

Moved by:	
Councillor Moya Johnson	
Seconded by:	
Councillor Mike Cluett	



905.336.1158 Fax: 905.336.7014 2596 Britannia Road West Burlington, Ontario L7P 0G3

conservationhalton.ca

Protecting the Natural Environment from Lake to Escarpment

May 7, 2019

The Honourable John Yakabuski, Minister of Natural Resources and Forestry Whitney Block, Suite 6630, 6th Floor 99 Wellesley St. W, Toronto, ON M7A 1W3

Tel: 416-314-2301

Email: john.yakabuski@pc.ola.org

Dear Minster Yakabuski,

On behalf of the Conservation Halton Board of Directors please note that the following resolution was passed on April 25 2019: Provincial Cutbacks to Conservation Authorities for Flood Forecasting and Control, Report # CHBD 05 19 12 (attached to this letter).

The report summarizes the impact of the Provincial transfer payments reduction by 50% for 2019 announced by the Province of Ontario through the Minister of Natural Resources and Forestry 2019 Budget allocations.

The Chief Administrative Officer of Conservation Halton received a letter signed by Monique Rolf von den Baumen, Assistant Deputy Minister (dated April 12 2019) that the Halton Region Conservation Authority will receive \$155,034.34 in funding for the 2019-20 fiscal year, for Section 39 Eligible Natural Hazard Management Grant. The reduced provincial funding will result in a 2019 budget variance of \$145,277, and an increase of 1.5%. The announcement comes after CA's budgets have already been approved.

Conservation Authorities have a mandate to prevent, mitigate and forecast flooding within their respective watersheds. Provincial funding (transfer payments) have traditionally been provided to assist CAs with addressing their core mandate, namely flood forecasting and hazard management.

Impacts (decreases) to CA budgets regarding flood forecasting would result in an increased risk to members of the public associated with property damage, personal injury and possibly, loss of life.

CA's sources of funding have been a combination of the Province and municipalities within their watersheds, and the loss in Conservation Halton's budget would transfer to the Municipal (Regional) levy and result in a 1.5% increase in its budget request from its watershed funding Municipalities.

Conservation Halton will see an increase of budget needs of 1.5% in the coming years and to mitigate the impact to the 2019 Budget the funds will have to be transferred from reserves.

Regards,

Gerry Smallegange

Chair, Conservation Halton Board of Directors

2596 Britannia Road West, Burlington, ON L7P 0G3 905.336.1158 | conservationhalton.ca C.C

The Honourable Steve Clark, Minister of Municipal Affairs and Housing 17th Floor, 777 Bay St., Toronto, ON M5G 2E5

Tel.: 416-585-7000

Email: steve.clark@pc.ola.org

The Honourable Rod Phillips, Minister of the Environment, Conservation and Parks Ferguson Block

11th Floor, 77 Wellesley St. W, Toronto, ON M7A 2T5

Tel.: 416-314-6790

Email: rod.phillips@pc.ola.org

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Phone: 905-639-7924

Email: jane.mckenna@pc.ola.org

Parm Gill, MPP, Milton

400 Main Street East, Suite 206, Milton Ontario, L9T 4X5

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Ted Arnott, MPP, Wellington-Halton Hills

2nd Floor, 181 St. Andrew Street East, Fergus Ontario, N1M 1P9

Phone: 519-787-5247 Email: <a href="mailto:ted.arnott@pc.ola.org">ted.arnott@pc.ola.org</a>

Halton Members of Federal Parliament (MPs):

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Email: karina.gould@parl.gc.ca

The Honourable Lisa Raitt MP, Halton 86 Main Street East, Milton, ON L9T 1N3

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John Oliver, MP, Oakville

301 Robinson Street, Oakville, ON L6J 1G7

Phone: 905-338-2008 Email: john.oliver@parl.gc.ca Pam Damoff, MP, Oakville-North Burlington 2525 Old Bronte Road, Suite 590, Oakville, ON L6M 4J2

Phone: 905-847-4043

Email: <a href="mailto:pam.damoff@parl.gc.ca">pam.damoff@parl.gc.ca</a>

The Honourable Michael Chong, MP, Wellington-Halton Hills 16 Mountainview Road South, Suite 205, Georgetown, ON L7G 4K1

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Opposition parties offices in Halton Region

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Oakville Liberal, Alan Johnson Email: <a href="mailto:president@oakvilleliberal.ca">president@oakvilleliberal.ca</a>

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Burlington Liberal, Matthew Powel

Email: president@bfla.ca

Milton Liberal, Jean Claude Ngansoo

Email: ngansooj@yahoo.fr

Milton NDP, Maliha Khan Email: <a href="mailto:president@ndpmilton.ca">president@ndpmilton.ca</a>

Halton Hills Liberal, Moya Johnson Email: MoyaJ@haltonhills.ca

Halton Hills NDP

Email:wellingtonhaltonndp@gmail.com

Clerk's at:

Town of Halton Hills Town of Milton Puslinch Township Town of Oakville City of Burlington City of Hamilton City of Mississauga Regions of Halton Region of Peel

General Manager's at: Conservation Ontario Toronto Region Conservation Authority Credit Valley Conservation Authority Hamilton Conservation Authority Grand River Conservation Authority From: Karen Landry
To: Nina Lecic

**Subject:** FW: More Homes, More Choice: Ontario"s Housing Supply Action Plan

**Date:** Friday, May 3, 2019 8:34:42 AM

Attachments: paperHeader.png

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From: Minister Steve Clark < mah@ontario.ca >

**Sent:** Thursday, May 2, 2019 5:31 PM **To:** Karen Landry < <a href="mailto:KLandry@puslinch.ca">KLandry@puslinch.ca</a>>

Subject: More Homes, More Choice: Ontario's Housing Supply Action Plan

Ministry of Municipal Affairs and Housing

Office of the Minister

777 Bay Street, 17th Floor Toronto ON M5G 2E5 Tel.: 416 585-7000 Fax: 416 585-8470 Ministère des Affaires municipales et du Logement

Bureau du ministre

777, rue Bay, 17° étage Toronto ON M5G 2E5 Tél.: 416 585-7000 Téléc.: 416 585-8470



19-002867

### Greetings:

Ontario's Government for the People is committed to building more housing and bringing down costs for the people of Ontario. To help fulfill this commitment, we have developed a broad-based action plan to address the barriers getting in the way of new ownership and rental housing.

<u>More Homes, More Choice</u> (the action plan) outlines our government's plan to tackle Ontario's housing crisis, while encouraging our partners to do their part. We are taking steps to make it faster and easier for municipalities, non-profits and private firms to build the right types of housing in the right places, to meet the needs of people in every part of Ontario.

As part of the action plan, we are proposing changes that would streamline the complex development approvals process to remove unnecessary duplication and barriers, while making costs and timelines more predictable. We are also proposing changes that would make it easier to build certain types of priority housing such as second units.

On May 2, 2019, the government introduced Bill 108 (the bill), the proposed More Homes, More Choice Act, 2019, in the Ontario Legislature. While the bill contains initiatives from various ministries, I would like to share some details regarding initiatives led by the Ministry of Municipal Affairs and Housing.

### **Planning Act**

Schedule 12 of the bill proposes changes to the Planning Act that would help make the planning system more efficient and effective, increase housing supply in Ontario, and streamline planning approvals.

If passed, the proposed changes would:

- Streamline development approvals processes and facilitate faster decisions,
- Increase the certainty and predictability of the planning system,
- Support a range and mix of housing options, and boost housing supply,
- Make charges for community benefits more predictable, and
- Make other complementary amendments to implement the proposed reforms, including how the proposed changes would affect planning matters that are in-process.

Amendments to the Planning Act are also proposed to address concerns about the land use planning appeal system. Proposed changes would broaden the Local Planning Appeal Tribunal's jurisdiction over major land use planning matters (e.g., official plan amendments and zoning bylaw amendments) and give the Tribunal the authority to make a final determination on appeals of these matters. The Ministry of the Attorney General is also proposing changes to the Local Planning Appeal Tribunal Act, 2017 to complement these changes (see Schedule 9 of the bill).

### **Development Charges Act**

Schedule 3 of the bill proposes changes to the Development Charges Act that would make housing more attainable by reducing costs to build certain types of housing and would increase the certainty of costs to improve the likelihood of developers proceeding with cost sensitive projects, such as rental housing.

If passed, the proposed changes would:

- Make it easier for municipalities to recover costs for waste diversion,
- Increase the certainty of development costs in specific circumstances and for certain types of developments,
- · Make housing more attainable by reducing costs to build certain types of homes, and
- Make other complementary amendments to implement the proposed reforms.

### Further consultation on the Planning Act and Development Charges Act

We are interested in receiving any comments you may have on the proposed changes to the Planning Act and the Development Charges Act. Comments on these proposed measures can be made through the <a href="mailto:Environmental Registry of Ontario">Environmental Registry of Ontario</a> as follows:

- Planning Act: posting number 019-0016
- Development Charges Act: posting number 019-0017

The Environmental Registry postings provide additional details regarding the proposed changes.

### A Place to Grow: Growth Plan for the Greater Golden Horseshoe

As an important part of More Homes, More Choice, I am also pleased to provide you with A

Place to Grow: Growth Plan for the Greater Golden Horseshoe, which addresses the needs of the region's growing population, its diversity, its people and its local priorities. A Place to Grow will come into effect on May 16, 2019.

As you know we recently consulted on proposed policy changes to make it faster and easier for municipalities in the region to plan for growth, increase housing supply, attract investment, and create and protect jobs. I would like to thank those who participated in the consultation process, and who contributed through their feedback to the development of the Plan.

It is anticipated that A Place to Grow will:

- Provide more flexibility for municipalities to respond to local needs,
- Increase housing supply at a faster rate,
- · Attract new investments and jobs,
- · Make the most of transit investments, and
- Protect important environmental and agricultural assets.

A Place to Grow reflects our trust in the ability of local governments to make decisions about how their communities grow, while the province maintains protections for the Greenbelt, agriculture, and natural heritage systems. One size doesn't fit all. We're supporting municipalities so they can respond to local needs and regional priorities.

In addition to sharing the new Plan with you today, I am also informing you that we are asking for further feedback on the transition regulation. Specifically, we are seeking feedback on specific planning matters that were submitted as part of the recent consultations and for which we would provide transitional rules. These matters were deemed to be far along in their process and as such are being considered for transition so as to not unduly disrupt ongoing planning matters that may be impacted by the policies in A Place to Grow. Changes to the <u>transition regulation</u> can be found on Ontario's Environmental Registry and Regulatory Registry for the next 30 days.

### Provincially Significant Employment Zones (PSEZs)

The economy in the Greater Golden Horseshoe is not only a critical factor provincially but also across Canada in achieving economic success and viability. As such, ensuring that lands are available to support the creation of jobs and the attraction of investments is paramount to providing homes that people can afford near stable and reliable employment.

To achieve this, we have formally identified the 29 provincially significant employment zones that we consulted on for the purposes of providing enhanced protections to existing employment areas. While no zones were removed or added to the 29 provincially significant employment zones at this time, they have been revised to address any factual errors in the mapping based on municipal official plans already in effect. These zones can be viewed on our <u>web portal</u>.

With the technical adjustments made, we will now begin the process of reviewing Requests for Reconsideration. Through this process, my ministry will consider requests to reconsider lands within and outside of existing zones as well as requests to add new zones. We will assess requests based on a number of factors that include, but are not limited to, the local planning context, municipal support and provincial interest.

If you have questions about the zones, the Requests for Reconsideration process, or accessing mapping files you may contact ministry staff at <a href="mailto:qrowthplanning@ontario.ca">qrowthplanning@ontario.ca</a>.

Finally, we heard loud and clear throughout the recent consultation period that there was a

desire for further discussions on the longer term vision for the provincially significant employment zones that would look at opportunities to support current and emerging industries. Notably, many expressed interest in utilizing zones to leverage economic development investments, programs and strategies both inside and outside of the Greater Golden Horseshoe.

Working with our partner ministries, we will be embarking on further public engagement in the coming months to explore the longer-term vision for provincially significant employment zones, along with potential opportunities to maximize the use of the zones as tools in investments, infrastructure planning and economic activity. Through these targeted engagement discussions, we will look to clearly articulate a framework for provincially significant employment zones that will position Ontario for more homes and better jobs.

If you have any questions and/or need further information on the upcoming engagement, or on any of the growth related matters, please feel free to contact Cordelia Clarke Julien, Assistant Deputy Minister, Ontario Growth Secretariat at <a href="mailto:cordelia.clarkejulien@ontario.ca">cordelia.clarkejulien@ontario.ca</a> or at (416) 325-5803.

Taken together, the actions outlined in **More Homes, More Choice** - including the proposed changes detailed above - will make it easier to build the right types of housing in the right places, make housing more affordable and help taxpayers keep more of their hard-earned dollars. Building more housing will make the province more attractive for employers and investors, proving that Ontario is truly Open for Business.

This action plan is complemented by our recently announced <u>Community Housing Renewal</u> <u>Strategy</u>, which will help sustain, repair and grow our community housing system. Together these two plans will ensure that all Ontarians can find a home that meets their needs.

At the same time, **More Homes, More Choice** underscores our commitment to maintain Ontario's vibrant agricultural sector and employment lands, protect sensitive areas like the Greenbelt, and preserve cultural heritage. Our plan will ensure that every community can build in response to local interests and demand while accommodating diverse needs.

I look forward to continuing to work together as we implement **More Homes, More Choice**.

Sincerely,

Steve Clark

Minister

From: <u>Karen Landry</u>
To: <u>Nina Lecic</u>

Subject:FW: Mulmur - Aggregate MotionDate:Thursday, May 9, 2019 8:15:19 AM

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Sent: Wednesday, May 8, 2019 3:37 PM

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Cc: Kerstin Vroom < <u>kvroom@mulmur.ca</u>>
Subject: Mulmur - Aggregate Motion
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The Township of Mulmur passed the following motion at the Council meeting on May 1, 2019.

Deputy Mayor Hawkins requested a recorded vote on the following motion:

Hello,

**Motion #78-19 Hawkins-Clark:** THAT The Township of Mulmur recognizes the importance of aggregate extraction and the proper management of aggregate

resources, including recycling aggregates;

AND WHEREAS, Mulmur owns and operates a gravel pit;

AND WHEREAS, the inappropriate extraction of aggregate can impact host communities, including, but not limited to: risk to surface and underground water supplies stress placed on local infrastructure; road safety; air and noise pollution; loss of farmland; encroachment on residential communities; interference with natural heritage systems;

AND WHEREAS, the Ontario Government commenced a detailed review of the Aggregate Resources Act in 2016;

AND WHEREAS, the Ministry of Natural Resources hosted a summit on Aggregate Reform on March 29, 2019, and did not include municipal government as stakeholders;

AND WHEREAS, the Township supports the recommendations to allow policy interpretation for accessing material under Road Allowances;

NOW THEREFORE BE IT RESOLVED THAT:

- 1) The Township of Mulmur hereby requests the following:
  - a) the Provincial Government provide for municipal representation at future meetings related to the Aggregate Reform;
  - b) Municipalities be provided authority to regulate hours of operation and haul routes within municipal boundaries;
  - c) If the Provincial level is accepted as a single level for applications, Municipalities be provided a process through which to provide comments on aggregate extraction activities proposed within or in the vicinity of their boundaries;
  - d) The comments on "Cutting the Red Tape" provided by the Ontario Sand and Gravel Association be evaluated from the perspective of the local host community and ensure that there are mechanisms/processes in place to address impacts.
  - e) That land unavailable for extraction due to changes on the rules to endangered and threatened species and other policies within the Natural Heritage System continue to be protected.

Shirley Boxem - yea Patricia Clark - yea Ken Cufaro - yea Earl Hawkins - yea Janet Horner - yea **Carried.** 

Have a nice day,

### **Adam Hicks | Administrative Assistant**

Township of Mulmur | 758070 2<sup>nd</sup> Line East | Mulmur, Ontario L9V 0G8 Phone 705-466-3341 ext. 234 | Fax 705-466-2922 | <u>ahicks@mulmur.ca</u>



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From: Karen Landry
To: Nina Lecic

Subject:FW: Mulmur Library MotionDate:Thursday, May 9, 2019 8:15:28 AM

From: Adam Hicks <a href="mailto:ahicks@mulmur.ca">ahicks@mulmur.ca</a>>
Sent: Wednesday, May 8, 2019 3:37 PM

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Cc: Kerstin Vroom < <u>kvroom@mulmur.ca</u>>
Subject: Mulmur Library Motion
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Hello,

The Township of Mulmur passed the following motion at the Council meeting on May 1, 2019.

**Motion #83-19 Boxem-Cufaro:** WHEREAS, Mulmur Township Council considers public libraries as a vital service to community well-being especially in a rural community such as ours;

AND WHEREAS, public libraries offer much needed support to the very vulnerable members of our society - the children, the seniors, recent immigrants, and the low-income citizens;

AND WHEREAS, the Provincial Government has cut the budget for Ontario Library Services by 50%;

AND WHEREAS, this funding will end the Interlibrary Loan Service to libraries;

AND WHEREAS, due to limited resources available to some libraries, the Interlibrary Loan Service is of great importance to its patrons;

NOW THEREFORE, Mulmur Township Council respectfully requests that the Province reconsiders the 50% budget cut for Ontario Library Services and finds some other means to fund necessary library services.

Carried.

Have a nice day,

### **Adam Hicks | Administrative Assistant**

Township of Mulmur | 758070 2<sup>nd</sup> Line East | Mulmur, Ontario L9V 0G8 Phone 705-466-3341 ext. 234 | Fax 705-466-2922 | <u>ahicks@mulmur.ca</u>



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### Mayor Dan Mathieson & Stratford City Council

In co-operation with the

### Stratford Festival

Are pleased to invite Municipal Staff, Elected Officials, their friends and families to join us for

# **Civic Night**

Tuesday, June 18<sup>th</sup>, 2019 **"Billy Elliott"** 

Festival Theatre - 55 Queen Street, Stratford Performance: 8:00 p.m.

### A Show to Make Your Spirit Shine

Dreams don't come easy in the hardscrabble mining town, riven by a bitter national strike, where eleven-year-old Billy lives with his bereaved family. But Billy's discovery of his talent for dance awakens in him a passion that will transform his life and win the hearts of his whole community. With its inspirational story, breathtaking dance numbers and music by pop legend Elton John, this fresh new take on the smash-hit show – reimagined for Stratford – will appeal to all.

# Please join us prior to the performance in the Paul D. Fleck Marquee for a Reception beginning at 6:30 pm

For this performance, the Stratford Festival is offering 2 tickets for the price of one, however, tickets can be purchased individually at half price. Tickets will sell out quickly for this performance, so please purchase your tickets early. The Festival is also offering discounted tickets for youth 18 years of age and under, so please feel free to bring them along.

Tickets can be purchased by contacting the Box Office at 1-800-567-1600 or on-line at <a href="https://www.stratfordfestival.ca">www.stratfordfestival.ca</a> and providing the **Promotion Code 85151**. Additional information regarding this performance is available through the Stratford Festival's website.

If you should have any questions or require additional information, please do not hesitate to contact Pat Shantz, Administrative Assistant to the Mayor, at 519-271-0250, ext. 236 or by email pshantz@stratford.ca. We look forward to seeing you on June 18th!



# Township of McKellar

701 Hwy #124, P.O. Box 69, McKellar, Ontario POG 1C0

Phone: (705) 389-2842 Fax: (705) 389-1244

May 7, 2019

Anne Potocnik, Chairperson McKellar Public Library Board P.O. Box 10 McKellar, ON POG 1C0

Dear Ms. Potocnik

Re: Resolution 19-263 - Ford Government funding cuts to Southern Ontario Library Service and Ontario Library Service North

Please be advised that at its regular meeting held, Monday May 6, 2019 the Council of the Township of McKellar passed the following resolution:

19-263

WHEREAS the Ontario government has reduced by 50% the funding to Southern Ontario Library Service and Ontario Library Service North, resulting in the suspension of interlibrary loan service and postage subsidy, with further service cuts yet to be announced;

**AND WHEREAS** the users of small northern libraries such as the McKellar Public Library will be significantly negatively impacted by the loss of equitable access to materials and information;

**AND WHEREAS** the resulting increased costs of postage will not have been considered in the budget preparation for the current fiscal year and will require lending libraries to carefully consider whether to fill an interlibrary loan request;

**NOW THEREFORE** be it resolved that the Council of the Corporation of the Township of McKellar strongly urges the Ontario government to restore the funding to Ontario Library Service North and Southern Ontario Library Service *at a minimum* to the previous 2018 funding level;

**AND FURTHER** that this resolution be forwarded to the Michael Tibollo, Minister of Culture, Recreation and Sport; Norm Miller, MPP; Doug Ford, Premier; Association of Municipalities of Ontario and all Ontario municipalities.

Your consideration on the matter is appreciated.

Sincerely,

Ina Watkinson

Administrative/Treasury Assistant

Township of McKellar

cc Honourable Doug ford, Premier of Ontario
Honourable Mike Tobollo, Minister of Culture, Recreation & Sport
Norm Miller, M.P.P., Parry Sound - Muskoka
Association of Municipalities of Ontario
Municipalities of Ontario

Premier Doug Ford Michael Tibollo, Minister of Culture Recreation and Sport Norm Miller, MPP , Parry Sound Muskoka

The recently announced budget cut to SOLS and OLS North has so far resulted in the suspension of interlibrary loans, courier service and subsidies for postage for interlibrary loan. The full impact of this outrageous funding reduction is not yet known, however the loss of readily accessible interlibrary loan service will have a significant impact on the users of small northern libraries such as McKellar Public Library. Larger libraries have substantially larger materials budgets and are more likely to own the resources required by their patrons. Small northern libraries rely on interlibrary loan service to provide their users with materials they do not have. The loss of this vital service leaves northern residents at a distinct disadvantage without readily available and equitable access to the range of materials and information they previously enjoyed. Electronic formats may be seen as a substitute however high speed broadband internet service is also not as readily available in northern or remote areas and not everyone owns a computer.

The Ontario Library Services also provide staff and trustee training and coordination of other services proving economies of scale and resource sharing.

We the board of the McKellar Public Library strongly urge the Ontario government to reverse this disastrous and short sighted funding reduction and to restore *at a minimum* the funding level provided to SOLS and OLS North in 2018.

Anne Potocnick, Chair, McKellar Public Library Board

# TOWNSHIP OF MCKELLAR

DATE: May-6, 2019	RESOLUTION No. 19- 263
Moved by San	
Seconded by / Joseph Seconded by	
	educed by 50% the funding to Southern Ontario e North, resulting in the suspension of interlibrary ner service cuts yet to be announced;
	ern libraries such as the McKellar Public Library will loss of equitable access to materials and information;
	costs of postage will not have been considered in the ar and will require lending libraries to carefully request;
McKellar strongly urges the Ontario govern	the Council of the Corporation of the Township of ament to restore the funding to Ontario Library by Service <i>at a minimum</i> to the previous 2018 funding
	rwarded to the Michael Tibollo, Minister of Culture, Doug Ford, Premier; Association of Municipalities of
Carried Defeated	Peter Hopkins, Mayor
DIV	ISION VOTE
Councillor Marco Ancinelli Councillor Don Carmichael Councillor Morley Haskim Councillor Mike Kekkonen	YEA NAY
Mayor Peter Hopkins	





May 2, 2019

Hon. Victor Fedeli Minister of Finance Frost Bldg S 7th Flr, 7 Queen's Park Cres Toronto, ON M7A 1Y7

Dear Mr. Fedeli:

Re: Ontario Municipal Partnership Fund (OMPF)

The Ontario Municipal Partnership Fund (OMPF) is the Province's main general assistance grant to municipalities. The program, that primarily supports northern and rural municipalities, is a critical component of the provincial-municipal fiscal relationship. Since 2012, grant allocations have decreased from \$598M to \$505M in 2019.

The government has committed to consult with municipalities in 2019 regarding the future of the OMPF. The goal of this review is to ensure that the program remains sustainable and focused on the northern and rural municipalities that need this funding the most. Reductions in the funding have a significant impact on municipal finances, with the loss of revenue typically being made up through increased tax levies. This has the potential of adversely affecting housing affordability in the affected municipalities and is contrary to the Province's stated goal of improving housing affordability.

The Town of Mono recommends that the OMPF be maintained at not less than its current funding level.

I look forward to an earnest dialogue with the Province that recognizes the importance to municipalities of maintaining this program and the potential impact that reductions to funding will have.

Regards,

TOWN OF MONO

Laura Ryan Mayor CC: Hon. Sylvia Jones, Solicitor General, MPP, Dufferin-Caledon All Ontario municipalities

P: 519.941.3599 F: 519.941.9490 E: info@townofmono.com
W: townofmono.com

347209 Mono Centre Road Mono, ON L9W 6S3



# Office of the Regional Chair

May 3, 2019

Resolution Number 2019-375

The Honourable Christine Elliott Ministry of Health and Long-Term Care Hepburn Block, 10<sup>th</sup> Floor 80 Grosvenor St. Toronto ON M7A 1E9 The Honourable Steve Clark Ministry of Municipal Affairs and Housing 17<sup>th</sup> Floor, 777 Bay Street Toronto ON M5G 2E5

Dear Ministers:

Subject: Overview of Health System Transformation - A Region of Peel Perspective

I am writing to advise that Regional Council approved the following resolution at its meeting held on Thursday, April 25, 2019:

### **Resolution 2019-375:**

Whereas the Provincial Government has made certain announcements relating to Public Health and the Paramedic Services system;

And whereas, the announcements do not contain sufficient detail to be able to provide commentary;

And whereas, the announcements have a significant impact on the delivery of public health services and Paramedic Services;

And whereas, the role of the municipalities is not clear in the announcement;

And whereas, funding has not been committed, neither quantum or source;

Therefore be it resolved, that this matter be referred to the Health Services Integration Committee to monitor the issue and determine the role of the Region throughout the roll out of the plans and work with staff to report back to Council on details of the proposal and projected impacts of change together with regular staff communication to Regional Council on emerging issues;

And further, that recommendations of the Health System Integration Committee and Regional Council be referred to the Government Relations Committee for further advocacy;

### The Regional Municipality of Peel

And further, that the Chair arrange a round table meeting with the local MPP's to provide information on the current structure and funding model and the potential impacts of change to service delivery with changes to the structure and funding model. Other invitees to the round table include the Chair and Vice-Chair of the Health Services section, the Commissioner of Health Services, the CAO, the Medical Officer of Health and the Chief of Paramedic Services and Chair of Health System Integration Committee;

And further, that the Chair and Mayors work with MARCO/LUMCO and AMO to demonstrate the benefits of public health and Paramedic Services remaining fully integrated with other Region of Peel functions;

And further, that the Province be requested to engage municipalities and existing Boards of Health before proceeding with any changes to the existing structure and funding;

And further, that this resolution be provided to the Minister of Health, the Minister of Municipal Affairs and Housing, all municipalities, AMO, Ontario Association of Paramedic Chiefs, the Association of Local Public Health Agencies, and MARCO/LUMCO.

Yours Truly,

Nando lannicca

Regional Chair and Chief Executive Officer

NI:sm

Copied:

Pat Vanini, Executive Director, Association of Municipalities of Ontario Michelle Mackenzie, Executive Director, Ontario Association of Paramedic Chiefs Loretta Ryan, Executive Director, The Association of Local Public Health Agencies Karen Redman, Regional Chair, Waterloo Region, Chair of MARCO Cam Guthrie, Mayor, City of Guelph, Chair of LUMCO All Ontario Municipalities

Ontario Provincial Police Police provinciale de l'Ontario



Municipal Policing Bureau Bureau des services policiers des municipalités

777 Memorial Ave. 777, ave Memorial Orillia ON L3V 7V3 Orillia (ON) L3V 7V3

Tel: (705) 329-6200 Fax: (705) 330-4191

File number/Référence: 612-10

May 01, 2019

Mayor/Reeve and Clerk/CAO/Treasurer,

First, I would like to congratulate all recently elected officials and wish you great success in your new roles.

2018 has been a year of substantial accomplishments such as the transitioning of another two municipalities to the Ontario Provincial Police (OPP), multiple contract renewals, and countless presentations to municipal councils throughout the province. OPP Municipal Policing Bureau staff will strive to make great progress to continue to build municipal relationships through excellent communication, contract and financial management.

As some of you may know, the government appointed Commissioner Thomas Carrique as the 15th OPP Commissioner to lead the police service in its 110 year history. Following the announcement of his appointment, Commissioner Carrique stated he is extremely grateful for and deeply honoured by the confidence placed in him by the provincial government and the Ministry of the Solicitor General to serve alongside the dedicated and professional members of the OPP, in a leadership role. We are all looking forward to strengthen our relationship with the municipalities the OPP polices under Commissioner Carrique's leadership.

The Comprehensive Ontario Police Services Act, 2019, received Royal Assent on March 26, 2019. Other than Special Investigation Unit modernization section, all other sections have not yet been proclaimed into force. This act creates the Community Safety and Policing Act, 2019 (CSPA), which will come into force on a date that has not yet been determined by government. Relevant regulations to the CSPA are currently being written. This will eventually lead to the legislation coming into force. When this new legislation comes into force, the current Police Services Act, 1990, (PSA) will be repealed. Until then, the PSA remains in force. We will keep you informed on this progression.

Recently, you or staff members of your municipality have been contacted by our members to build awareness of the resources available to you, such as our webpage <a href="https://www.opp.ca/billingmodel">www.opp.ca/billingmodel</a> materials, and offer to answer any of the questions you may have on the billing model and present to your municipalities, if necessary. Thank you for your feedback.

In an effort to bring our communication to the next level, our bureau announced the implementation of the ePost mailing system. Your municipality will be sent instructions to set-up up to three ePost user accounts (Mayor/ Reeve, CAO/Clerk, PSB Chair (if applicable)) to allow for more efficient and innovative distribution of the annual billing statements and other correspondence. The ePost system is run by Canada Post and is official and legal mail. This system has been operated by Canada Post for 19 years, and has

been adopted throughout the country by numerous municipalities and various pension and pay organizations. The intention is to provide timely and reliable information to our hundreds of municipalities and avoid the unreliable nature of the current mailing system.

I would like to welcome your views or any comments you may have to enhance our communication and invite you to ask questions of myself or any member of the OPP Municipal Policing Bureau through email at OPP.MunicipalPolicing@opp.ca or by phone at (705) 329-6200.

Sincerely

M.M. (Marc) Bedard Superintendent Commander,

Aux Besterd

Municipal Policing Bureau

<u>Email OPP.MunicipalPolicing@opp.ca</u> Twitter @OPP\_Mun\_Pol

/nv

Corporation of the Township of Essa 5786 County Road 21 Utopia, Ontario LOM 1TO



Telephone: (705) 424-9770 Fax: (705) 424-2367

Web Site: www.essatownship.on.ca

May 9, 2019

All Ontario Municipalities

Dear Mayor and Council:

Re:

Township of Essa Request for Support - Resolution No. CW097-2019 Re: Support of Essa Public Library Board Initiative

Please be advised that at its meeting of May 1, 2019, Council of the Township of Essa passed the following motion in respect of support of the Essa Public Library Board:

Resolution No: CW097-2019 Moved by: White Seconded by: Sander

WHEREAS the Ontario Library Service North and Southern Ontario Library Service provide the support for interlibrary loans, staff and board training, bulk purchasing, collaborative programming, technological supports, shared electronic book collections and shared catalogue databases; and WHEREAS Township of Essa Council supports the Essa Public Library Board in their initiative to circulate a petition seeking support for the Ontario Public Library Board in their request for the reinstatement of funding to the Ontario Library Service (North and South) agencies to, at a minimum, 2017-18 funding levels, in order for these agencies to continue their day-to-day support of Ontario Public Library Services, and to continue to maintain base funding for Ontario Public Libraries:

NOW THEREFORE BE IT RESOLVED THAT this resolution be forwarded to the office of MPP Simcoe-Grey Jim Wilson, AMO, County of Simcoe Council, and all Simcoe County municipalities for their support.

----Carried----

Council has further requested that letters of support be sent directly to the Township of Essa, and that the attached petition be made available to the public.

Sincerely,

Lisa Lehr, CMO Clerk

CC.

MPP Simcoe-Grey, Jim Wilson

AMO

All Simcoe County Municipalities

To the Legislative Assembly of Ontario:

WHEREAS, according to the <u>Statement of Public Library Funding</u> dated Thursday, April 18, 2019 by the Minister of Tourism, Culture and Sport, the Honourable Michael Tibollo, we appreciate that base funding for public libraries will be maintained, we call into question the statement that the **Ontario Library Service agencies** "have no involvement in day-to-day operations of Ontario's public libraries":

WHEREAS Ontario Library Service-North and Southern Ontario Library Service provide the support for interlibrary loan, staff and board training, bulk purchasing, collaborative programming, technological supports, our shared electronic book collection and our shared catalogue database itself:

WHEREAS we question how involved the agencies need to be in order to be considered crucial for the day-to-day operations of all provincial libraries, but even more specifically for small, northern and rural libraries;

WHEREAS value for money and respect for taxpayer dollars are the umbrella under which the agencies operate – allowing libraries to share resources and expertise in an efficient and costeffective manner – while also allowing them to best serve their individual communities;

# Support Ontario's Public Libraries

When completed, please forward to:

Espanola Public Library, 245 Avery Drive, Espanola ON P5E 1S4

We the undersigned, therefore petition the Legislative Assembly of Ontario:
- for the reinstatement of funding to the Ontario Library Service (North and South)
agencies to at minimum, the 2017 - 2018 funding levels, in order for these agencies to
continue the day-to-day support of Ontario Public Library Services;

- to continue to maintain base funding for Ontario Public Libraries.

POSTAL CODE					
CITY					
ADDRESS					
NAME (PRINTED)					
SIGNATURE					



May 6, 2019

To Our Development Charge Clients:

### Re: Proposed Changes to the Development Charges Act

The letter is to advise that on May 2, 2019, the Province introduced Bill 108 which proposes changes to the *Development Charges Act*, 1997 (D.C.A.). The Bill has been introduced as part of the Province's "More Homes, More Choice: Ontario's Housing Supply Action Plan." The Bill has been given first reading and is expected to be debated over the coming months.

The Act proposes that any development charge (D.C.) by-laws passed after May 2, 2019 will be affected by these proposed changes. Any by-laws that were passed prior to this date will remain in effect until the by-law either is repealed or expires. A summary of the proposed changes to the D.C.A. is provided below.

Changes to Eligible Services – The Bill will remove "soft services" from the D.C.A. These services will be considered as part of a new Community Benefit Charge (discussed below) imposed under the *Planning Act*. Eligible services that will remain under the D.C.A. are as follows:

- Water supply services, including distribution and treatment services;
- Wastewater services, including sewers and treatment services;
- Stormwater drainage and control services;
- Services related to a highway as defined in subsection 1 (1) of the Municipal Act. 2001 or subsection 3 (1) of the City of Toronto Act, 2006, as the case may be;
- Electrical power services;
- Policing services;
- Fire protection services:
- Toronto-York subway extension, as defined in subsection 5.1 (1);
- Transit services other than the Toronto-York subway extension;
- Waste diversion services; and
- Other services as prescribed.

**Waste Diversion** – The Bill will remove the mandatory 10% deduction for this service.

Payment in Installments Over Six Years – The Bill proposes that rental housing, nonprofit housing and commercial/industrial/institutional developments pay their D.C.s in six equal annual payments commencing the date of issuance of an occupancy permit or occupancy of the building, whichever is earlier. The municipality may elect to charge interest (at a prescribed rate) for each payment, commencing the date of the first



payment. If payments are not made, interest may continue to be charged and may be added to the property and collected as taxes.

When D.C. Amount is Determined – The Bill proposes that the D.C. amount for all developments proceeding by site plan or requiring a zoning amendment shall be determined based on the D.C. charge in effect on the day of the application for site plan or zoning amendment. If the development is not proceeding via these planning approvals, then the amount is determined at the earlier of the date of issuance of a building permit or occupancy.

Soft Services to be Included in a New Community Benefit Charge Under the Planning Act – It is proposed that a municipality may, by by-law, impose community benefits charges against land to pay for the capital costs of facilities, services and matters required because of development or redevelopment in the area to which the by-law applies. These services may not include services authorized by the D.C.A. Various provisions are provided as follows:

- Before passing a community benefits charge by-law, the municipality shall prepare a community benefits charge strategy that (a) identifies the facilities, services and matters that will be funded with community benefits charges; and (b) complies with any prescribed requirements.
- The amount of a community benefits charge payable shall not exceed an amount equal to the prescribed percentage of the value of the land as of the valuation date.
- The valuation date is the day before building permit issuance.
- Valuations will be based on appraised value of land. Various requirements are set out in this regard.
- All money received by the municipality under a community benefits charge bylaw shall be paid into a special account.
- In each calendar year, a municipality shall spend or allocate at least 60 percent of the monies that are in the special account at the beginning of the year.
- Requirements for annual reporting shall be prescribed.
- Transitional provisions are set out regarding the D.C. reserve funds and D.C. credits.

### Remarks

The proposed legislative changes noted above will require a more detailed review to consider the impact to the D.C. and *Planning Act* matters including methodology, collection policies and transition policies. As we have done in the past, our firm will be engaging with legal advisors to further consider the full implications of the Bill and potential Regulations. We will be providing a submission on the Bill to the Province on behalf of our D.C. clients. A few direct comments are made at this time for consideration of the reader, as follows:



### Payment in Installments Over Six Years

- The delay in receiving the D.C. revenue will impact the D.C. cashflow. As most of these "hard services" must be provided in advance of development occurring, it will require increased debt borrowing. Added debt interest will have upward pressure on the D.C. quantum.
- As the proposed changes to the Act are to facilitate the Province's housing agenda, it is unclear why these installment payments are to be provided to commercial, industrial and institutional developments.
- The requirement to manage multiple-year collections for each building permit issued for each rental housing, non-profit housing and commercial/industrial/institutional development building permit will cause a tremendous administrative burden on municipalities. This will add to staffing requirements and be reflected in higher planning and building permit fees.

### When D.C. Amount is Determined

- Locking in the D.C. rates well in advance of the building permit issuance would produce a shortfall in D.C. revenue, as the chargeable rates will not reflect the current rate as of the time the development proceeds to be built.
- There should be a time limit on how long the development takes to move from site plan approval, or zoning change, to the issuance of a building permit. There is no financial incentive for the development to move quickly to building permit. This may induce speculation to change the land use and then market the lands. (Note: There is an opportunity for a time limit to be prescribed by regulation; however, there are a number of references currently in the D.C.A. that "the Minister may prescribe" which have not been acted upon.)

# Soft Services to be Included in a New Community Benefit Charge Under the *Planning*Act

- More information is needed, as there are several key items to be included as part of the regulations. That is, what items are to be included in the community benefits charge strategy and what percentage of the "value of land" is to be eligible for collection?
- Depending on what is to be included in the community benefits charge strategy, this may be undertaken at a similar time as the D.C. background study. As noted, however, it is unclear as to the prescribed items to be included along with the process required to adopt the strategy and the by-law.
- Concern is raised regarding what prescribed percentage of the land value will be allocated for the charge. If the same percentage is provided for all Ontario, then a single-family lot in Toronto valued at \$2 million will yield 20 times the revenue of a \$100,000 lot in eastern Ontario. Given that building costs for the same



- facilities may only vary by, say, 15%, the community benefits charge could yield nominal funds to pay for required services for municipalities outside the G.T.A.
- It is unclear how the community benefits charge will be implemented in a two-tier municipal system. Given that both the upper and lower tiers will have needs, there is no guidance on how the percentage of the land value will be allocated, or how the process for allocating this would occur. Obviously, land values will vary significantly in urban vs. semi-urban communities (e.g. in York Region, land value in Markham is significantly higher than in Georgina), so the upper-tier needs may only take, say, 30% of the allotted value in the urban areas but 75%-90% of the allotted semi-urban or rural values.
- Given the need for appraisals and the ability of the applicant to challenge the appraisal, a charging system based on land values will be extremely cumbersome and expensive. It is unclear how appraisal costs are recovered, and the appraisals may become a significant cost on each individual property.

We trust that the above information is helpful. For those clients who are in the midst of a background study process, we would be pleased to further discuss this with you and Council shortly. For our other clients, we would be pleased to arrange a time to discuss this further. As noted above, we will be providing further feedback to the Province during this legislative process.

Yours very truly,

WATSON & ASSOCIATES ECONOMISTS LTD.

Gary D. Scandlan, BA, PLE

Director

Andrew Grunda, MBA, CPA, CMA

Principal



# Township of Puslinch Development Charges Background Study

**Council Information Session** 

May 15, 2019

#### **Development Charges**



- Purpose of Development Charges (D.C.) is to recover the capital costs associated with residential and non-residential growth within the municipality
- The capital costs are in addition to what costs would normally be constructed as part of a subdivision (i.e. internal roads, watermains, roads, sidewalks, streetlights, etc.)
- Municipalities are empowered to impose these charges via the Development Charges Act (D.C.A.)

### Bill 108 – More Homes, More Choice Act, 2019

#### Proposed Changes to the D.C.A.

#### Changes to Eligible Services

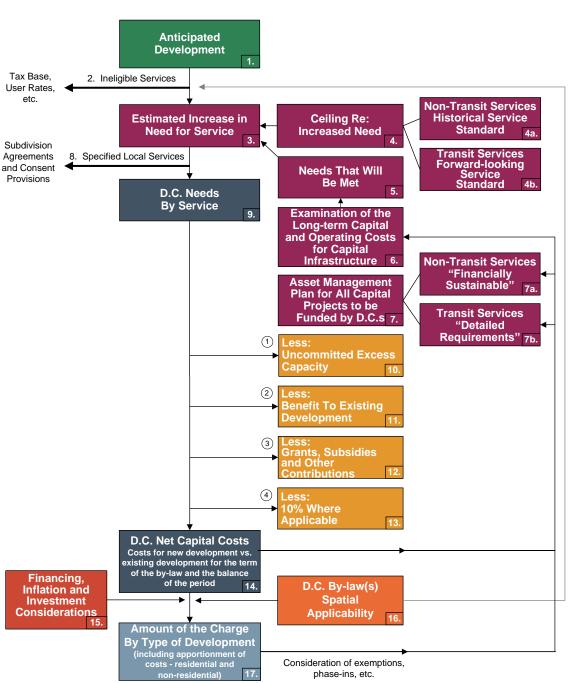
- "Soft Services" would be removed from the D.C.A. and considered as part of a Community Benefit Charge under the authority of the Planning Act
- Waste Diversion would continue to be included as an eligible service at 100% D.C. recoverable

#### Calculation of D.C. Amount

 D.C. would be calculated at the time of Site Plan and Zoning Bylaw Amendment application, and payable at building permit issuance or occupancy

#### Payment in Installments Over Six Years

 Rental housing, non-profit housing and commercial/ industrial/ institutional developments would pay D.C.s in six equal annual payments, commencing from the date of occupancy





#### **Growth Forecast**



• Growth forecast has been prepared for the 10-year period (2019-2029) and 20-year period (2019-2039)

	Resid	ential	Non-Residential				
Time Horizon	Net Population	Employme		Sq.Ft. of GFA			
Mid-2019	7,714	2,854	4,454				
Mid-2029	8,909	3,285	4,786				
Mid-2039	9,180	3,409	5,146				
	Incren	nental Change					
10-year (2019-2029)	1,195	431	332	354,300			
20-year (2019-2039)	1,466	555	692	753,700			

#### Increase in Need for Service



- Municipal-Wide Services
  - Roads and Related Services
  - Fire Services
  - Parks and Recreation (indoor recreation, parks, and trails development)
  - Administration Studies

#### Roads and Related Services

								Less:	Potentia	I D.C. Recove	rable Cost
Prj.No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Asset Number	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 78%	Non- Residential Share 22%
	Roads										
1	Victoria Road South: County Road 36 (Badenoch Street) to Gilmour Road	124	2019	382,500	-	382,500	330,475		52,025	40,579	11,445
	Victoria Road South: Gilmour Road to entrance to Aberfoyle Pit #2	125A	2019	127,500	-	127,500	110,158		17,342	13,526	3,815
3	Concession 7: Concesion 2A to Mason Road	115	2021	156,675	-	156,675	135,365		21,310	16,622	4,688
4	Concession 7: Mason Road to McLean Road West	116	2021	52,225	-	52,225	45,122		7,103	5,541	1,563
5	Concession 2: Side Road 20 South to Sideroad 25 South (Truck Route)	35	2021	346,200	-	346,200	299,113		47,087	36,728	10,359
1 6	Concession 2: Sideroad 25 South to Concession 7 (Truck Route)	36	2021	173,100	-	173,100	149,556		23,544	18,364	5,180
/	Watson Road South: bridge to Leslie Road West	134	2023	86,000	ı	86,000	74,303		11,697	9,124	2,573
8	Watson Road South: County Road 36 (Badenoch Street) to Bridge	136	2023	129,000	-	129,000	111,454		17,546	13,686	3,860
l a	Watson Road South: Leslie Road West to McRae Station Road	133	2023	127,400		127,400	110,072		17,328	13,516	3,812
	Morriston Traffic Calming		2028	100,000	-	100,000	86,399		13,601	10,609	2,992
	Concession 1- Sideroad 10 to Wellington Rd 35	14	2027	255,000	-	255,000	220,317		34,683	27,053	7,630
12	Concession 11 railway crossing - County Road 34 to Sideroad 17	144	2019	50,000	-	50,000	43,199		6,801	5,304	1,496
13	Concession 1 - Sideroad 20 South to Concession 7	16, 17	2020	520,000	-	520,000	449,274		70,726	55,166	15,560
	Concession 4- Sideroad 10 to 32	56	2024	450,000		450,000	388,795		61,205	47,740	13,465
	McLean Rd E and Winer Rd	212A, 158	2024	365,000	-	365,000	315,356		49,644	38,723	10,922
	Mason Crt Concession 7 to dead end	38	2024	38,100	-	38,100	32,918		5,182	4,042	1,140
	Maple Leaf Lane County Road 46 to dead end	52	2024	45,800	-	45,800	39,571		6,229	4,859	1,370
	Concession 4- Hwy 6 to 35	160, 161	2025	390,000	-	390,000	336,955		53,045	41,375	11,670
19	Watson Road South: Maltby Road East to County Road 34	139, 140	2026	480,000	-	480,000	414,714		65,286	50,923	14,363
	Watson Rd - Wellington Road 34 to Wellington Road 36	137	2026	500,000		500,000	431,994		68,006	53,045	14,961
21	Gore Road - Valens Road to Concession 7	5	2026	270,000	-	270,000	233,277		36,723	28,644	8,079
22	Church and Victoria Street	28_Surface	2026	50,000	-	50,000	43,199		6,801	5,304	1,496

### Roads and Related Services (Cont'd)

								Less:	Potentia	D.C. Recove	erable Cost
Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Asset Number	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 78%	Non- Residential Share 22%
23	Leslie Rd West- Victoria Rd South to East limit	21, 22, 23, 25	2027	645,000	-	645,000	557,272		87,728	68,428	19,300
24	Gore Rd-Sideroad 20 to Valens Rd	4	2027	365,000	-	365,000	315,356		49,644	38,723	10,922
25	Sideroad 20 North - Wellington Road 34 to Forestell Road	166	2028	375,000	-	375,000	323,996		51,004	39,783	11,221
26	Roszell Road - Townline Road to Forestell Road	90, 54a	2028	287,500	-	287,500	248,397		39,103	30,501	8,603
27	Maltby Road - Victoria Road to Watson Road	63A, 63B	2028	262,500	-	262,500	226,797		35,703	27,848	7,855
28	Concession 4- Sideroad 10 North to Sideroad 12 North	57	2019	112,000	-	112,000	96,767		15,233	11,882	3,351
29	Concession 1 -County Road 35 to Sideroad 20 South	15	2019	303,000	-	303,000	261,788		41,212	32,145	9,067
30	Brock Road Sidewalk - 304	304	2019-2020	235,000	-	235,000	203,037		31,963	24,931	7,032
31	Leslie Road West - Watson Road South to Bridge 5 (Mountsberg)	22	2021-2022	620,000	-	620,000	535,673		84,327	65,775	18,552
32	Fox Run Drive - transition to curb to County Road 46	205, 206	2022	63,000	-	63,000	54,431		8,569	6,684	1,885
33	Concession 4 - County Road 35 to Sideroad 20 North	59	2025	282,739	-	282,739	-		282,739	220,536	62,203
	Bridges and Culverts										
34	Galt Creek Bridge Gore Road Lot 2	1008	2021	170,000	-	170,000	146,878		23,122	18,035	5,087
35	Little's Bridge	1003	2022-2023	525,000	-	525,000	453,594		71,406	55,697	15,709
36	Moyer's Bridge - 0004	1004	2024	25,000	-	25,000	21,600		3,400	2,652	748
37	Moyer's Bridge - 0004	1004	2025	500,000	-	500,000	431,994		68,006	53,045	14,961
38	Gilmour Culvert	2009	2023-2025	600,000	-	600,000	518,393		81,607	63,654	17,954
39	Victoria Road Culvert Over Galt Creek	2006	2024	105,000	-	105,000	90,719		14,281	11,139	3,142
40	Victoria Road Culvert North of Leslie Ellis Road Culvert Over Puslinch Lake Irish	2013	2024 2026	105,000 250,000	-	105,000 250,000	90,719		14,281 34,003	11,139 26,522	3,142 7,481
40	Creek	0007	0000			,	,		,	·	,
42	Irish Creek Culvert on Townline Road	2007	2026	180,000	-	180,000	155,518		24,482	19,096	5,386
43	Roads & Related Vehicles Gravel Packer - New Equipment for Grader	8002	2019	173,100	-	173,100	-		173,100	135,018	38,082
	Reserve Fund Adjustment/Unfunded Balance			<u> </u>		29,907			29,907	23,328	6,580
	Total			11,278,339	-	11,308,246	9,350,512	-	1,957,734	1,527,033	430,702

### Fire Services



			Gross				Less:	Potentia	al D.C. Recov	Residential Share 22%  74 190,039  50 1,650  43 8,051  00 9,900  40 1,760  009) (43,890)
Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 78%	Residential Share
	Fire Stations						-			
1	Provision for Additional Facility Space	2019-2021	1,151,750	-	1,151,750	287,938		863,813	673,774	190,039
2	Design a Fully Services Station	2019	10,000	-	10,000	2,500		7,500	5,850	1,650
3	Provision for Equipment for New Firefighters (9)	2019-2028	48,792	-	48,792	12,198		36,594	28,543	8,051
4	Motorized Water Vessel	2022-2024	50,000	-	50,000	5,000		45,000	35,100	9,900
5	Cargo Trailer	2022-2024	8,000	-	8,000	-		8,000	6,240	1,760
	Reserve Fund Adjustment/Unfunded Balance				(199,498)			(199,498)	(155,609)	(43,890)
	Total		1,268,542	-	1,069,044	307,635	-	761,408	593,898	167,510

#### Parks and Recreation Services



						Le	ess:		Less:	Potential I	D.C. Recovera	able Cost
Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Subtotal	Other (e.g. 10% Statutory Deduction)	Total	Residential Share 95%	Non- Residential Share
4	Soccer Fields at Puslinch Community	0040 0000	000 400	000 000	447.000	00.047	000 040	70.005	7.000	70.070		
1	Centre Park	2019-2020	698,169	280,239	417,930	69,817	269,249	78,865	7,886	70,978	67,429	3,549
2	Phase 1 of Parks Master Plan	2021	701,907	73,496	628,411	537,115	59,343	31,954	3,195	28,758	27,320	1,438
3	Phase 2 of Parks Master Plan	2022	874,580	351,048	523,532	60,000	306,596	156,936	15,694	141,242	134,180	7,062
1 4	Playground area at Boreham Park (also known as Arkell Park)	2026	75,000	-	75,000	7,500		67,500	6,750	60,750	57,713	3,038
5	Fox Run Park Trail	2019	118,500	-	118,500	11,850	48,064	58,586	5,859	52,728	50,091	2,636
	Reserve Fund Adjustment/Unfunded Balance							(51,919)		(51,919)	(49,323)	(2,596)
	Total		2,468,156	704,783	1,763,373	686,281	683,251	341,922	39,384	302,538	287,411	15,127

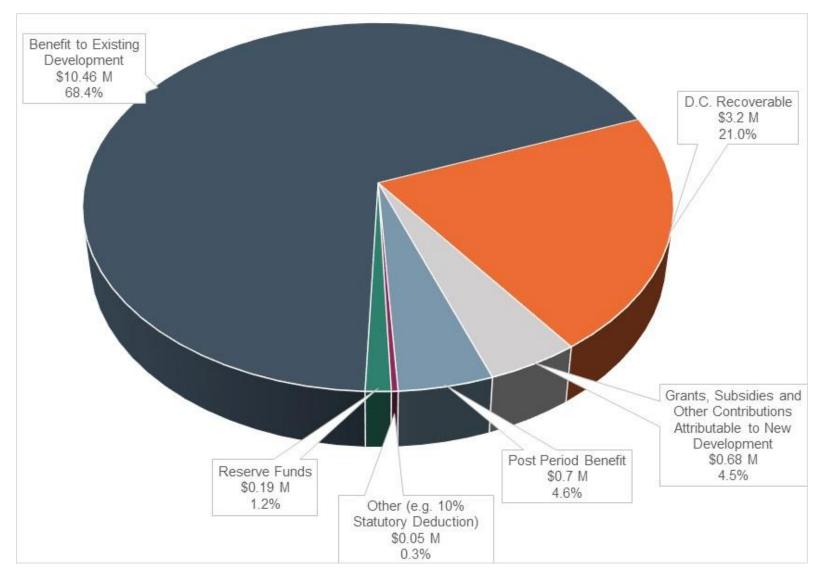
#### Administration - Studies



						Le	ess:		Less:	Potential I	D.C. Recovera	able Cost
Prj.No	Increased Service Needs Attributable to Anticipated Development  2019-2028	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Subtotal	Other (e.g. 10% Statutory Deduction)	Total	Residential Share 78%	Non- Residential Share 22%
1	Master Fire Plan	2025	44,000	-	44,000	17,600		26,400	-	26,400	20,592	5,808
2	Development Charges Study	2019	21,000	-	21,000	-		21,000	2,100	18,900	14,742	4,158
3	Recreation Master Plan	2025	50,000	-	50,000	20,000		30,000	3,000	27,000	21,060	5,940
4	Traffic Count Study	2020	25,000	-	25,000	10,000		15,000	-	15,000	11,700	3,300
5	Transportation Master Plan including PCI Updates	2021	25,000	-	25,000	10,000		15,000	-	15,000	11,700	3,300
6	Development Charges Study	2024	21,000	-	21,000	-		21,000	2,100	18,900	14,742	4,158
7	Asset Management Plan	2019	48,500	-	48,500	41,903		6,597	660	5,937	4,631	1,306
8	Community Based Strategic Plan	2025	30,000	-	30,000	15,000		15,000	1,500	13,500	10,530	2,970
9	Municipal Servicing Standards	2019	10,000	-	10,000	-		10,000	-	10,000	7,800	2,200
	Reserve Fund Adjustment/Unfunded Balance							31,392		31,392	24,486	6,906
	Total		274,500	-	274,500	114,503	-	191,388	9,360	182,029	141,982	40,046

## Gross Capital Costs - \$15.3 million

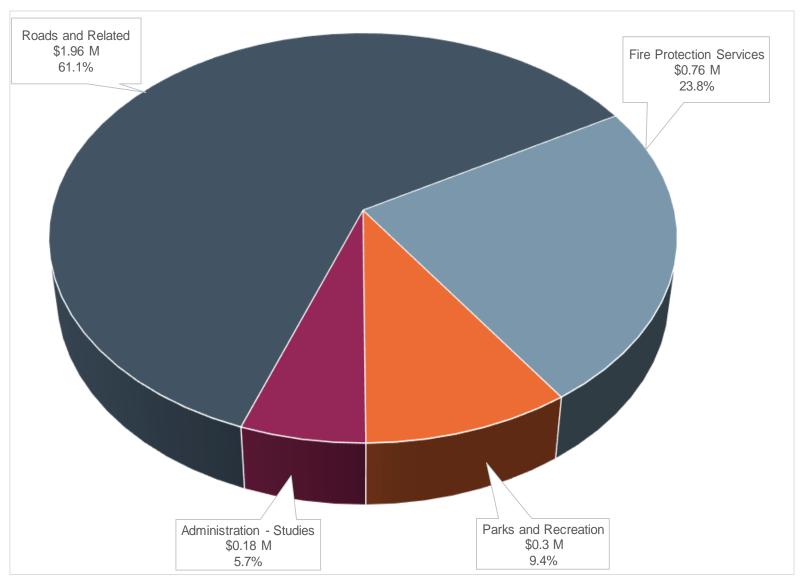




### Development Charge Recoverable Capital Costs



#### Total D.C. Recoverable Costs – \$3.2 million



## Calculated Schedule of Development Charges



				RE	SIDENTIAL					NON-RESIDENTIAL	
Service	le and Semi- ched Dwelling			Apartments - Bachelor and 1 Bedroom		Other Multiples		Special Care/Special Dwelling Units		(per sq.ft. of Gross Floor Area)	
Municipal Wide Services:											
Roads and Related	\$ 3,542	\$	1,926	\$	1,637	\$	2,650	\$	1,313	\$	1.21
Fire Protection Services	\$ 1,378	\$	749	\$	637	\$	1,031	\$	511	\$	0.47
Parks and Recreation Services	\$ 667	\$	363	\$	308	\$	499	\$	247	\$	0.04
Administration - Studies	\$ 329	\$	179	\$	152	\$	246	\$	122	\$	0.11
Total Municipal Wide Services	\$ 5,916	\$	3,217	\$	2,734	\$	4,426	\$	2,193	\$	1.83

### **Development Charge Comparison**



# Current vs. Calculated Charges per Single Detached Residential Dwelling Unit and per Sq. Ft. of Non-Residential Gross Floor Area

Residential (Single Detached) Comparison

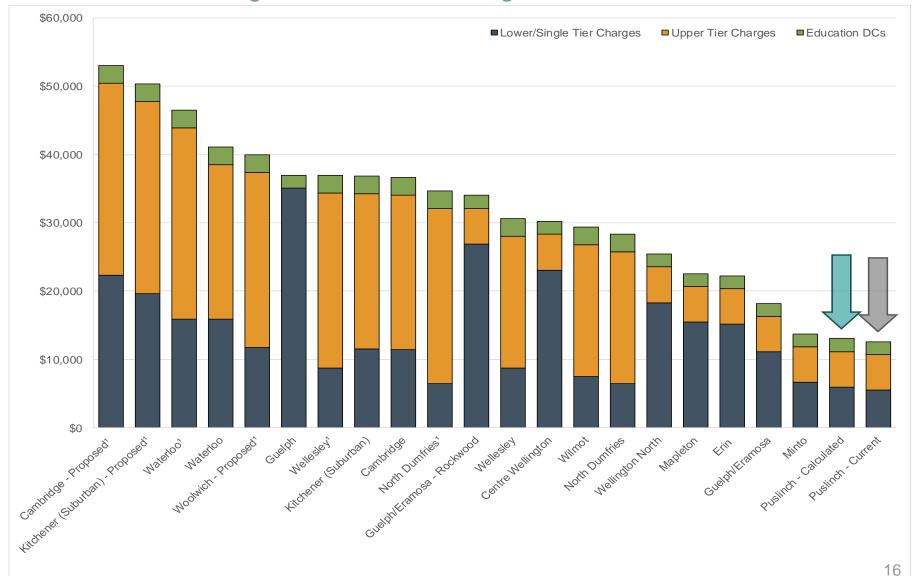
Service		urrent	Calculated							
Municipal Wide Services:										
Roads and Related	\$	3,184	\$	3,542						
Fire Protection Services	\$	1,661	\$	1,378						
Parks and Recreation Services	\$	361	\$	667						
Administration - Studies	\$	277	\$	329						
Total Municipal Wide Services	\$	5,483	\$	5,916						

Non-Residential (per sq.ft.) Comparison

Service	Cu	ırrent	Calculated		
Municipal Wide Services:					
Roads and Related	\$	1.83	\$	1.21	
Fire Protection Services	\$	0.53	\$	0.47	
Parks and Recreation Services	\$	0.04	\$	0.04	
Administration - Studies	\$	0.16	\$	0.11	
Total Municipal Wide Services	\$	2.56	\$	1.83	

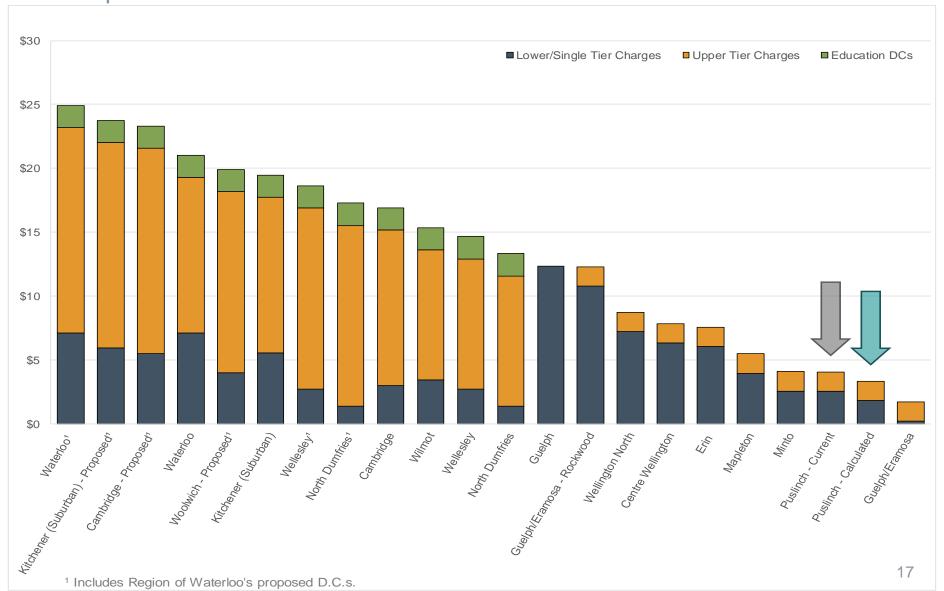
#### D.C. Comparison

#### Per Residential Single-Detached Dwelling Unit



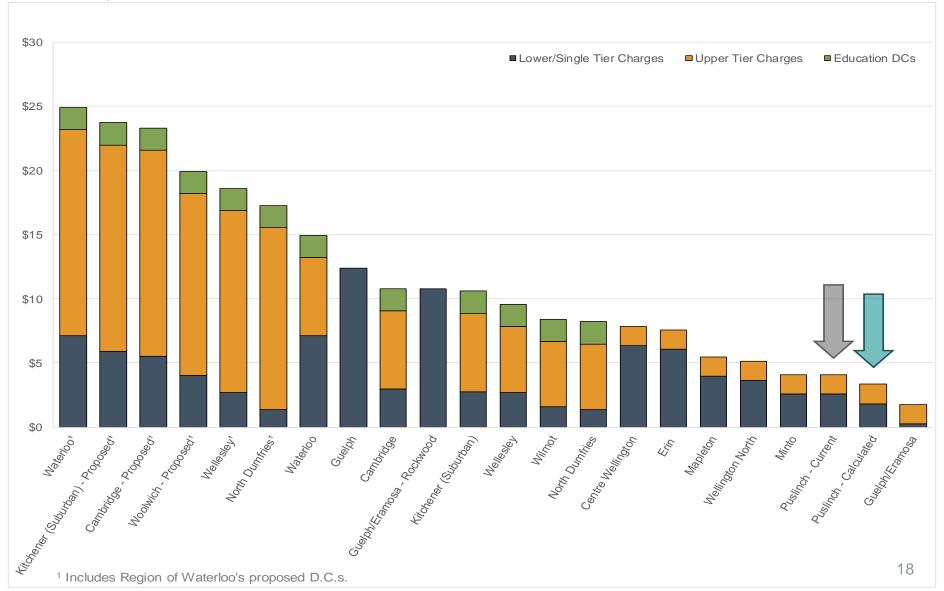
#### D.C. Comparison

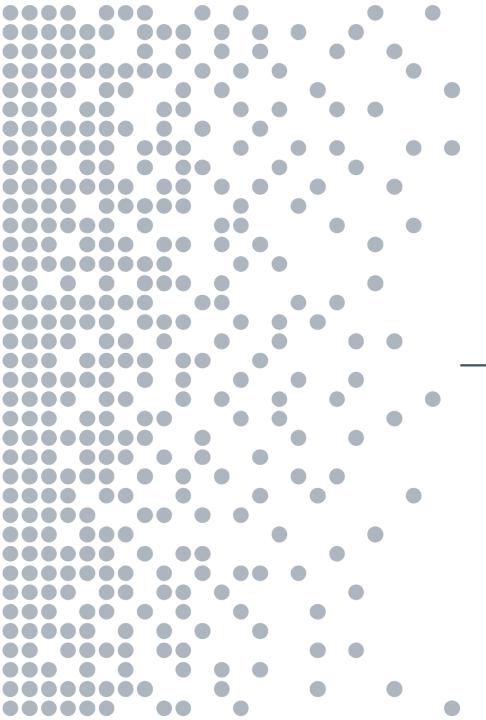
#### Per sq.ft. Commercial Gross Floor Area



#### D.C. Comparison

#### Per sq.ft. Industrial Gross Floor Area





# Development Charge By-Law Policies

#### Timing of Collection



- D.C.s can be calculated and payable at the time of building permit issuance or at subdivision registration for hard services
  - Municipality may enter into agreement for the D.C. to paid before or after it would otherwise be payable
- A municipality is not required to issue a building permit for development to which a D.C. applies unless the charge has been paid
- If a D.C. or any part of it remains unpaid after it is payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes
- D.C.s are payable on the date the first building permit is issued

#### D.C. Exemptions



- The Act provides for some mandatory exemptions but also allows municipalities the ability to provide it's own exemptions
- Exemptions set out certain classes of development that will not be required to pay D.C.s. These exemptions may be determined by:
  - Use (e.g. places of worship, farm buildings)
  - Geographic area
  - Development type
  - Service exemption
- The Act is specific in identifying that the revenue forgone may not be made up by increasing the D.C.s for other classes of development
- In effect, it is a loss of revenue to the municipality which will have to be funded via taxes, rates, reserves or other financial resources

#### Statutory D.C. Exemptions



- The D.C.A. provides statutory exemptions for:
  - Industrial building expansions (may expand by 50% with no D.C.)
  - Residential intensification:
    - May add up to two apartments for a single detached home as long as size of home doesn't double
    - Add one additional unit in medium & high density buildings
  - Upper/Lower Tier Governments and School Boards

### Current Non-Statutory D.C. Exemptions



- A temporary use in accordance with section 39 of the Planning Act,
- Accessory use;
- A home occupation;
- Non-residential farm buildings used for agricultural purposed; and
- Institutional use.

#### Redevelopment Credits



- Redevelopment credits on conversions or demolitions of existing buildings or structures are generally granted to recognize what is being replaced on site (not specific in the Act but provided by case law)
- Township currently provides redevelopment credits for redevelopment within 12 months of issuance of the demolition permit.
- Recommend redevelopment credits be provided where demolition/conversion occurs within 5 years of demolition permit issuance
- Credits are not granted for demolitions/conversions that would be exempt under the current by-law

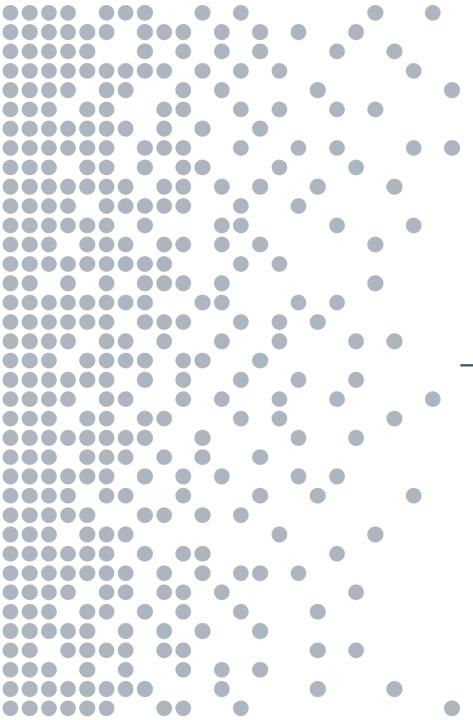
#### D.C. Indexing

- D.C.A. allows for adjustment of charges to reflect underlying cost increases and reduces municipal cash flow impact between statutory by-law reviews
- Indexing can be:
  - Mandatory implemented annually commencing from the date the by-law comes into force, in accordance with the Statistics Canada Quarterly, Construction Price Statistics
  - Discretionary index presented to Council annually for direction
- Current by-law provision for mandatory annual indexing on January 1<sup>st</sup>

#### **Transition Policies**



- Where no D.C.s currently exist or calculated increases are more significant, Council may wish to consider a transition policy
  - Phasing-in the implementation of the charge over multiple years (e.g. equal instalments over the 5-year by-law term)
  - Transition period of 6 months between notification of increase (i.e. stakeholder consultation) and implementation of increased charge
- D.C. revenue forgone during transition periods (and due to other exemptions) must be funded from non-D.C. sources (e.g. taxes, user fees, reserves or other financial resources)



## Next Steps

#### **Next Steps**



- Receive Council input on the study findings
- Release of D.C. Background Study (May 17, 2019, 60 days prior to bylaw passage)
- Provide notice of Public Meeting in Newspaper (May 29, 2019)
- Undertake Public Meeting of Council (June 19, 2019)
- Council to consider by-law for adoption (July 17, 2019)





# 2019 Development Charges Background Study

Township of Puslinch

Technical Appendix/Draft Findings - For Discussion Purposes Only

#### SCHEDULE OF DEVELOPMENT CHARGES

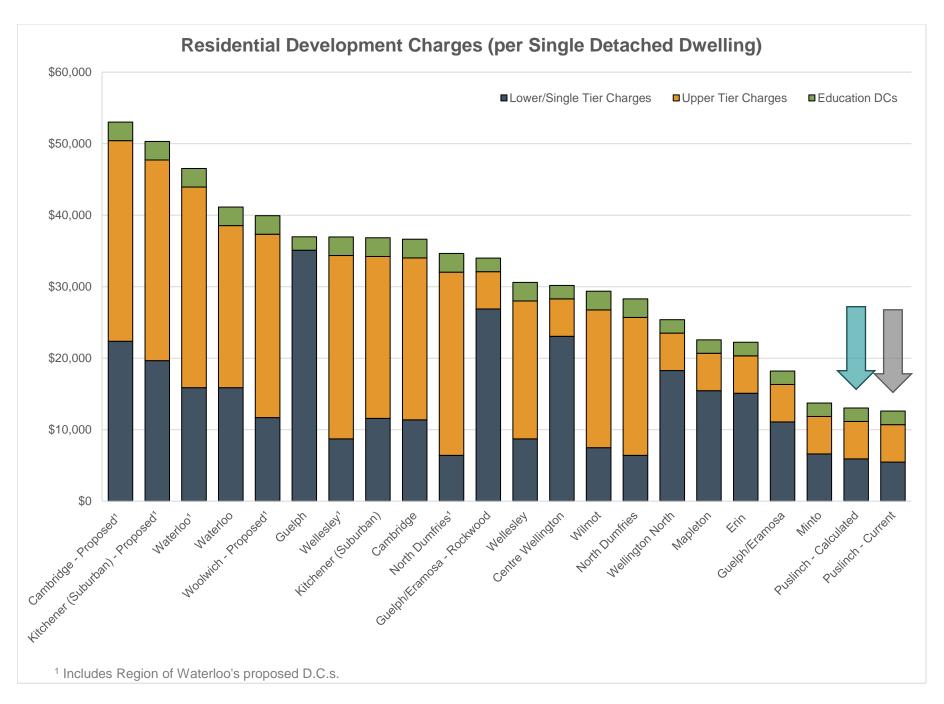
			RESIDENTIAL			NON-RESIDENTIAL
Service	Single and Semi- Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	Special Care/Special Dwelling Units	(per sq.ft. of Gross Floor Area)
Municipal Wide Services:						
Roads and Related	3,542	1,926	1,637	2,650	1,313	1.21
Fire Protection Services	1,378	749	637	1,031	511	0.47
Parks and Recreation Services	667	363	308	499	247	0.04
Administration - Studies	329	179	152	246	122	0.11
Total Municipal Wide Services	5,916	3,217	2,734	4,426	2,193	1.83

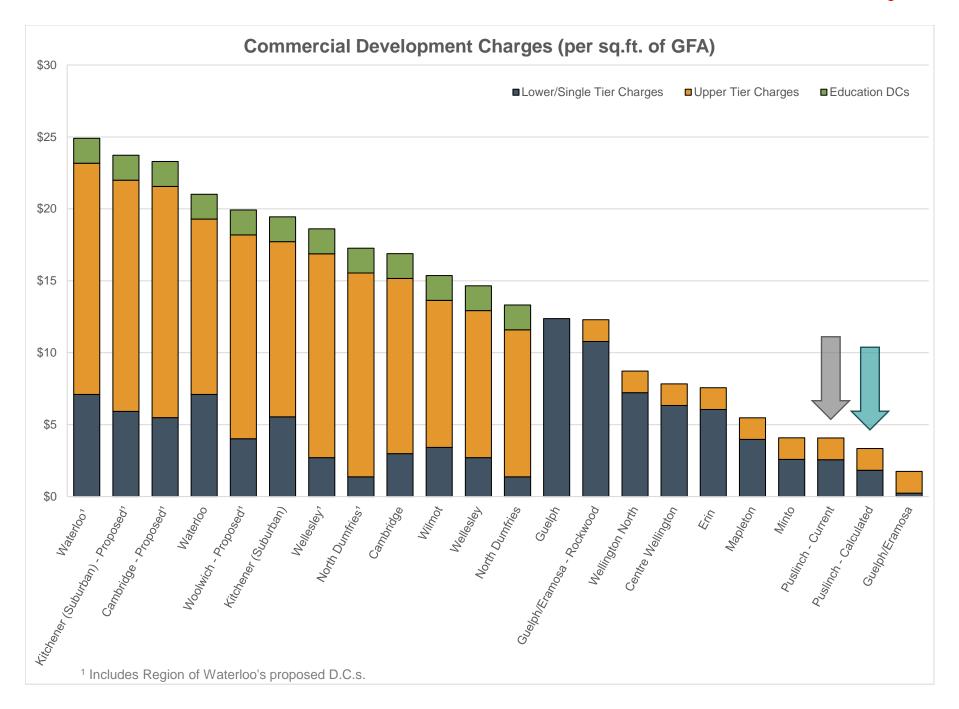
**Residential (Single Detached) Comparison** 

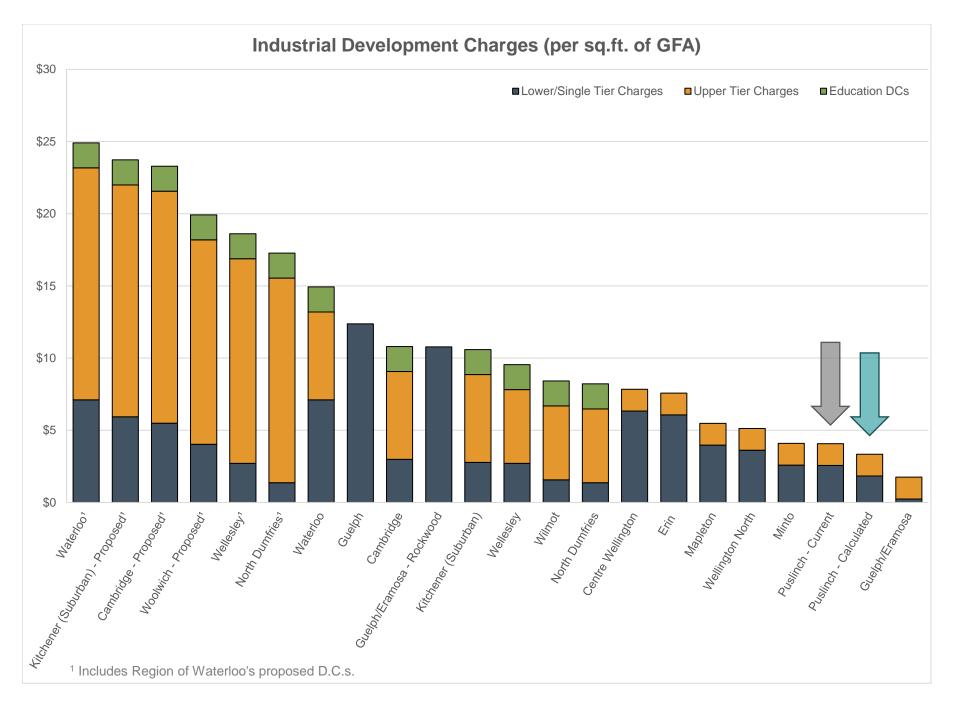
Service	Current	Calculated
Municipal Wide Services:		
Roads and Related	3,184	3,542
Fire Protection Services	1,661	1,378
Parks and Recreation Services	361	667
Administration - Studies	277	329
Total Municipal Wide Services	5,483	5,916

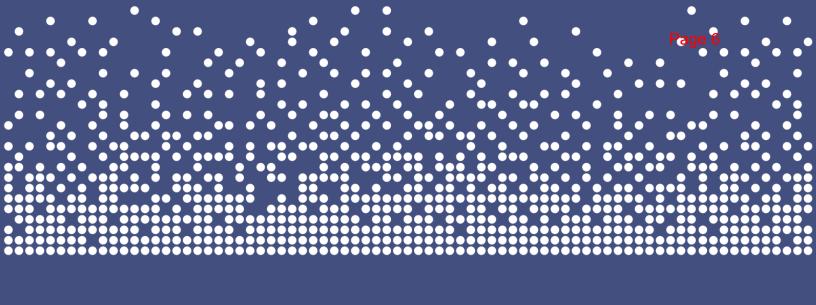
Non-Residential (per sq.ft.) Comparison

Service	Current	Calculated
Municipal Wide Services:		
Roads and Related	1.83	1.21
Fire Protection Services	0.53	0.47
Parks and Recreation Services	0.04	0.04
Administration - Studies	0.16	0.11
Total Municipal Wide Services	2.56	1.83









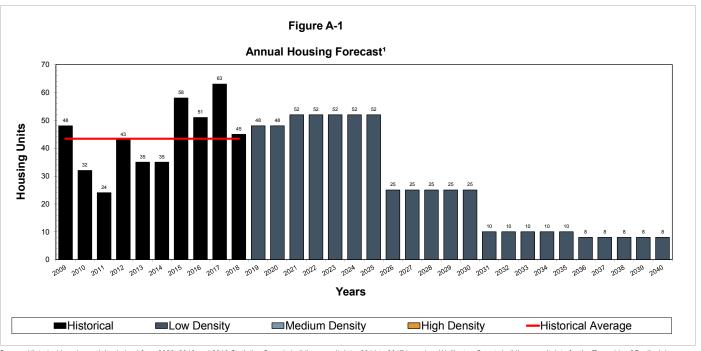
## **Growth Forecast**

## Schedule 1 Township of Puslinch Residential Growth Forecast Summary

			Exclud	ding Census Unde	ercount	Housing Units					Person Per
	Year	Population (Including Census Undercount) <sup>1</sup>	Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings <sup>2</sup>	Apartments <sup>3</sup>	Other	Total Households	Unit (P.P.U.): Total Population/ Total Households
-	Mid 2006	6,960	6,689	124	6,565	2,270	30	20	20	2,340	2.859
Historical	Mid 2011	7,320	7,029	99	6,930	2,158	15	31	330	2,534	2.774
Ī	Mid 2016	7,640	7,336	46	7,290	2,555	35	20	85	2,695	2.722
	Mid 2019	8,080	7,763	49	7,714	2,714	35	20	85	2,854	2.720
cast	Mid 2029	9,335	8,965	56	8,909	3,145	35	20	85	3,285	2.729
Forecast	Mid 2039	9,615	9,238	58	9,180	3,269	35	20	85	3,409	2.710
	Mid 2041	9,655	9,272	58	9,214	3,285	35	20	85	3,425	2.707
	Mid 2006 - Mid 2011	360	340	-25	365	-112	-15	11	310	194	
	Mid 2011 - Mid 2016	320	307	-53	360	397	20	-11	-245	161	
Incremental	Mid 2016 - Mid 2019	440	427	3	424	159	0	0	0	159	
Incren	Mid 2019 - Mid 2029	1,255	1,202	7	1,195	431	0	0	0	431	
	Mid 2019 - Mid 2039	1,535	1,475	9	1,466	555	0	0	0	555	
	Mid 2019 - Mid 2041	1,575	1,509	9	1,500	571	0	0	0	571	

Derived from Wellington County Official Plan (Updated June 1, 2018) forecast for the Township of Puslinch by Watson & Associates Economists Ltd., 2019. Housing forecast has been updated to reflect recent P.P.U. trends.

<sup>&</sup>lt;sup>2</sup> Includes townhouses and apartments in duplexes. <sup>3</sup> Includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Source: Historical housing activity derived from 2009, 2010 and 2018 Statistics Canada building permit data, 2011 to 2017 based on Wellington County building permit data for the Township of Puslinch by Watson & Associates Economists Ltd., 2019.

<sup>&</sup>lt;sup>1</sup> Census undercount estimated at approximately 4.1%. Note: Population including the undercount has been rounded.

<sup>1.</sup> Growth forecast represents calendar year.

## Schedule 2 Township of Puslinch Estimate of the Anticipated Amount, Type and Location of Residential Development for Which Development Charges can be Imposed

DRAFT

Development Location	Timing	Single & Semi- Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total Residential Units	Gross Population In New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Aberfoyle	2019 - 2029	7	0	0	7	21	(8)	12	0	12
Aberioyie	2019 - 2039	10	0	0	10	30	(18)	12	0	12
Morriston	2019 - 2029	35	0	0	35	104	(4)	100	0	100
MONISION	2019 - 2039	46	0	0	46	136	(9)	127	0	128
Domest	2019 - 2029	389	0	0	389	1,154	(71)	1,083	7	1,090
Rural	2019 - 2039	499	0	0	499	1,481	(154)	1,327	9	1,336
Township of Puslinch	2019 - 2029	431	0	0	431	1,279	(84)	1,195	7	1,202
Township of Pusiinch	2019 - 2039	555	0	0	555	1,647	(181)	1,466	9	1,475

Derived from Wellington County Official Plan (Updated June 1, 2018) forecast for the Township of Puslinch by Watson & Associates Economists Ltd., 2019. Housing forecast has been updated to reflect recent P.P.U. trends.

<sup>1.</sup> Includes townhouses and apartments in duplexes.

<sup>2.</sup> Includes accessory apartments, bachelor, 1-bedroom and 2-bedroom+ apartments.

## Schedule 3 Township of Puslinch Current Year Growth Forecast Mid 2016 to Mid 2019

			Population
Mid 2016 Population			7,336
Occupants of New Housing Units, Mid 2016 to Mid 2019	Units (2) multiplied by P.P.U. (3) gross population increase	159 3.485 554	554
Occupants of New Equivalent Institutional Units, Mid 2016 to Mid 2019	Units multiplied by P.P.U. (3) gross population increase	3 1.100 3	3
Decline in Housing Unit Occupancy, Mid 2016 to Mid 2019	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	2,695 -0.048 -130	
Population Estimate to Mid 201	7,763		
Net Population Increase, Mid 20	016 to Mid 2019		427

<sup>(1) 2016</sup> population based on Statistics Canada Census unadjusted for Census undercount.

<sup>(3)</sup> Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit¹ (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
Singles & Semi Detached	3.485	100%	3.485
Multiples (6)	2.000	0%	0.000
Apartments (7)	1.477	0%	0.000
Total		100%	3.485

<sup>&</sup>lt;sup>¹</sup>Based on 2016 Census custom database

- (6) Includes townhouses and apartments in duplexes.
- (7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

<sup>(2)</sup> Estimated residential units constructed, Mid-2016 to the beginning of the growth period assuming a six-month lag between construction and occupancy.

<sup>&</sup>lt;sup>2</sup> Based on Building permit/completion activity

<sup>(4) 2016</sup> households taken from Statistics Canada Census.

<sup>(5)</sup> Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

## Schedule 4a Township of Puslinch Ten Year Growth Forecast Mid 2019 to Mid 2029

			Population
Mid 2019 Population			7,763
Occupants of New Housing Units, Mid 2019 to Mid 2029	Units (2) multiplied by P.P.U. (3) gross population increase	431 2.967 1,279	1,279
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2029	Units multiplied by P.P.U. (3) gross population increase	6 1.100 7	7
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2029	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	2,854 -0.029 -84	-84
Population Estimate to Mid 202	8,965		
Net Population Increase, Mid 20		1,202	

<sup>(1)</sup> Mid 2019 Population based on:

2016 Population (7,336) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period  $(159 \times 3.485 = 554)$  +  $(3 \times 1.100 = 3)$  +  $(2,695 \times -0.048 = -130)$  = 7,763

<sup>(3)</sup> Average number of persons per unit (p.p.u.) is assumed to be:

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
Singles & Semi Detached	2.967	100%	2.967
Multiples (6)	2.220	0%	0.000
Apartments (7)	1.537	0%	0.000
one bedroom or less	1.371		
two bedrooms or more	1.613		
Total		100%	2.967

Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

<sup>(2)</sup> Based upon forecast building permits/completions assuming a lag between construction and occupancy.

 $<sup>^{\</sup>rm 2}$  Forecast unit mix based upon historical trends and housing units in the development process.

<sup>(4)</sup> Mid 2019 households based upon 2,695 (2016 Census) + 159 (Mid 2016 to Mid 2019 unit estimate) = 2,854

<sup>(5)</sup> Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

 $<sup>\</sup>begin{tabular}{ll} (6) Includes townhouses and apartments in duplexes. \end{tabular}$ 

<sup>(7)</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

## Schedule 4b Township of Puslinch Twenty Year Growth Forecast Mid 2019 to Mid 2039

			Population		
Mid 2019 Population			7,763		
Occupants of New Housing Units, Mid 2019 to Mid 2039	Units (2) multiplied by P.P.U. (3) gross population increase	555 2.967 1,647	1,647		
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2039	Units multiplied by P.P.U. (3) gross population increase	8 1.100 9	9		
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2039	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	2,854 -0.063 -181			
Population Estimate to Mid 203	9,238				
Net Population Increase, Mid 20	Net Population Increase, Mid 2019 to Mid 2039				

<sup>(1)</sup> Mid 2019 Population based on:

2016 Population (7,336) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period  $(159 \times 3.485 = 554)$  +  $(3 \times 1.100 = 3)$  +  $(2,695 \times -0.048 = -130)$  = 7,763

- (2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.
- (3) Average number of persons per unit (p.p.u.) is assumed to be:

Structural Type	Persons Per Unit¹ (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
Singles & Semi Detached	2.967	100%	2.967
Multiples (6)	2.220	0%	0.000
Apartments (7)	1.537	0%	0.000
one bedroom or less	1.371		
two bedrooms or more	1.613		
Total		100%	2.967

Persons per unit based on Statistics Canada Custom 2016 Census database.

- (4) Mid 2019 households based upon 2,695 (2016 Census) + 159 (Mid 2016 to Mid 2019 unit estimate) = 2,854
- (5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.
- (6) Includes townhouses and apartments in duplexes.
- (7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

 $<sup>^{\</sup>rm 2}$  Forecast unit mix based upon historical trends and housing units in the development process.

## Schedule 5 Township of Puslinch 2041 Growth Forecast Mid 2019 to Mid 2041

			Population
Mid 2019 Population			7,763
Occupants of New Housing Units, Mid 2019 to Mid 2041	Units (2) multiplied by P.P.U. (3) gross population increase	571 2.967 1,694	1,694
Occupants of New Equivalent Institutional Units, Mid 2019 to Mid 2041	Units multiplied by P.P.U. (3) gross population increase	8 1.100 9	9
Decline in Housing Unit Occupancy, Mid 2019 to Mid 2041	Units (4) multiplied by P.P.U. decline rate (5) total decline in population	2,854 -0.068 -194	
Population Estimate to Mid 204	9,272		
Net Population Increase, Mid 20	019 to Mid 2041		1,509

<sup>(1)</sup> Mid 2019 Population based on:

2016 Population (7,336) + Mid 2016 to Mid 2019 estimated housing units to beginning of forecast period  $(159 \times 3.485 = 554) + (3 \times 1.100 = 3) + (2,695 \times -0.048 = -130) = 7,763$ 

- (2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.
- (3) Average number of persons per unit (p.p.u.) is assumed to be:

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
Singles & Semi Detached	2.967	100%	2.967
Multiples (6)	2.220	0%	0.000
Apartments (7)	1.537	0%	0.000
one bedroom or less	1.371		
two bedrooms or more	1.613		
Total		100%	2.967

Persons per unit based on Statistics Canada Custom 2016 Census database.

- (4) Mid 2019 households based upon 2,695 (2016 Census) + 159 (Mid 2016 to Mid 2019 unit estimate) = 2,854
- (5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.
- (6) Includes townhouses and apartments in duplexes.
- (7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

<sup>&</sup>lt;sup>2</sup> Forecast unit mix based upon historical trends and housing units in the development process.

Schedule 6

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## Township of Puslinch Historical Residential Building Permits Years 2009 to 2018

Year	Residential Building Permits						
rear	Singles & Semi Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total			
2009		0	0	48			
2010	32	0	0	32			
2011	24	0	0	24			
2012		0	0	43			
2013	35	0	0	35			
Average (2009 - 2013)	36	0	0	36			
% Breakdown	100.0%	0.0%	0.0%	100.0%			
2014	35	0	0	35			
2015	58	0	0	58			
2016	51	0	0	51			
2017	63	0	0	63			
2018	45	0	0	45			
Sub-total	252	0	0	252			
Average (2014 - 2018)	50	0	0	50			
% Breakdown	100.0%	0.0%	0.0%	100.0%			
2009 - 2018							
Total	287	0	0	287			
Average	43	0	0	43			
% Breakdown	100.0%	0.0%	0.0%	100.0%			

Source: Historical housing activity based on 2013 to 2017 Wellington County building permit data for the Township of Puslinch, and 2009 to 2012, 2018 from Statistics Canada Publication 64-001XIB.

<sup>&</sup>lt;sup>1</sup> Includes townhouses and apartments in duplexes.

<sup>&</sup>lt;sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

## Schedule 7a Township of Puslinch Persons Per Unit By Age and Type of Dwelling (2016 Census)

Age of	Singles and Semi-Detached							
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	25 Year Average	25 Year Forecast <sup>1</sup>
1-5	-	-	-	2.750	-	3.485		
6-10	-	-	1.579	2.879	-	2.627		
11-15	-	-	1.619	2.629	4.077	2.586		
16-20	-	-	-	2.829	-	2.537		
20-25	-	-	-	2.818	-	3.086	2.864	2.967
25-35	-	-	-	2.833	3.769	2.979		
35+	-	-	2.000	2.744	3.200	2.673		
Total	-	1.929	1.827	2.767	4.013	2.750		

Age of	All Density Types										
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total					
1-5	-	-	-	2.810	-	3.211					
6-10	-	-	1.737	2.969	-	2.623					
11-15	-	-	1.565	2.706	4.308	2.554					
16-20	-	-	1.769	2.833	-	2.569					
20-25	-	-	-	2.783	-	2.850					
25-35	-	-	-	2.806	3.769	2.843					
35+	-	-	2.125	2.768	3.000	2.644					
Total	-	1.370	1.785	2.795	3.922	2.695					

<sup>&</sup>lt;sup>1</sup> PPU has been forecasted based on 2001 to 2016 historical trends.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.

## Schedule 7b Wellington County Persons Per Unit By Age and Type of Dwelling (2016 Census)

Age of			Multip					
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	25 Year Average	25 Year Forecast <sup>3</sup>
1-5	-	-	1.722	2.000	-	2.000		
6-10	-	-	1.667	2.600	-	2.156		
11-15	-	-	1.632	2.583	-	2.064		
16-20	-	-	-	2.889	-	2.632		
20-25	-	-	-	2.533	-	2.364	2.243	2.220
25-35	-	-	-	2.667	-	2.273		
35+	-	1.071	2.227	2.565	-	2.230		
Total		1.500	1.811	2.575	-	2.228		

Age of			Apartm					
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	25 Year Average	25 Year Forecast <sup>3</sup>
1-5	-	1.438	1.386	-	-	1.477		
6-10	-	-	1.750	-	-	1.650		
11-15	-	-	1.412	-	-	1.385		
16-20	-	-	1.692	-	-	1.600		
20-25	-	-	1.609	-	-	1.471	1.516	1.537
25-35	-	1.162	1.735	-	-	1.542		
35+	-	1.126	1.597	2.320	-	1.494		
Total	0.900	1.191	1.590	2.225	-	1.503		

Age of	All Density Types										
Dwelling	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total					
1-5	-	1.435	1.611	3.069	4.681	2.734					
6-10	-	1.261	1.765	3.015	4.643	2.822					
11-15	1	1.316	1.726	2.953	4.322	2.781					
16-20	-	1.542	1.656	2.995	4.321	2.838					
20-25	-	1.545	1.618	2.935	4.478	2.800					
25-35	-	1.317	1.816	2.819	3.875	2.695					
35+	-	1.267	1.828	2.776	4.077	2.618					
Total		1.320	1.768	2.852	4.198	2.690					

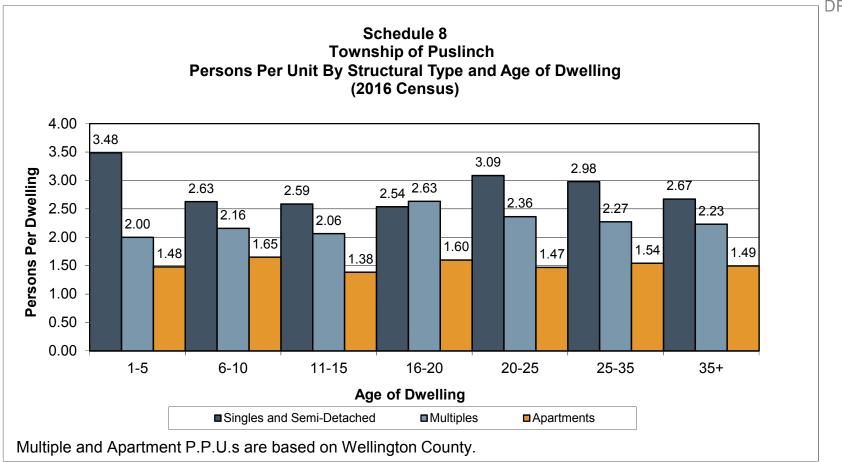
 $<sup>^{\</sup>rm 1}$  Includes townhouses and apartments in duplexes.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.

<sup>&</sup>lt;sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

<sup>&</sup>lt;sup>3</sup> PPU has been forecasted based on 2001 to 2016 historical trends.



### Schedule 9a Township of Puslinch Employment Forcecast, 2019 to 2041

**Activity Rate** Total Total Employmen Period Population Work at Home Commercial/ Population Related Work at Primary Total N.F.P.O.W.1 Primary Total N.F.P.O.W. Home NFPOW N.F.P.O.W. Mid 2006 6.689 0.017 0.073 0.335 0.093 0.016 0.534 0.055 0.589 115 485 2 240 620 110 3.570 370 3.940 Mid 2011 7,029 0.014 0.057 0.265 0.098 0.018 0.452 0.053 0.505 100 400 1,863 688 130 3,180 370 3,550 Mid 2016 7,336 0.015 0.070 0.342 0.189 0.028 0.645 0.120 0.764 110 515 2,513 1,388 205 4,730 878 5,608 Mid 2029 8,965 0.012 0.074 0.318 0.175 0.028 0.608 0.121 0.729 110 665 2,855 1,570 251 5,451 1,082 6,533 Mid 2039 9,238 0.012 0.081 0.334 0.182 0.028 0.638 0.122 0.760 110 745 3,090 1,684 262 5,891 1,126 7,017 Mid 2041 9,272 0.012 0.082 0.342 0.187 0.031 0.655 0.123 0.778 110 762 3,176 1,735 289 6,072 1,138 7,210 Incremental Change Mid 2006 - Mid 2011 340 -0.003 -0.016 -0.070 0.005 0.002 -0.081 -0.003 -0.084 -15 -85 -378 68 20 -390 0 -390 Mid 2011 - Mid 2016 0.0008 0.0133 0.0775 0.0913 0.0094 0.1924 0.0670 0.2594 10 115 650 700 75 1.550 508 2.058 307 Mid 2016 - Mid 2019 427 -0.0008 0.0010 0.0000 0.0000 0.0000 0.0002 0.0000 0.0002 0 38 147 81 12 277 51 328 Mid 2019 - Mid 2029 -0.0019 0.0030 -0.0240 -0.0140 0.0000 -0.0369 0.0010 -0.0359 0 112 196 102 34 444 153 597 Mid 2019 - Mid 2039 1.475 -0.0023 0.0094 -0.0080 -0.0068 -0.0072 0.0022 -0.0050 0 192 216 45 884 1.081 0.0005 431 197 Mid 2019 - Mid 2041 -0.0023 0.0000 -0.0020 0.0129 209 267 72 1,065 1,274 1,509 0.0110 0.0032 0.0099 0.0030 0 517 209 Annual Average -0.00312 -0.01398 -0.01626 -0.01680 Mid 2006 - Mid 2011 68 -0.00059 0.00102 0.00041 -0.00054 -3 -17 -76 14 4 -78 0 -78 Mid 2011 - Mid 2016 61 0.0002 0.0027 0.0155 0.0183 0.0019 0.0385 0.0134 0.0519 2 23 130 140 15 310 102 412 0 Mid 2016 - Mid 2019 142 -0.0003 0.0003 0.0000 0.0000 0.0000 0.0001 0.0000 0.0001 13 49 27 4 92 17 109 120 -0.00019 0.00030 -0.00240 -0.00140 0.00000 -0.00369 0.00010 -0.00359 Ω 10 3 15 60 Mid 2019 - Mid 2029 11 20 44 -0.00025 Mid 2019 - Mid 2039 74 -0.00011 0.00047 -0.00040 -0.00034 0.00002 -0.00036 0.00011 0 10 22 11 2 44 10 54 Mid 2019 - Mid 2041 69 -0.00010 0.00050 0.00000 -0.00009 0.00015 0.00045 0.00014 0.00059 0 10 24 12 3 48 10 58

Source: Watson & Associates Economists Ltd., 2019.

Note: Employment forecast has been adjusted from the Wellington County Official Plan, June 1, 2018, to reflect the 2016 Census.

## DRAFT

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Employment
Total (Excluding Work at Home)
3,085
2,780
4,215
4,454
4,786
5,146
5,310
-305
1,435
239
332
692
856
-61
287
80
33
35
39

## Schedule 9b Township of Puslinch Employment & Gross Floor Area (G.F.A) Forecast, 2019 to 2039

				Employment			Gros	s Floor Area in S	quare Feet (Estin	nated)¹
Period	Population	Primary	Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	6,689	115	2,240	620	110	3,085				
Mid 2011	7,029	100	1,863	688	130	2,780				
Mid 2016	7,336	110	2,513	1,388	205	4,215				
Mid 2019	7,763	110	2,659	1,468	217	4,454				
Mid 2029	8,965	110	2,855	1,570	251	4,786				
Mid 2039	9,238	110	3,090	1,684	262	5,146				
				Incren	nental Change					
Mid 2006 - Mid 2011	340	-15	-378	68	20	-305				
Mid 2011 - Mid 2016	307	10	650	700	75	1,435				
Mid 2016 - Mid 2019	427	0	147	81	12	239	205,100	44,300	8,400	257,800
Mid 2019 - Mid 2029	1,202	0	196	102	34	332	274,400	56,100	23,800	354,300
Mid 2019 - Mid 2039	1,475	0	431	216	45	692	603,400	118,800	31,500	753,700
				Ann	ual Average					
Mid 2006 - Mid 2011	68	-3	-76	14	4	-61				
Mid 2011 - Mid 2016	61	2	130	140	15	287				
Mid 2016 - Mid 2019	142	0	49	27	4	80	68,367	14,767	2,800	85,933
Mid 2019 - Mid 2029	120	0	20	10	3	33	27,440	5,610	2,380	35,430
Mid 2019 - Mid 2039	74	0	22	11	2	35	30,170	5,940	1,575	37,685

Source: Watson & Associates Economists Ltd., 2019.

Industrial1,400Commercial/ Population Related550Institutional700

<sup>1</sup> Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and lan

<sup>&</sup>lt;sup>2</sup> Square Foot Per Employee Assumptions

Schedule 9c

## Estimate of the Anticipated Amount, Type and Location of Non-Residential Development for Which Development Charges can be Imposed

Development Location	Timing	Industrial G.F.A. S.F. <sup>1</sup>	Commercial G.F.A. S.F. <sup>1</sup>	Institutional G.F.A. S.F. <sup>1</sup>	Total Non- Residential G.F.A. S.F.	Employment Increase <sup>2</sup>
Aberfoyle	2019 - 2029	-	4,400	700	5,100	9
Abelloyle	2019 - 2039	-	7,700	2,100	9,800	17
Morriston	2019 - 2029	-	2,800	700	3,500	6
WOTTSLOTT	2019 - 2039	-	5,500	2,800	8,300	14
Rural	2019 - 2029	274,400	49,000	22,400	345,800	317
Nuldi	2019 - 2039	603,400	105,600	26,600	735,600	661
Township of Puslinch	2019 - 2029	274,400	56,100	23,800	354,300	332
Township of Fusinich	2019 - 2039	603,400	118,800	31,500	753,700	692

Source: Watson & Associates Economists Ltd., 2019.

Industrial 1,400 Commercial 550 Institutional 700

<sup>&</sup>lt;sup>1</sup> Employment Increase does not include No Fixed Place of Work.

<sup>&</sup>lt;sup>2</sup> Square feet per employee assumptions:

### Schedule 10 Township of Puslinch Non-Residential Construction Value Years 2007 to 2016 (000's 2018 \$)

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YEAR			Indu	ustrial			Comm	ercial			Insti	tutional			1	「otal	
		New		Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve		Total
	2007	1,893	343	407	2,643	489	0	0	489	0	0	0	0	2,382			3,132
	2008	2,247	172	0	2,419	15,269	182	0	15,452	0	0	0	0	17,516			17,871
	2009	8,090	286	1,409	9,785	1,417	243	396	2,055	0	0	0	0	9,507	529		11,840
	2010	2,510	67	1,282	3,859	1,476	456	0	1,932	1,949	0	0	1,949	5,935	523		7,740
	2012	398	185	0	583	43,643	2,763	632	47,038	0	27	0	27	44,041	2,975		47,648
	2013	13,645	320	0	13,965	1,499	1,340	0	2,839	0	0	0	0	15,145	1,660		16,805
	2014	191	5,378	0	5,569	0	94	0	94	0	2	0	2	191	5,474		5,665
	2015	282	1,602	0	1,884	945	247	0	1,192	0	4	0	4	1,227	1,853		3,080
	2016	574	1,097	0	1,672	445	272	0	717	0	114	0	114	1,020	1,483		2,503
Subtotal		30,242	9,837	4,751	44,830	67,257	5,637	1,028	73,921	1,949	941	0	2,890	99,447	16,415		121,642
Percent of Total		67%	22%	11%	100%	91%	8%	1%	100%	67%	33%	0%	100%	82%	13%	5%	100%
Average		3,024	984	1,188	4,483	7,473	626	514	7,392	1,949	188	#DIV/0!	482	9,945	1,642	1,156	12,164
2007 - 2011																	
Period Total					21,157				22,041				2,743				45,942
2007 - 2011 Average					4,231				4,408				549				9,188
% Breakdown					46.1%				48.0%				6.0%				100.0%
2012 - 2016																	
Period Total					23,673				51,880				147				75,700
2012 - 2016 Average					4,735				10,376				29				15,140
% Breakdown					31.3%				68.5%				0.2%				100.0%
2007 - 2016																	
Period Total					44,830				73,921				2,890				121,642
2007 - 2016 Average					4,483				7,392				289				12,164
% Breakdown					36.9%				60.8%				2.4%				100.0%

Source: Statistics Canada Publication, 64-001-XIB

Note: Inflated to year-end 2017 (January, 2018) dollars using Reed Construction Cost Index

## Schedule 11 **Township of Puslinch**

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## Employment to Population Ratio by Major Employment Sector, 2006 to 2016

NAIGO	Employment & Gross Floor Area (G.F.A)		Year			Change		0
NAICS	Forecast, 2016 To Buildout	2006	2011	2016	96-01	06-11	11-16	Comments
	Employment by industry							
	Primary Industry Employment							
11	Agriculture, forestry, fishing and hunting	130	150	135		20	-15	Categories which relate to local land-based resources
21	Mining and oil and gas extraction	80	15	40		-65	25	
	Sub-total Sub-total	210	165	175	0	-45	10	
	Industrial and Other Employment							
22	Utilities	0	0	10		0	10	
23	Construction	315	380	460		65	80	
31-33	Manufacturing	1,015	835	1,115		-180	280	Categories which relate primarily to industrial land
41	Wholesale trade	385	290	305		-95	15	supply and demand
48-49	Transportation and warehousing	600	405	675		-195	270	
56	Administrative and support	50	58	78		8	20	
	Sub-total	2,365	1,968	2,643	-50	-398	675	
	Population Related Employment							
44-45	Retail trade	120	110	290		-10	180	
51	Information and cultural industries	20	15	0		-5	-15	
52	Finance and insurance	40	40	50		0	10	
53	Real estate and rental and leasing	15	55	55		40	0	
54	Professional, scientific and technical services	180	165	260		-15	95	Categories which relate primarily to population growth
55	Management of companies and enterprises	0	0	20		0	20	within the municipality
56	Administrative and support	50	58	78		8	20	
71	Arts, entertainment and recreation	55	85	145		30	60	
72	Accommodation and food services	160	205	525		45	320	
81	Other services (except public administration)	190	165	230		-25	65	
	Sub-total	830	898	1,653	-50	68	755	
	Institutional							
61	Educational services	65	85	95		20	10	
62	Health care and social assistance	90	55	105		-35	50	
91	Public administration	10	10	60		0	50	
	Sub-total	165	150	260	0	-15	110	
	Total Employment	3,570	3,180	4,730	-100	-390	1,550	
	Population	6,689	7,029	7,336	804	340	307	
	Employment to Population Ratio							
	Industrial and Other Employment	0.35	0.28	0.36	-0.06	-0.07	0.08	
	Population Related Employment	0.12	0.13	0.23	-0.03	0.00	0.10	
	Institutional Employment	0.02	0.02	0.04	0.00	0.00	0.01	
	Primary Industry Employment	0.03	0.02	0.02	0.00	-0.01	0.00	
	Total	0.53	0.45	0.64	-0.09	-0.08	0.19	

Source: Statistics Canada Employment by Place of Work
Note: 2006-2016 employment figures are classified by North American Industry Classification System (NAICS) Code



# Roads and Related Services

Service: Roads

Unit Measure: km of roadways

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/km)
Hard Top Roads - Single Lift	Various	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	\$318,000
Hard Top Roads - Double Lift	Various	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	\$461,000
Gravel Roads	Various	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	\$177,500
Surface Treated Roads	Various	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	\$56,000
Less Local Roads:												
Currie Drive	180	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	\$318,000
Ochs Drive	181	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	\$318,000
Laing Court	210	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$318,000
Winer Court	209	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$461,000
Telfer Glen Street	190	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	\$461,000
Settler's Court	191	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$461,000
Bridle Path	204_Surface, 185 Surface	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	\$461,000
Carriage Lane	201_Surface	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$461,000
Daymond Drive	203_Surface	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$461,000
Cassin Court	202_Surface	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$461,000
Fox Run Drive	205, 206, 207, 196	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	\$461,000
Deer View Ridge	195	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$461,000
Boreham Drive	208_Surface	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$461,000
Total		183	183	183	183	183	183	183	183	183	183	
	-	-						-		-		
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	
Per Capita Standard		0.0264	0.0262	0.0261	0.0260	0.0258	0.0256	0.0254	0.0250	0.0246	0.0241	]

10 Year Average	2009-2018
Quantity Standard	0.0255
Quality Standard	\$278,020
Service Standard	\$7,090

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$7,090
Eligible Amount	\$8,471,953

Service: Bridges, Culverts & Structures

Unit Measure: Number of Bridges, Culverts & Structures

		magee, earre										
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Bridges												
Cook's Mill Bridge	1001	1	1	1	1	1	1	1	1	1	1	\$593,190
Little's Bridge	1003	1	1	1	1	1	1	1	1	1	1	\$219,765
Leslie Road West	1005	1	1	1	1	1	1	1	1	1	1	\$445,900
Concession 1	1006	1	1	1	1	1	1	1	1	1	1	\$783,510
French's Bridge	1007	1	1	1	1	1	1	1	1	1	1	\$309,140
Galt Creek Bridge	1008	1	1	1	1	1	1	1	1	1	1	\$745,875
Moyer's Bridge	1009	1	1	1	1	1	1	1	1	1	1	\$495,040
Stroy's Bridge	N/A	1	1	1	-	-	-	-	-	-	-	\$1,420,900
Culverts												
Culvert of Cook's Mill Race	2002	1	1	1	1	1	1	1	1	1	1	\$97,200
McFarlane's Culvert	2004	1	1	1	1	1	1	1	1	1	1	\$126,585
Victoria Road Culvert over Galt Creek	2006	1	1	1	1	1	1	1	1	1	1	\$225,630
Irish Creek Culvert on Townline Rd	2007	1	1	1	1	1	1	1	1	1	1	\$239,400
7th Concession Culvert (#2008)	2008	1	1	1	1	1	1	1	1	1	1	\$55,688
Gilmour Rd Culvert over Aberfoyle Creek	2009	1	1	1	1	1	1	1	1	1	1	\$138,600
Ellis Rd Culvert over Puslinch Lake Irish Creek	2010	1	1	1	1	1	1	1	1	1	1	\$283,500
Ellis Rd Culvert at Lot 10 Conc. 2	2011	1	1	1	1	1	1	1	1	1	1	\$131,670
Concession 2 Bridge/Culvert over Mill Creek	2012	1	1	1	1	1	1	1	1	1	1	\$560,700
Victoria Road Culvert North of Leslie	2013	1	1	1	1	1	1	1	1	1	1	\$177,165
Leslie Road Culvert West of Victoria	2014	1	1	1	1	1	1	1	1	1	1	\$171,450
Culvert of Flamborough T/L West of Victoria	2015	1	1	1	1	1	1	1	1	1	1	\$264,735
Flamborough T/L Bridge/Culvert East of Macpherson Ln	2016	1	1	1	1	1	1	1	1	1	1	\$219,240
Gore Rd Culvert	2017	1	1	1	1	1	1	1	1	1	1	\$84,546
Gore Rd Dual Culvert	2018	1	1	1	1	1	1	1	1	1	1	\$63,135
7th Concession Culvert (#2019)	2019	1	1	1	1	1	1	1	1	1	1	\$194,400
Total		24	24	24	23	23	23	23	23	23	23	
Population		6.928	6,999	7,029	7,036	7,112	7,159	7,206	7.336	7,443	7,591	1
i opaidion		0,020	0,000	1,020	7,000	7,112	7,100	1,200	1,000	1,770	7,001	4

Population	6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591
Per Capita Standard	0.0035	0.0034	0.0034	0.0033	0.0032	0.0032	0.0032	0.0031	0.0031	0.0030

10 Year Average	2009-2018
Quantity Standard	0.0032
Quality Standard	\$307,594
Service Standard	\$984

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$984
Eligible Amount	\$1,176,239

Service: Sidewalks
Unit Measure: km of roadways

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value
<b>Document</b>	1.0001110.	2000	2010									(\$/km)
Watson Road Sidewalk	300	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450	0.450	\$143,000
Arkell Road Sidewalk	301	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	\$143,000
Church Street Sidewalk	303	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	\$143,000
Victoria Street Sidewalk	307	0.177	0.177	0.177	0.177	0.177	0.177	0.177	0.177	0.177	0.177	\$143,000
Brock Road Sidewalk	304	0.917	0.917	0.917	0.917	0.917	0.917	0.917	0.917	0.917	0.917	\$143,000
Badenoch Road Sidewalk	305	0.411	0.411	0.411	0.411	0.411	0.411	0.411	0.411	0.411	0.411	\$143,000
Watson Road Sidewalk	306	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	\$143,000
Calfass Road Sidewalk	308	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	\$143,000
Queen Street Sidewalk	309	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.900	\$143,000
Main Street Sidewalk	310	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	\$143,000
Total		3.813	3.813	3.813	3.813	3.813	3.813	3.813	3.813	3.813	3.813	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	
Per Capita Standard		0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	

10 Year Average	2009-2018
Quantity Standard	0.0005
Quality Standard	\$152,000
Service Standard	\$76

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$76
Eligible Amount	\$90,820

Service: Traffic Signals & Streetlights
Unit Measure: No. of Traffic Signals

Offic Mododio.	110. Of Hamo	Olginalo										
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Cobrahead Streetlights	Various	184	184	184	184	184	184	184	184	184	184	\$515
Decorative - Acorn Post Top Streetlights	Various	11	11	11	11	11	11	11	11	11	11	\$1,780
Decorative - Top Hat	Various	1	1	1	1	1	1	1	1	1	1	\$1,100
Decorative - Victorian Lantern Post Top	Various	76	76	76	76	76	76	76	76	76	76	\$2,185
Sentinel	Various	3	3	3	3	3	3	3	3	3	3	\$1,013
Total		275	275	275	275	275	275	275	275	275	275	
10141		210	LIU	210								
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	
Per Capita Standard		0.0397	0.0393	0.0391	0.0391	0.0387	0.0384	0.0382	0.0375	0.0369	0.0362	

10 Year Average	2009-2018
Quantity Standard	0.0383
Quality Standard	\$1,031
Service Standard	\$40

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$40
Eligible Amount	\$47,203

Service: Depots and Domes
Unit Measure: ft² of building area

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Works Depot	95MC, 56MC, 46MC, 77MC, 59MC, 21MC, 1MC, 15002, 41MC	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	\$140
Roads Storage Building	92RSB, 95RSB, 7RSB, 24RSB, 15RSB, 81RSB, 86RSB	-	5,070	5,070	5,070	5,070	5,070	5,070	5,070	5,070	5,070	\$123
Total		7,800	12,870	12,870	12,870	12,870	12,870	12,870	12,870	12,870	12,870	
Population Per Capita Standard		6,928 1.1259	6,999 1.8388	7,029 1.8310	7,036 1.8291	7,112 1.8096	7,159 1.7977	7,206 1.7860	7,336 1.7543	7,443 1.7291	7,591 1.6954	

10 Year Average	2009-2018
Quantity Standard	1.7197
Quality Standard	\$134
Service Standard	\$230

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$230
Eligible Amount	\$274,838

Service: Roads and Related Vehicles
Unit Measure: No. of vehicles and equipment

Offic Wicasarc.	140. Of Vernoles	ana oquipmon										
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
2008 Backhoe #6	8001	1	1	1	1	1	1	1	1	1	1	\$125,000
1999 Grader #501	8002	1	1	1	1	1	1	1	1	1	1	\$350,000
2000 Grader #502	8003	1	1	1	1	1	1	1	1	1	1	\$350,000
1999 Dump/Plow #302	N/A	1	1	-	-	-	-	-	-	-	-	\$250,000
2002 Dump/Plow #301	N/A	1	1	1	-	-	-	-	-	-	-	\$250,000
2003 Dump/Plow #304	N/A	1	1	-	-	-	-	-	-	-	-	\$250,000
2006 Dump/Plow #303	N/A	1	1	1	1	1	1	-	-	-	1	\$225,000
2011 Dump/Plow #304	8013	-	-	1	1	1	1	1	1	1	1	\$250,000
2012 Dump/Plow #302	8014	-	-	1	1	1	1	1	1	1	1	\$250,000
2013 Dump/Plow (International) #301	8016	-	-	-	1	1	1	1	1	1	1	\$250,000
2007 Pickup #4	N/A	1	1	-	-	-	-	-	-	-	-	\$40,000
2002 Pickup #5	N/A	1	1	1	-	-	-	-	-	-	-	\$52,000
2008 One Tonne Dump/Plow #305	7003	1	1	1	1	1	1	1	1	1	1	\$100,000
2011 Pickup #4	7008	-	-	1	1	1	1	1	1	1	1	\$40,000
2012 Pickup #5	N/A	-	-	-	1	1	1	1	1	-	-	\$52,000
2007 Mower	N/A	1	1	1	1	-	-	-	-	-	-	\$11,500
Anti-Ice Equipment	8015-1, 8015- 2, 8015-3	-	-	-	1	1	1	1	1	1	1	\$24,000
2005 Sweeper	N/A	1	1	1	1	1	1	1	1	1	1	\$9,100
2003 Trailer	N/A	1	1	1	1	1	-	-	-	-	-	\$5,000
2002 Water Pump and Hose	2002PW	1	1	1	1	1	1	1	1	1	1	\$51,200
2015 Pickup # 3	8019	-	-	-	-	-	-	1	1	1	1	\$40,000
2015 Dump/Plow #303	8017	-	-	-	-	-	-	1	1	1	1	\$225,000
2017 Pickup #5	7009	-	-	-	-	-	-	-	-	1	1	\$52,000
2015 Brush Chipper	8018	-	-	-	-	-	-	1	1	1	1	\$40,000
Total		14	14	14	15	14	13	15	15	15	15	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	1
Per Capita Standard		0.0020	0.0020	0.0020	0.0021	0.0020	0.0018	0.0021	0.0020	0.0020	0.0020	1
•											1	-

10 Year Average	2009-2018
Quantity Standard	0.002
Quality Standard	\$146,780
Service Standard	\$294

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$294
Eligible Amount	\$350,804

## Infrastructure Costs Included in the Development Charges Calculation

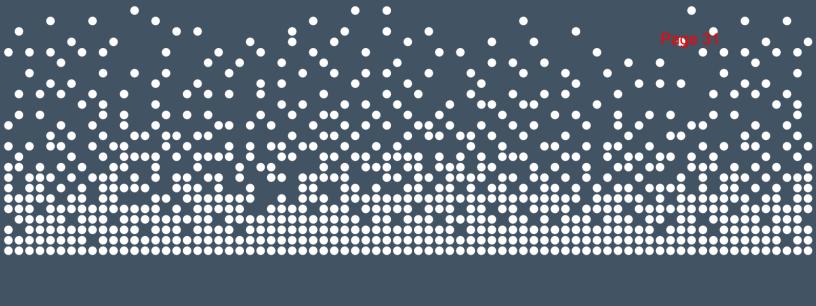
Township of Puslinch Service: Roads and Related

								Less:	Potential D.C. Recoverable Cost				
Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Asset Number	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 78%	Non-Residential Share 22%		
	Roads												
1	Victoria Road South: County Road 36 (Badenoch Street) to Gilmour Road	124	2019	382,500	-	382,500	330,475		52,025	40,579	11,445		
2	Victoria Road South: Gilmour Road to entrance to Aberfoyle Pit #2	125A	2019	127,500	-	127,500	110,158		17,342	13,526	3,815		
3	Concession 7: Concesion 2A to Mason Road	115	2021	156,675	-	156,675	135,365		21,310	16,622	4,688		
4	Concession 7: Mason Road to McLean Road West	116	2021	52,225	-	52,225	45,122		7,103	5,541	1,563		
5	Concession 2: Side Road 20 South to Sideroad 25 South (Truck Route)	35	2021	346,200	-	346,200	299,113		47,087	36,728	10,359		
6	Concession 2: Sideroad 25 South to Concession 7 (Truck Route)	36	2021	173,100	-	173,100	149,556		23,544	18,364	5,180		
7	Watson Road South: bridge to Leslie Road West	134	2023	86,000	-	86,000	74,303		11,697	9,124	2,573		
8	Watson Road South: County Road 36 (Badenoch Street) to Bridge	136	2023	129,000	-	129,000	111,454		17,546	13,686	3,860		
9	Watson Road South: Leslie Road West to McRae Station Road	133	2023	127,400	-	127,400	110,072		17,328	13,516	3,812		
10	Morriston Traffic Calming		2028	100,000	-	100,000	86,399		13,601	10,609	2,992		
11	Concession 1- Sideroad 10 to Wellington Rd 35	14	2027	255,000	-	255,000	220,317		34,683	27,053	7,630		
12	Concession 11 railway crossing - County Road 34 to Sideroad 17	144	2019	50,000	-	50,000	43,199		6,801	5,304	1,496		
13	Concession 1 - Sideroad 20 South to Concession 7	16, 17	2020	520,000	-	520,000	449,274		70,726	55,166	15,560		
14	Concession 4- Sideroad 10 to 32	56	2024	450,000	-	450,000	388,795		61,205	47,740	13,465		
	McLean Rd E and Winer Rd	212A, 158	2024	365,000	-	365,000	315,356		49,644	38,723	10,922		
16	Mason Crt Concession 7 to dead end	38	2024	38,100	-	38,100	32,918		5,182	4,042	1,140		
17	Maple Leaf Lane County Road 46 to dead end	52	2024	45,800	-	45,800	39,571		6,229	4,859	1,370		
18	Concession 4- Hwy 6 to 35	160, 161	2025	390,000	-	390,000	336,955		53,045	41,375	11,670		
19	Watson Road South: Maltby Road East to County Road 34	139, 140	2026	480,000	-	480,000	414,714		65,286	50,923	14,363		
20	Watson Rd - Wellington Road 34 to Wellington Road 36	137	2026	500,000	-	500,000	431,994		68,006	53,045	14,961		
21	Gore Road - Valens Road to Concession 7	5	2026	270,000	-	270,000	233,277		36,723	28,644	8,079		
22	Church and Victoria Street	28_Surface	2026	50,000	-	50,000	43,199		6,801	5,304	1,496		
23	Leslie Rd West- Victoria Rd South to East limit	21, 22, 23, 25	2027	645,000	-	645,000	557,272		87,728	68,428	19,300		

## Infrastructure Costs Included in the Development Charges Calculation

Township of Puslinch Service: Roads and Related

								Less:	Potentia	Potential D.C. Recoverable Cos			
Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	oment Asset Timing (year) Capital Cost Post Period Net Capital Benefit to Other Contributions		Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 78%	Non-Residential Share 22%						
24	Gore Rd-Sideroad 20 to Valens Rd	4	2027	365,000	-	365,000	315,356		49,644	38,723	10,922		
25	Sideroad 20 North - Wellington Road 34 to Forestell Road	166	2028	375,000	-	375,000	323,996		51,004	39,783	11,221		
26	Roszell Road - Townline Road to Forestell Road	90, 54a	2028	287,500	-	287,500	248,397		39,103	30,501	8,603		
27	Maltby Road - Victoria Road to Watson Road	63A, 63B	2028	262,500	-	262,500	226,797		35,703	27,848	7,855		
28	Concession 4- Sideroad 10 North to Sideroad 12 North	57	2019	112,000	-	112,000	96,767		15,233	11,882	3,351		
29	Concession 1 -County Road 35 to Sideroad 20 South	15	2019	303,000	-	303,000	261,788		41,212	32,145	9,067		
30	Brock Road Sidewalk - 304	304	2019-2020	235,000	-	235,000	203,037		31,963	24,931	7,032		
31	Leslie Road West - Watson Road South to Bridge 5 (Mountsberg)	22	2021-2022	620,000	-	620,000	535,673		84,327	65,775	18,552		
32	Fox Run Drive - transition to curb to County Road 46	205, 206	2022	63,000	-	63,000	54,431		8,569	6,684	1,885		
33	Concession 4 - County Road 35 to Sideroad 20 North	59	2025	282,739	-	282,739	•		282,739	220,536	62,203		
34	Bridges and Culverts Galt Creek Bridge Gore Road Lot 2	1008	2021	170,000	-	170,000	146,878		23,122	18,035	5,087		
	Little's Bridge	1003	2022-2023	525,000	-	525,000	453,594		71,406	55,697	15,709		
	Moyer's Bridge - 0004	1004	2024	25,000	-	25,000	21,600		3,400	2,652	748		
	Moyer's Bridge - 0004	1004	2025	500,000	-	500,000	431,994		68,006	53,045	14,961		
38	Gilmour Culvert	2009	2023-2025	600,000	-	600,000	518,393		81,607	63,654	17,954		
39	Victoria Road Culvert Over Galt Creek	2006	2024	105,000	-	105,000	90,719		14,281	11,139	3,142		
40	Victoria Road Culvert North of Leslie	2013	2024	105,000	-	105,000	90,719		14,281	11,139	3,142		
41	Ellis Road Culvert Over Puslinch Lake Irish Creek	2010	2026	250,000	-	250,000	215,997		34,003	26,522	7,481		
42	Irish Creek Culvert on Townline Road	2007	2026	180,000	-	180,000	155,518		24,482	19,096	5,386		
43	Roads & Related Vehicles Gravel Packer - New Equipment for Grader	8002	2019	173,100	-	173,100	-		173,100	135,018	38,082		
	Reserve Fund Adjustment/Unfunded Balance					29,907			29,907	23,328	6,580		
	Total			11,278,339	-	11,308,246	9,350,512	-	1,957,734	1,527,033	430,702		



# Fire Protection Services

Service: Fire Facilities
Unit Measure: ft² of building area

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Fire Building C.R.34	95MC, 56MC, 46MC, 77MC, 59MC, 21MC, 1MC, 15002, 41MC	7,700	7,700	7,700	7,700	7,700	7,700	7,700	7,700	7,700	7,700	\$365
Total		7,700	7,700	7,700	7,700	7,700	7,700	7,700	7,700	7,700	7,700	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	ì
Per Capita Standard		1.1114	1.1002	1.0955	1.0944	1.0827	1.0756	1.0686	1.0496	1.0345	1.0144	

10 Year Average	2009-2018
Quantity Standard	1.0727
Quality Standard	\$365
Service Standard	\$392

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$392
Eligible Amount	\$467,878

Service: Fire Vehicles
Unit Measure: No. of vehicles

Offic Measure.	NO. OI VEITICI	63										
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
1986 Pumper #32	N/A	1	1	1	1	-	-	-	-	-	-	\$300,000
2004 Pumper #31	5031	1	1	1	1	1	1	1	1	1	1	\$468,000
1988 Tanker #39	N/A	1	-	-	-	-	-	-	-	-	-	\$410,000
1990 Telesquirt #33 (Aerial)	N/A	1	1	1	1	1	1	1	1	-	-	\$500,000
2000 Rescue #35	5035	1	1	1	1	1	1	1	1	1	1	\$520,000
2006 Tanker #38	5038	1	1	1	1	1	1	1	1	1	1	\$450,000
2010 Tanker #37	7006	-	1	1	1	1	1	1	1	1	1	\$410,000
2013 Pumper # 32	5040	-	-	-	-	1	1	1	1	1	1	\$300,000
Used Quint Truck (Aerial 33 Truck-used)	5033	-	-	-	-	-	-	-	-	1	1	\$500,000
Pickup Truck	7005A	-	-	-	-	-	-	-	-	1	1	\$27,873
Total		6	6	6	6	6	6	6	6	7	7	
	-						T	T		T		7
Donulation		6 020	6 000	7 020	7.026	7 1 1 2	7 150	7 206	7 226	7 449	7 501	

Population	6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591
Per Capita Standard	0.0009	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0009	0.0009

10 Year Average	2009-2018
Quantity Standard	0.0009
Quality Standard	\$410,700
Service Standard	\$370

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$370
Eligible Amount	\$441,708

Service: Fire Small Equipment and Gear Unit Measure: No. of equipment and gear

Offic Measure.	140. Or equip	ment and gear										
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Equiped Fire Fighters	Various	37	37	37	37	37	41	41	42	42	42	\$3,021
Pagers	4_35FE	42	42	42	42	42	42	42	42	42	42	\$500
Mobile/Truck Radios	3_18FE	10	10	10	10	10	10	10	7	7	7	\$5,000
Base Radio	FE_Bas_1	1	1	1	1	1	1	1	1	1	1	\$5,000
Base Radio County	FE_Bas_2	1	1	1	1	1	1	1	1	1	1	\$5,000
Antennae Roof	FE_Ant_3	1	1	1	1	1	1	1	1	1	1	\$600
Antennae Tower	FE_Ant_4	1	1	1	1	1	1	1	1	1	1	\$11,400
Antennae	FE_Ant_5	1	1	1	1	1	1	1	1	1	1	\$2,000
Panda Vox Recorder Radio	FE_Pan_6	2	2	2	2	2	2	2	2	2	2	\$1,400
Panda Vox Recorder	FE_Pan_7	1	1	1	1	1	1	1	1	1	1	\$5,700
Blue tooth Headset	FE_Blu_8	-	-	-	-	1	1	1	1	2	2	\$2,200
Portable Radios	2_46FE	31	31	31	31	31	31	31	31	31	33	\$1,900
Communication Equipment including Radio Communication Interface	6012	1	1	1	1	1	1	1	1	1	1	\$41,898
Automated External Defibrillators - Fire Trucks	12_41FE	3	3	3	3	3	3	3	3	3	3	\$5,000
Self Contained Breathing Apparatus	Various	18	18	18	18	22	22	22	22	22	22	\$7,450
Self Contained Breathing Apparatus Cylinder 4500 PSI	Various	46	46	46	46	52	52	52	52	52	52	\$1,500
Air Cylinder Compressor	1_26FE	1	1	1	1	1	1	1	1	1	1	\$29,490
Automated External Defibrillators - Public Access	1212_41FE	3	3	3	3	3	3	3	3	3	3	\$1,500
Self Contained Breathing Apparatus Masks	67_17FVT	28	28	28	28	28	28	28	28	28	28	\$439
Vehicle Extrication Equipment	5_44FE	1	1	1	1	1	1	1	1	1	1	\$25,000
Power Hydraulic Toolset	6_70FE	1	1	1	1	1	1	1	1	1	1	\$52,500
Edraulic Combination Tool	7_82FE	-	-	-	-	1	1	1	1	1	1	\$15,000
Thermal Imaging Camera	8_93FE	1	1	1	1	1	1	1	1	1	1	\$6,000
Washer/Extractor	9_104FE	-	-	-	-	-	-	-	-	1	1	\$10,000
Gear Dryer	10_2FE	-	-	-	-	-	-	-	-	1	1	\$6,000
Rapid Deployment Watercraft	11_103FE	-	1	1	1	1	1	1	1	1	1	\$6,000
Portable Pumps	13_89FE	2	2	2	2	2	2	2	2	2	2	\$7,500
Total		233	234	234	234	246	250	250	248	251	253	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	
Per Capita Standard	İ	0.0336	0.0334	0.0333	0.0333	0.0346	0.0349	0.0347	0.0338	0.0337	0.0333	
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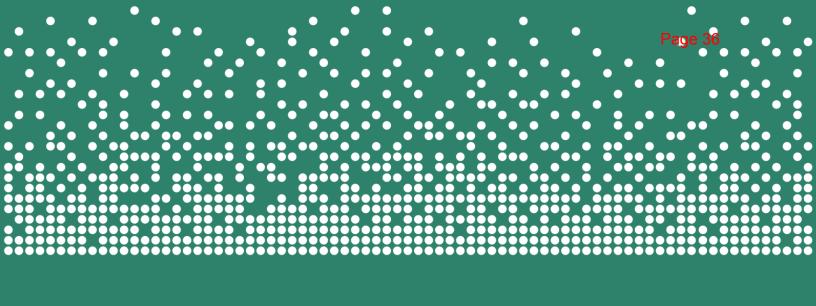
10 Year Average	2009-2018
Quantity Standard	0.0339
Quality Standard	\$2,974
Service Standard	\$101

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$101
Eligible Amount	\$120,468

## Infrastructure Costs Included in the Development Charges Calculation

Township of Puslinch Service: Fire Services

			Gross			Less:		Potentia	al D.C. Recov	erable Cost
Prj .No	Increased Service Needs Attributable to Anticipated Development 2019-2028	Timing (year)	Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 78%	Non- Residential Share 22%
	Fire Stations									
1	Provision for Additional Facility Space	2019-2021	1,151,750	-	1,151,750	287,938		863,813	673,774	190,039
2	Design a Fully Services Station	2019	10,000	-	10,000	2,500		7,500	5,850	1,650
3	Provision for Equipment for New Firefighters (9)	2019-2028	48,792	-	48,792	12,198		36,594	28,543	8,051
4	Motorized Water Vessel	2022-2024	50,000	-	50,000	5,000		45,000	35,100	9,900
5	Cargo Trailer	2022-2024	8,000	-	8,000	-		8,000	6,240	1,760
	Reserve Fund Adjustment/Unfunded Balance				(199,498)			(199,498)	(155,609)	(43,890)
	Total		1,268,542	-	1,069,044	307,635	-	761,408	593,898	167,510



# Parks and Recreation Services

Service: Parkland Development Unit Measure: Acres of Parkland

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Acre)
Puslinch Community Centre	2301000006140000000	14.4	14.4	14.4	24.1	24.1	24.1	24.1	24.1	24.1	24.1	
Morriston Meadows Park	2301000005090200000	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Old Morriston Park	2301000005092000000	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Arkell Park	2301000008113700000	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
Badenoch Soccer Pitch	2301000007046500000	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
Fox Run Park	2301000006054310000	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Morriston Historic Corner Block Park Area	2301000005121000000	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
=		10.0										
Total		40.2	40.2	40.2	50.0	50.0	50.0	50.0	50.0	50.0	50.0	
D 13		0.000	0.000	7.000	7.000	7.440	7.450	7.000	7.000	7.440	7.504	1
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	4
Per Capita Standard		0.0058	0.0057	0.0057	0.0071	0.0070	0.0070	0.0069	0.0068	0.0067	0.0066	]

10 Year Average	2009-2018
Quantity Standard	0.0065
Quality Standard	\$0
Service Standard	\$0

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$0
Eligible Amount	\$0

Service: Parkland Amenities
Unit Measure: No. of parkland amenities

Unit Measure.	No. or parkiand amenities											
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/item)
Community Centre Complex: Soccer Field	3080	1	1	1	1	1	1	1	1	1	1	\$575,000
Community Centre Complex: Baseball Diamond	3013, 3013-1, 3014, 3015, 3016, 3017, 3019, 3020, 3024	1	1	1	1	1	1	1	1	1	1	\$277,226
Community Centre Complex: Aberfoyle Playground	3031, 3032	1	1	1	1	1	1	1	1	1	1	\$28,930
Community Centre Complex: Tennis Courts	14003, 14005	1	1	1	1	1	1	1	1	1	1	\$66,240
Community Centre Complex: Horse Paddock	14004, 14006, 3036, 3037	1	1	1	1	1	1	1	1	1	1	\$66,140
Community Centre Complex: Puslinch Community Gardens Benches	3823	1	1	1	1	1	1	1	1	1	1	\$500
Morriston Meadows: Morriston Playground	3041	1	1	1	1	1	1	1	1	1	1	\$25,000
Morriston Meadows: Picnic Pavillion, Morriston Meadows Park	3010, 3043	1	1	1	1	1	1	1	1	1	1	\$33,500
Morriston Meadows: Basketball Court	3044, 3279	1	1	1	1	1	1	1	1	1	1	\$23,425
Morriston Meadows: Baseball Diamonds	3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3055	2	2	2	2	2	2	2	2	2	2	\$70,977
Old Morriston: Baseball Diamond	3057, 3058, 3059, 3060, 3061, 3063, 3064, 3065	1	1	1	1	1	1	1	1	1	1	\$243,807
Badenoch Soccer Field	3068	1	1	1	1	1	1	1	1	1	1	\$2,000
Boreham Drive Park: Basketball Court	3074, 3260	1	1	1	1	1	1	1	1	1	1	\$23,425
Boreham Drive Park: Arkell Playground	3075	1	1	1	1	1	1	1	1	1	1	\$25,000
Total		15	15	15	15	15	15	15	15	15	15	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	1
D 0 '' 0' 1 1		0.0000	0.0004	0.0004	0.0004			0.0004	0.0000	0.0000	0.0000	1

Per Capita Standard 0.0022 0.0021 0.0021 0.0021 0.0021 0.0021 0.0021 0.0020 0.0020 0.0020	Population	6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591
	Per Capita Standard	0.0022	0.0021	0.0021	0.0021	0.0021	0.0021	0.0021	0.0020	0.0020	0.0020

10 Year Average	2009-2018
Quantity Standard	0.0021
Quality Standard	\$101,638
Service Standard	\$213

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$213
Eligible Amount	\$255,061

Service: Parkland Trails

Unit Measure: Linear Metres of Paths and Trails

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/ Linear Metre)
Wayne Stokley Trail	3079	-	-	-	-	-	-	-	450	450	450	\$32
Telfer Glen Trail	3077	270	270	270	270	270	270	270	270	270	270	\$32
Total		270	270	270	270	270	270	270	720	720	720	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	1

Population	6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591
Per Capita Standard	0.0390	0.0386	0.0384	0.0384	0.0380	0.0377	0.0375	0.0981	0.0967	0.0948

10 Year Average	2009-2018
Quantity Standard	0.0557
Quality Standard	\$32
Service Standard	\$2

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$2
Eligible Amount	\$2,127

Service: Recreation Vehicles and Equipment

Unit Measure: No. of vehicles and equipment

Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Value (\$/Vehicle)
Trailer	8012	1	1	1	1	1	1	1	1	1	1	\$5,000
Lawn Tractor	7007	1	1	1	1	1	1	1	1	1	1	\$30,000
Pitching Machines	N/A	2	2	2	2	2	2	2	2	2	1	\$11,500
Ultraviolet Units	N/A	4	4	4	4	4	4	4	4	4	3	\$3,400
Olympia Ice Machine	8020	-	1	1	1	1	1	1	1	1	1	\$80,000
Floor Scrubber	4060	-	1	1	1	1	1	1	1	1	1	\$8,000
Generators	210PCC	2	2	2	2	2	2	2	2	2	2	\$37,500
Total		10	12	12	12	12	12	12	12	12	10	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	]
Per Capita Standard		0.0014	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0016	0.0016	0.0013	

10 Year Average	2009-2018
Quantity Standard	0.0016
Quality Standard	\$19,513
Service Standard	\$31

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$31
Eligible Amount	\$37,308

Service: Indoor Recreation Facilities
Unit Measure: ft² of building area

Unit Measure:	n² or building area											
Description	Asset No.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Value/sq.ft. with land, site works, etc.
Community Centre, Badenoch	N/A	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	-	\$360
Concession Booth and Washrooms, Morriston Meadows	3009MM	500	500	500	500	500	500	500	500	500	500	\$74
Morriston Meadows: Picnic Pavillion, Morriston Meadows Park	3010, 3043	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$55
Concession Booth and Washrooms, Old Morriston Park	3009OMM	400	400	400	400	400	400	400	400	400	400	\$74
Puslinch Community Centre	53PCC, 67PCC, 9PCC, 46PCC, 93PCC, 26PCC, 40PCC, 41PCC	7,071	7,071	7,071	7,071	8,323	8,323	8,323	8,323	8,323	8,323	\$180
Blue Storage Building Behind Puslinch Community Centre	64BSBBPCC, 71BSBBPCC, 66BSBBPCC, 14BSBBPCC, 70BSBBPCC, 89BSBBPCC, 44BSBBPCC	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	\$74
Community Centre Complex: Concession Booth At Community Centre Ball Diamond, County Road 46	3011	252	252	252	252	252	252	252	252	252	252	\$74
Community Centre Complex: Storage Building and Announcer's Booth at Horse Paddock	3035	300	300	300	300	300	300	300	300	300	300	\$74
Outdoor Rink/Gymnasium and Change Rooms, Optimist Recreation Centre (ORC)	330CC, 660CC, 510CC, 440CC, 970CC, 220CC, 180CC, 390CCIR, 950CCIR, 130CCIR, 580CCIR, 170CCIR, 510CCIR, 880CCIR, 410CCIR,	-	19,600	19,600	19,600	19,600	19,600	19,600	19,600	19,600	19,600	\$314
Badenoch Soccer Field: Storage Shed	3067	120	120	120	120	120	120	120	120	120	120	\$74
=												
Total		14,543	34,143	34,143	34,143	35,395	35,395	35,395	35,395	35,395	33,895	
Population		6,928	6,999	7,029	7,036	7,112	7,159	7,206	7,336	7,443	7,591	
Per Capita Standard		2.0992	4.8783	4.8574	4.8526	4.9768	4.9441	4.9119	4.8248	4.7555	4.4652	

10 Year Average	2009-2018
Quantity Standard	4.5566
Quality Standard	\$239
Service Standard	\$1,091

D.C. Amount (before deductions)	10 Year
Forecast Population	1,195
\$ per Capita	\$1,091
Eligible Amount	\$1,303,566

### Infrastructure Costs Included in the Development Charges Calculation

Township of Puslinch Service: Parks and Recreation

						Less:			Less:	Potential D.C. Recoverable Cost		
Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Subtotal	Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non- Residential Share
	2019-2028						Development				95%	5%
1 1	Soccer Fields at Puslinch Community Centre Park	2019-2020	698,169	280,239	417,930	69,817	269,249	78,865	7,886	70,978	67,429	3,549
2	Phase 1 of Parks Master Plan	2021	701,907	73,496	628,411	537,115	59,343	31,954	3,195	28,758	27,320	1,438
3	Phase 2 of Parks Master Plan	2022	874,580	351,048	523,532	60,000	306,596	156,936	15,694	141,242	134,180	7,062
	Playground area at Boreham Park (also known as Arkell Park)	2026	75,000		75,000	7,500		67,500	6,750	60,750	57,713	3,038
5	Fox Run Park Trail	2019	118,500	-	118,500	11,850	48,064	58,586	5,859	52,728	50,091	2,636
	Reserve Fund Adjustment/Unfunded Balance							(51,919)		(51,919)	(49,323)	(2,596)
	Total		2,468,156	704,783	1,763,373	686,281	683,251	341,922	39,384	302,538	287,411	15,127

Watson & Associates Economists Ltd. Puslinch 2019 DC v6



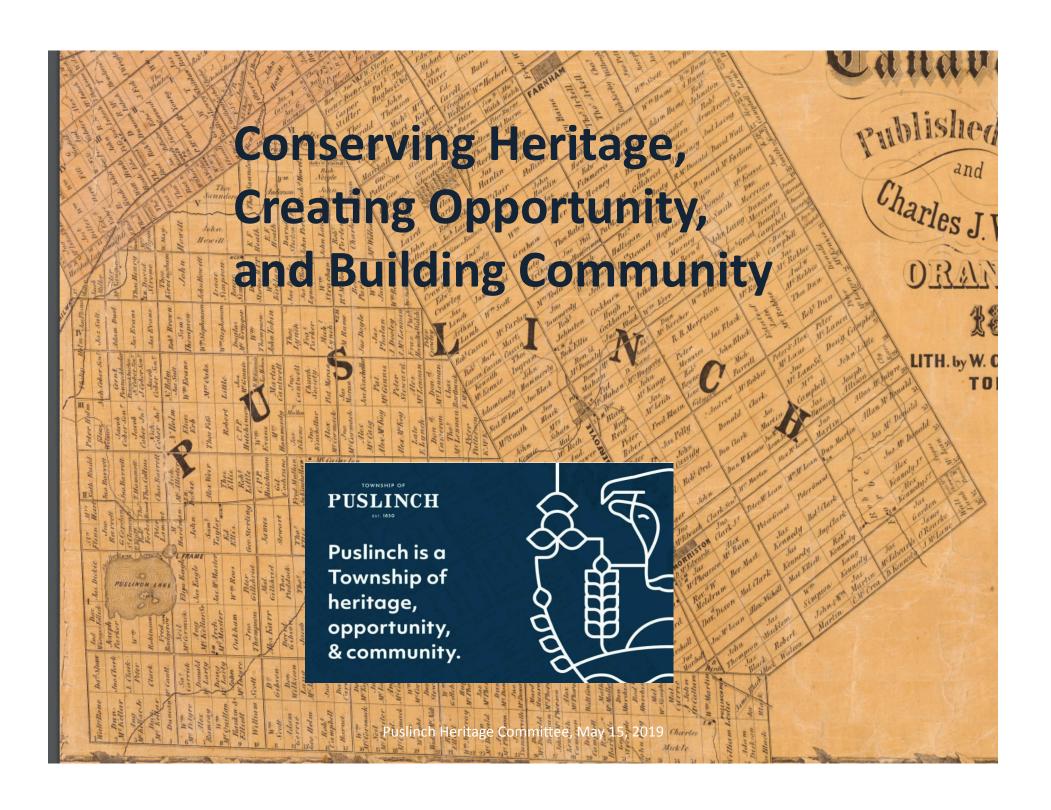
# Administration - Studies

### Infrastructure Costs Included in the Development Charges Calculation

Township of Puslinch Service: Administration Studies

						Less:			Less:	Potential D.C. Recoverable Cost		
Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2019\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Subtotal	Other (e.g. 10% Statutory Deduction)	Total	Residential Share 78%	Non- Residential Share
1	Master Fire Plan	2025	44,000	-	44,000	17,600	·	26,400	_	26,400	20,592	5,808
2	Development Charges Study	2019	21,000	_	21,000	-		21,000	2,100	18,900	14,742	4,158
3	Recreation Master Plan	2025	50,000	-	50,000	20,000		30.000	3,000	27,000	21,060	5,940
4	Traffic Count Study	2020	25,000	-	25,000	10,000		15,000	-	15,000	11,700	3,300
5	Transportation Master Plan including PCI Updates	2021	25,000	-	25,000	10,000		15,000	-	15,000	11,700	3,300
6	Development Charges Study	2024	21,000	-	21,000	-		21,000	2,100	18,900	14,742	4,158
7	Asset Management Plan	2019	48,500	-	48,500	41,903		6,597	660	5,937	4,631	1,306
8	Community Based Strategic Plan	2025	30,000	-	30,000	15,000		15,000	1,500	13,500	10,530	2,970
9	Municipal Servicing Standards	2019	10,000	-	10,000	-		10,000	-	10,000	7,800	2,200
	Reserve Fund Adjustment/Unfunded Balance							31,392		31,392	24,486	6,906
	Total		274,500	-	274,500	114,503	-	191,388	9,360	182,029	141,982	40,046

Watson & Associates Economists Ltd. Puslinch 2019 DC v6







### **Historic Puslinch Architecture**

Throughout the discovery phase of this project, architecture was a consistent topic of conversation in the Puslinch story.

As new homes are constructed, long-time residents considered how this will change the landscape of the area – architecturally and economically.

The castle found in the existing symbol speaks to a sense of grandeur and exclusivity. This castle has been updated with the architectural frame of a historic Puslinch Township home.





MINISTRY OF TOURISM, CULTURE AND SPORT

### What is the role of a Municipal Heritage Committee?

### To advise and assist Council on:

- Designation of individual properties (under Part IV) and heritage conservation districts (under Part V)
- Alterations to designated property
- Demolition/removal of designated property
- Repeal of a designation by-law
- Municipal register of cultural heritage properties
- Easement or covenants
- Other heritage matters

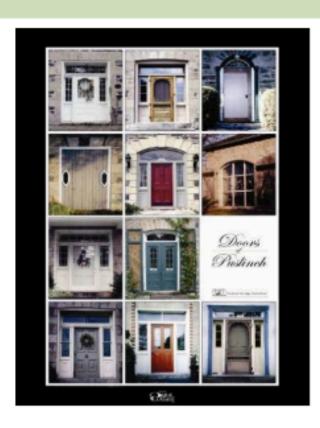




MINISTRY OF TOURISM, CULTURE AND SPORT

### Other Responsibilities

- Survey, inventory, research
- Community involvement and liaison
- · Information and education
- Heritage-related municipal planning
- · Keeping council informed
- Other duties as assigned by Council



### "Puslinch is a Township of Heritage"

160 built heritage resources documented





Cultural heritage landscapes





Archaeological resources



### Plaqued Heritage Resources





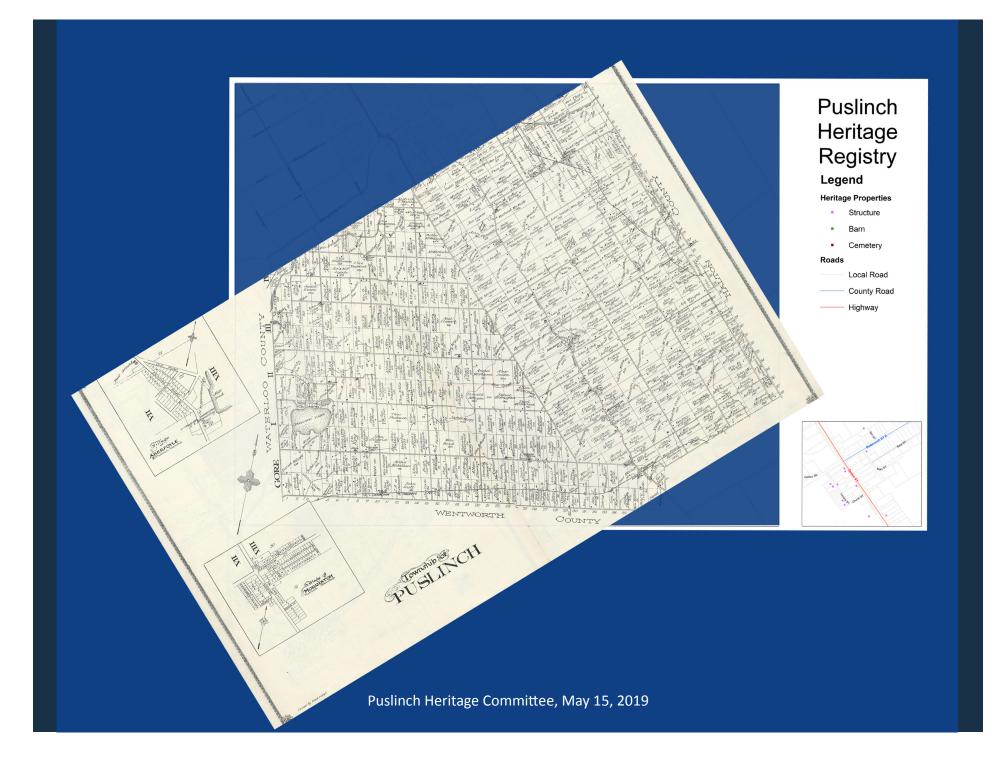
Plaques honour good stewardship

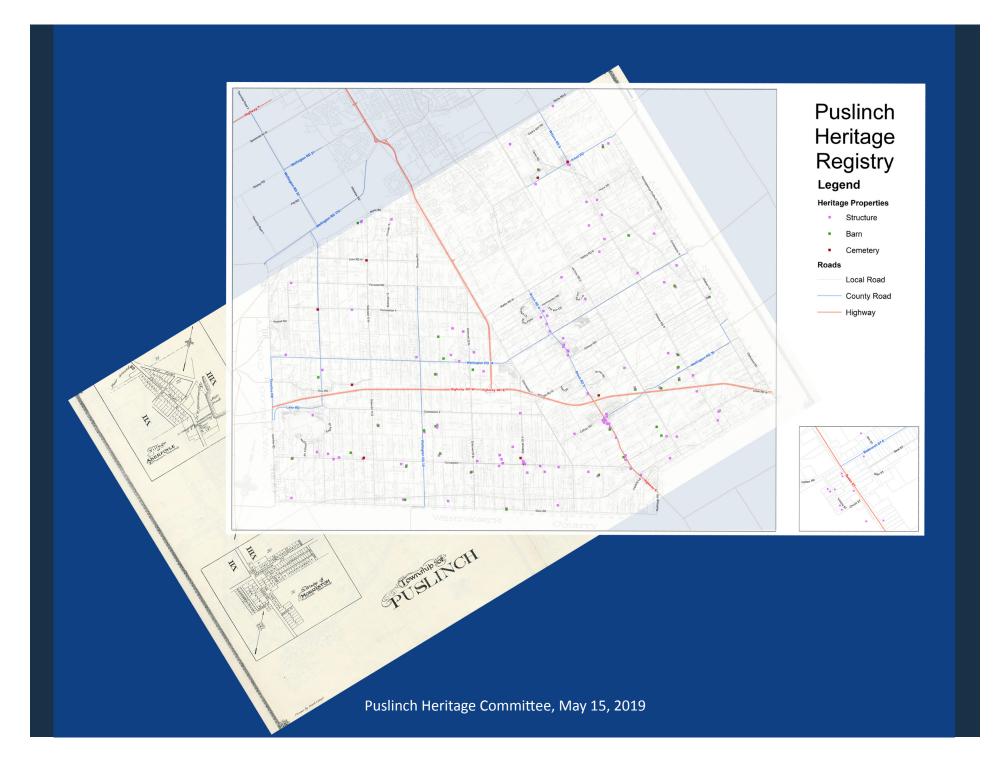
### Non-plaqued Heritage Resources

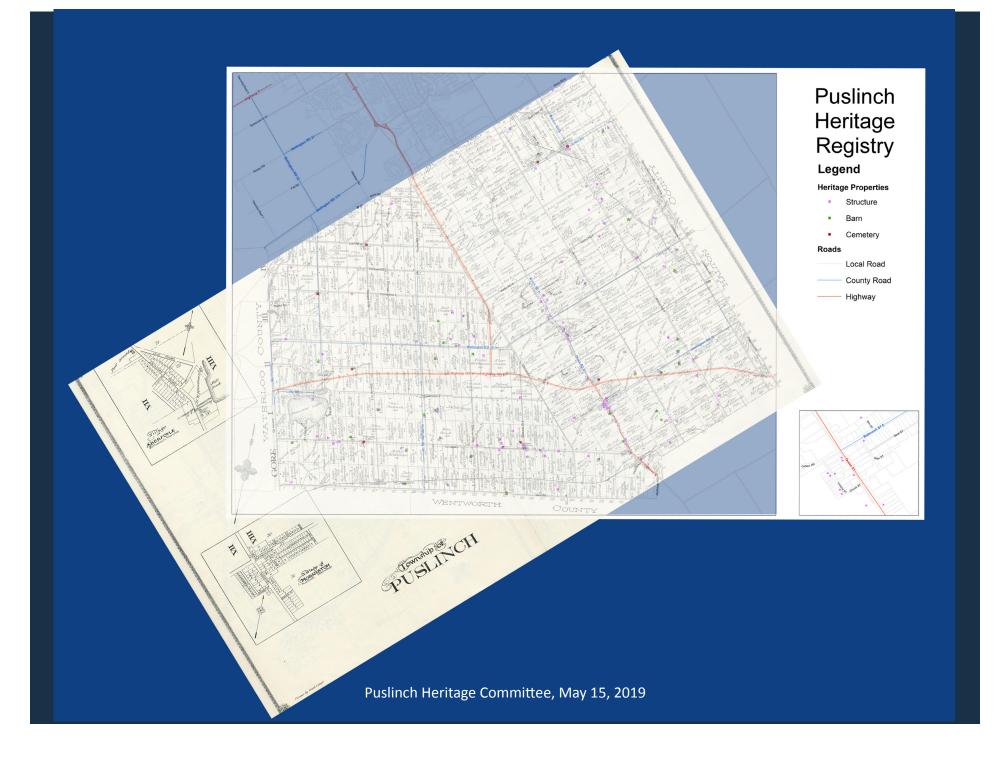


Alexander Fraser House, 1840-1850.

Heritage resources that meet the criteria of the Ontario Heritage Act 09/06: they have aesthetic, historical or contextual value but condition is not primary criteria.









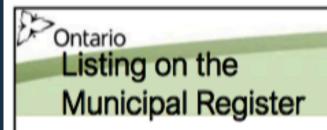
MINISTRY OF TOURISM, CULTURE AND SPORT

Listing is an interim measure that provides some protection against demolition and flags property for municipal officials

### Listing involves:

- Inclusion of non-designated properties on the municipal register that may have cultural heritage value or interest
- Council approval (normally by resolution)
- Consultation with the municipal heritage committee (where one exists)
- Notification of property owners (recommended)





MINISTRY OF TOURISM, CULTURE AND SPORT

### The Register is a work-in-progress

 Properties can be added or removed from the Register by Council, in consultation with the Municipal Heritage Committee (OHA, ss. 27 1.3)

 Register must include "description of the property that is sufficient to readily ascertain that property"

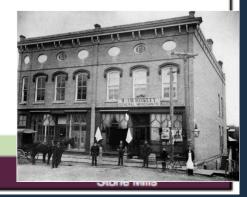
 Properties on the Register can be mapped easy identification by municipal staff public



## Listing on the Municipal Register

Why list property on the register?

- Recognizes properties of cultural heritage value in the community
- Promotes knowledge and enhances an understanding of the community's cultural heritage
- A planning document for:
  - municipal decision makers
  - land-use planners and practitioners
  - property owners
  - public or private developers
  - tourism industry
  - educators
  - general public
- Provides interim protection for listed property





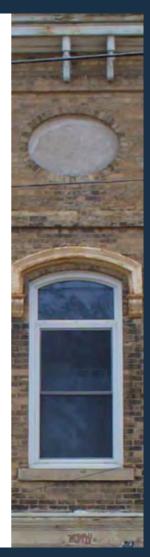
2018: Mayor and Councilors envision a future for Puslinch defined by its rural settings.

The 2019 National Trust Roundtable on Conserving Rural Heritage and Rural Sustainability:

- "Sense of place" is central to rural sustainability.
- Heritage Resources are the foundation to a sense of place.
- Design guidelines are necessary to physically maintain a sense of place.
- Local initiatives support rural sense of place.
- Economic development through cultural tourism is vital to sustaining a sense of place.

### Township of Puslinch Design Guideline Study

"Reinforce rural character of Township and villages through enhancing streetscapes, promoting quality development and respect established character by conserving heritage assets and integrating natural resources."



### Citizen Involvement and Sense of Place



Private property owners and community groups have conserved built heritage resources in Puslinch at their own expense.





### A Sense of Place and Opportunity

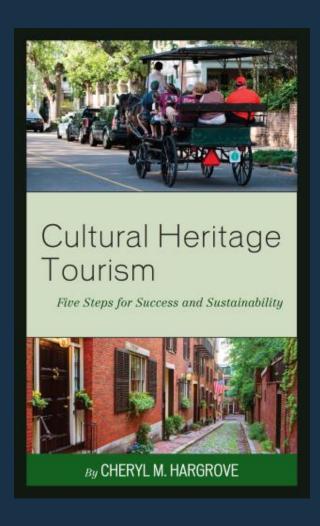
Encourage adaptive reuse of heritage resources to maintain a sense of place, manage sustainability and create opportunity through programs such as the Community Improvement Plan







# Economic development through cultural tourism is vital to sustaining a rural sense of place



- •Speed River Cycle has 28 routes through Puslinch Township – cyclists need refreshment stops in addition to Union Market Square and Danish Place (both heritage structures )
- •Morriston is an well-preserved historic village with several intact heritage streetscapes with the bypass, the heritage character will support a tourist destination with shops and cafes.
- •Farm taste real tours
- •Interpretative signage

### 2017-2018 Heritage Committee Report to Puslinch Township Council, May 2019.

The Puslinch Municipal Heritage Advisory Committee is an advisory body to Council. The purpose of the Committee is to advise on the identification and conservation of heritage resources in the Township.

### **Puslinch Municipal Heritage Advisory Committee Members:**

Mary Tivy, Chair, John Levak, Vice-Chair, Barb Jefferson, John Arnold, Matthew Bulmer, Township of Puslinch Councilor, Cameron Tuck (resigned December 2017)

#### 2. MANDATE

The primary function of the Heritage Committee is to advise Council and make recommendations on heritage designations, applications for repeal of designations, applications for alterations, and/or removal/demolition of Part IV and Part V properties under the *Ontario Heritage Act*.

#### **Deliverables:**

#### The Committee will accomplish its mandate by:

- 1. Providing comments to Council on all heritage applications.
- 2. Commenting on various development applications that may impact existing or potential heritage properties or districts when required.
- 3. Commenting on demolition permits that apply to heritage legislation.
- 4. Recording sites of heritage significance that are worthy of preservation, and awarding heritage plagues.
- 5. Recording historical information related to properties with heritage significance.
- 6. Promoting public awareness of Puslinch's heritage.
- 7. Discussing concerns raised by the public and staff.

**Deliverables: 2017 – 2018** 

### 1. Providing Comments to Council on all Heritage Applications:

### 1.1 Heritage Applications: A Municipal Register of Heritage Properties

Section 27 of the Ontario Heritage Act requires each municipality to keep a Municipal Register of Heritage Properties. The Municipal Register of Cultural Heritage Resources is an administrative and documentation tool used to assist in identification and ongoing preservation of significant heritage resources within the land use planning and permit application process. It is also used to set priorities for subsequent heritage designations under Part IV of the Ontario Heritage Act. As such, the Register represents basic public acknowledgement of the contribution of specific heritage resources to the rich cultural history of Puslinch Township. These properties may be designated under Part IV or Part IV of the Ontario Heritage Act, or may be non-designated properties that are considered to have heritage significance. Because previous Heritage Committees have not brought forward recommendations for the designation of properties in the Township to Council, Puslinch has passed neither Part IV nor Part V designation by-laws under the Ontario Heritage Act. Thus no heritage applications have been made to the Township under this legislation. Nor has the Township offered grants to heritage property owners for the Committee to assess. The new Community Improvement Plan funding may be applied for façade improvements for heritage properties on the Register.

Creating an official register of these properties for the Township of Puslinch has been a major goal of the current Heritage Committee in the last two years and this work is still in progress. To meet this requirement, Committee members have reviewed and updated information on approximately 175 properties currently listed on the Township's internal Prinsys inventory of heritage properties. This extensive project is in final review with the assistance of Township planning staff.

#### The Approval Process for the Municipal Register

Properties will only be listed in the Register after undergoing: a) field assessment; b) research and documentation; c) criteria evaluation; d) endorsement of Township Council.

#### Assessment of Heritage Value

Every potential heritage resource holds certain attributes and characteristics that reflect a degree of cultural heritage value or interest. Before being added to the Municipal Register, the cultural heritage value of a given property must be assessed. The Committee has adopted a set of provincially regulated criteria under

the Ontario Heritage Act, Reg.09/06, that determines overall merit and significance within the following categories:

- Design or physical value; and/or
- · Historical or associative value; and/or
- Contextual value.

### 1.2 Providing Comments to Council: Committee Expertise

Committee members continue to pursue professional development opportunities to provide best practices for a municipal heritage advisory committee and to meet the deliverables identified in the mandate of the Puslinch Heritage Committee. With funding assistance from the Township, three committee members attended the Ontario Heritage Conference Ottawa, June 7-10, 2017. "Canada 150: The Past, Present and Future of Heritage Conservation." In addition Committee members routinely participate in the Grand River Conservation Authority's Heritage Day Conferences/Workshops including the GRCA Heritage Day Workshop February 15-17, 2017: "History and Heritage of the Mississauga of the New Credit First Nation", and February 2018: "Heritage Makes \$ense" (reports on these conferences and workshops are in "Appendix A")

Committee Chair, Mary Tivy is a member of the board of The Alliance for Historic Landscape Preservation: *Conserving Cultural Landscapes* and attended annual conferences in Calgary, Alberta, 2017; and Tucson Arizona, 2018. (Self-funded).

Committee Chair, Mary Tivy, also sits as Chair of the City of Guelph Municipal Heritage Advisory Committee. She has 40 years of experience in the cultural heritage field.

### 2. Commenting on various development applications that may impact existing or potential heritage properties or districts when required.

The Committee routinely comments on various development applications that may impact existing or potential heritage properties or districts. Due to deadline requirements for some applications that have no impact, the Chair will respond on behalf of the Committee when the schedule of Committee meetings does not allow for a timely response.

#### 2.1 Heritage Impact Assessment: Calfas/Stewart Farmhouse

The Committee reviewed and provided guidelines and recommendations to go forward with conservation of the character-defining elements of the heritage property at 66 Queen Street South, Morriston. This report was the first Heritage Impact Assessment required by, and submitted to, the Township of Puslinch, as a

condition of subdivision approval, under advisement by this Municipal Heritage Advisory Committee.

### 2.2 Terms of Reference for Heritage Impact Assessment Studies

In order to assist future consultants preparing Heritage Impact Assessments for the Township, the Committee recommends the adoption of standard terms of reference for such studies. Since neither the Township of Puslinch nor the County of Wellington currently has Terms of Reference for the preparation of a Heritage Impact Assessment, the Heritage Committee researched those terms of reference used in other jurisdictions and recommended adoption of the guidelines used by the City of Waterloo. The Committee will submit these guidelines to Council in the winter/spring of 2019.

### 3. Commenting on demolition permits that apply to heritage legislation.

### **Listed Properties and Demolition Control**

Currently the Township's "Prinsys" internal list of properties identified by the Committee provides some measure of demolition control by alerting the Heritage Committee to such applications, but it is not an official Register of Heritage Properties, and does not have a legislative protocol for demotion control. The *Ontario Heritage Act* helps protect Section 27 (1.2) "listed" properties through interim demolition control. Section 27(3) of the Ontario Heritage Act states that the owner of a property included in the Heritage Register under Section 27 (1.2) shall not demolish or remove a building or structure unless the owner gives Council at least 60 days notice in writing of the owner's intention to demolish. Section 27(5) states that the notice of intention to demolish shall be accompanied by such plans and shall set out such information as the Council may require. Under this provision, the Township may request a Heritage Impact Assessment and/or mitigation plan. This provision is used to ensure appropriate due diligence is completed prior to the approval of demolition permits.

### 4. Recording sites of heritage significance that are worthy of preservation, and awarding heritage plaques.

As part of the process of compiling the Municipal Register of Heritage Properties, the Committee has recorded and reviewed approximately 175 properties of heritage significance through research, and also conducted field trips to the properties listed below.

- 7421 Wellington Rd. 34
- 4599 Sideroad 20 N.
- 4856 Sideroad 10

- 18 Victoria St. Morriston
- 880 Victoria Road S.
- 1867 Puslinch Township Hall, and Cassin Farmstead that had been removed and relocated at the Country Heritage Park Museum, Milton
- 6926 Wellington Road 34
- 4092 Sideroad 25
- 6990 Wellington Road 34
- 7150 Concession 1, Puslinch
- Lot 9 and 10, 5<sup>th</sup> Concession
- 66 Queen Street South, Morriston
- Lot 33, Concession 7.

Most property owners of heritage properties in the Township are proud of their stewardship and appreciate the support and recognition of the Puslinch Heritage Committee during these visits. Reports on these field visits are attached in "Appendix B"

### 5. Recording historical information related to properties with heritage significance.

This archival, field visit and interview work is done as part of the process of recording sites of heritage significance that are worthy of preservation and awarding heritage plaques. In addition a separate research project of historical information on extant barns in Puslinch Township is being compiled.

### 6. Promoting public awareness of Puslinch's heritage

#### 6.1 Township Website:

The Township has several pages compiled by the Puslinch Heritage Committee on its mandate and activities. Over the next year, the Committee's goal is to update the website and provide images and GIS mapping of plaqued heritage properties, with the assistance of a summer student.

#### **6.2 Puslinch Pioneer Column**

Puslinch Heritage Committee members write a Puslinch Heritage Matters column in each Puslinch Pioneer on significant heritage properties in Puslinch and their stewardship by current owners. Preparation of each column involves meeting with property owners and supporting their efforts.

#### 6.3 Exhibits

The Committee also presents an exhibit on Heritage Properties and Indigenous Peoples in Puslinch for the Township Canada Day celebrations.

#### 6.4 Future Outreach

Planning for an annual Doors Open day of heritage properties is underway.

### 7. Discussing concerns raised by the public and staff

Through exhibits, responses to the website or Pioneer articles, field visits and correspondence, Committee members provide information and advice as requested to heritage property owners regarding their property's history and restoration best practices, as well as funding for restoration and repair. The Chair routinely responds to requests concerning demolished or extant heritage properties or other queries on cultural heritage resources in Puslinch Township. Community members have indicated a desire to have the historical information on plaqued and identified sites of heritage value made accessible through the Township's website.

The Township of Puslinch Municipal Heritage Advisory Committee is a Committee appointed by Council for the purpose of conserving properties of cultural heritage value or interest in the Township and operates under the following legislative and policy guidelines:

1. Enabling Legislation: Ontario Heritage Act, R.S.O. 1990, c. 0.18

Section 28 of the *Ontario Heritage Act* states that:

a municipality may establish a heritage committee to advise and assist the Council on all matters relating to the conservation of property of cultural heritage value or interest and heritage conservation districts and such other heritage matters as the Council may specify by by-law.

Under the *Ontario Heritage Act*, a local Council may pass by-laws to:

- a) Designate individual properties of cultural heritage value or interest, in accordance with the criteria set out in Ontario Regulation 9/06. Such a by-law shall include a description of the property and a statement of cultural heritage value or interest and description of the heritage attributes;
- b) Designate a Heritage Conservation District or Districts in order to protect the heritage resources of an area. Such a by-law will be based on a study identifying the heritage resources of the area. If a by-law is passed to identify a Heritage Conservation District, the designated area may be recognized by an amendment to the Plan.

Designated heritage properties and heritage conservation districts shall be listed in a register of properties kept by the municipal clerk. The register may also include properties that Council considers to be of cultural heritage value or interest but have not been designated.

### **Heritage Committees**

A Heritage Committee will advise and assist Council on cultural heritage resource matters as set out by the *Ontario Heritage Act*.

#### Other Municipal Authority:

- a) A local Council may pass by-laws providing for the acquisition by purchase, lease, or otherwise of any property or part thereof, designated under Part IV of the Ontario Heritage Act. A local Council may dispose by sale, lease or otherwise of any property or interest acquired under Part IV of the Ontario Heritage Act upon such terms and conditions as Council may consider necessary.
- b) Pursuant to the Planning Act, the Municipal Act and other relevant legislation, a local Council may pass by-laws for the following purposes:
  - i) to ensure the protection of heritage features;
  - ii) to regulate development so that it is sympathetic in height, bulk, location and character to heritage resources;
  - iii) to control demolition of heritage buildings or structures in a defined area.

- c) A local Council may enter into an easement agreement or covenant, pursuant to Section 37 of the Ontario Heritage Act, with the owner of any real property and register such easement or covenant against the real property in the land registry office for the purpose of:
  - i) conserving, protecting and preserving the heritage features of the property;
  - ii) preventing any demolition, construction, alteration, remodeling or any other action which would adversely affect the heritage features of the property;
  - iii) establishing criteria for the approval of any development affecting the heritage property.
- d) A local Council will use its best efforts to obtain, in consultation with the Heritage Committee, documentation for archival purposes which may include a history, photographic record and measured drawings, of cultural heritage resources which are to be demolished or significantly altered.

### 2. County of Wellington Official Plan: May 6, 1999 (Last Revision June 1, 2018)

The following policies apply throughout the County of Wellington for the conservation of cultural heritage resources:

#### **CULTURAL HERITAGE and ARCHAEOLOGICAL RESOURCES**

Cultural heritage and archaeological resources form an important and in many cases highly visible part of the community fabric. These resources are a source of civic pride for the residents, a benefit to the local economy through tourism, and are important to our understanding of the settlement of the County. The policies of this Plan, in conjunction with the Ontario Heritage Act, provide a framework for the protection and enhancement of cultural heritage resources in Wellington County

### **Built Heritage**

Wellington County has a rich history reflected in many buildings and structures, either individually or in groups, which are considered to be architecturally or historically significant to the community, county, province or country.

### **Cultural Heritage Landscapes**

A cultural heritage landscape is a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act, and villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways and industrial complexes of cultural heritage value.

For cultural heritage landscapes to be significant, they must be valued for the important contribution they make to our understanding of a place, an event, or a people.

### **Archaeological Resources**

The past settlement of Wellington forms an important aspect of our community. Traces of human settlement both recent and long past are recognized as important elements of our history and culture. Archaeological resources include a property or area recognized by the Province as being archaeologically significant.

### **Identifying Cultural Heritage Resources**

Cultural heritage resources include, but are not necessarily restricted to the following criteria under Ontario Regulations 9/06 issued under the Ontario Heritage Act.

- a) A property has design value or physical value because it:
  - i) is a rare, unique, representative or early example of a style, type, expression, material or construction method,
  - ii) displays a high degree of craftsmanship or artistic merit, or
  - iii) demonstrates a high degree of technical or scientific achievement.
- b) A property has historical value or associative value because it:
  - i) has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,
  - ii) yields, or has the potential to yield, information that contributes to an under-standing of a community or culture, or
  - iii) demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
- c) A property has contextual value because it:
  - i) is important in defining, maintaining or supporting the character of an area,

- ii) is physically, functionally, visually or historically linked to its surroundings, or
- iii) is a landmark.

### **Heritage Areas**

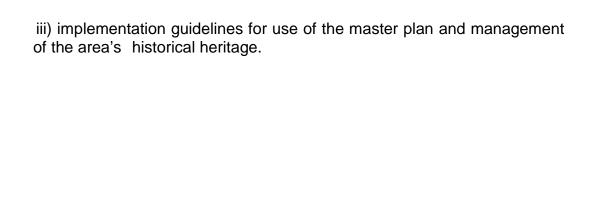
This Plan may identify a Heritage Area for the purposes of regulating land use under the Planning Act.

It is the policy of this Plan that any development, redevelopment or public work shall respect the goals and objectives relating to the protection and enhancement of heritage resources. Development projects requiring planning approval which are of a size, scale or character not in keeping with the surrounding heritage resources shall not be allowed. The Heritage Area is broadly defined and contains many buildings which are not heritage resources. The intent of the Heritage Area is to identify an area in which a significant number of buildings contain heritage values and to ensure proper consideration is given to protecting these buildings when development proposals are put forward. A Heritage Area is not a Heritage Conservation District under the *Ontario Heritage Act*.

### **Policy Direction**

- a) significant built heritage resources and significant cultural heritage landscapes shall be conserved. Conserved means the identification, protection, use and/or management of cultural heritage and archeological resources in such a way that their heritage values, attri- butes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment in accordance with Section 4.6.7.
- b) The need for a Heritage Impact Assessment and/or Conservation plan will be based on the heritage attributes or reasons for which the resource is identified as significant, and will normally be identified in pre-consultation on development applications.
- c) Wellington County will work with its local municipalities to identify significant cultural heritage landscapes. The identification of significant cultural heritage landscapes shall be implemented through at least one of the following options:
  - i) Added to an Official Plan through an Amendment that shows the resource as an overlay designation on the Schedule, and adds site-specific policies where needed;
  - ii) included in the municipal register of properties that Council considers to be of cultural heritage value or interest but have not been designated;
  - iii) Designated under the Ontario Heritage Act.

- d) The need for a Heritage Impact Assessment
- e) Wellington will encourage the conservation of significant built heritage resources through heritage designations and planning policies which protect these resources.
- f) The re-use of heritage buildings is often a valid means of ensuring their restoration, enhancement or future maintenance. Projects to re-use heritage buildings may be given favourable consideration if the overall results are to ensure the long term protection of a heritage resource and the project is compatible with surrounding land uses and represents an appropriate use of land.
- g) Where a property has been identified as a protected heritage property, development and site alteration may be permitted on adjacent lands where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved. Mitigative measures and/or alternative development approaches may be required in order to conserve the heritage attributes of the protected heritage property affected by the adjacent development or site alteration.
- h) The County recognizes the important cultural significance of the Grand River as a Canadian Heritage River, and the need to conserve its inherent values.
  - i) Where development and site alteration is allowed, significant archaeological resources must be conserved. Such resources will be conserved through removal, and documentation, or preservation on site. Where significant archaeological resources must be preserved on site, development and site alteration will only be allowed if the heritage integrity of the site is maintained.
  - j) Where the County has determined a proposed development has areas of archaeological potential, an assessment of the property will be required to identify archaeological resources. Resources identified and determined to be significant will be conserved. The County may also require parts of a site to be excluded from development in order to maintain the heritage integrity of the site.
  - k) The County or local municipality may develop an archaeological master plan to be used as a planning tool where addressing archaeological conservation concerns. The principal components of the master plan would be:
  - i) an inventory of all registered and known archaeological sites in the County;
  - ii) archaeological potential mapping based on locally relevant criteria;





#### **REPORT FIN-2019-022**

TO: Mayor and Members of Council

FROM: Mary Hasan, Director of Finance/Treasurer

MEETING DATE: May 15, 2019

SUBJECT: Asset Management Plan and Policy Approval

File No's. F06ASS and A09ASS

#### RECOMMENDATIONS

That Report FIN-2019-022 regarding the Asset Management Plan and Policy Approval be received; and

That Council adopt in principle the Asset Management Plan prepared by Urban and Environmental Management Inc. and DFA Infrastructure International attached as Schedule A to Report FIN-2019-022; and

That the Asset Management Plan be utilized to assist the Township with identifying and prioritizing the long term needs of its infrastructure; and

That the Asset Management Plan be used as a tool for the Township's Capital Program; and

That the service levels outlined in Section 5.0 of the Asset Management Plan be approved; and

That the Asset Management Policy in Section 20.4 of the Asset Management Plan be adopted.

#### Background

The Province of Ontario passed Ontario Regulation 588/17 in late 2017, requiring that all municipalities prepare an Asset Management Policy and Asset Management Plan that provides for the cost-effective management of assets.

The key elements of the Asset Management Policy and Asset Management Plan are as follows:

Provide defined levels of service and monitoring performance;

- Manage the impact of growth through demand management and infrastructure investment;
- Take a lifecycle approach to develop cost-effective management strategies for the longterm that meet defined levels of service;
- Identify, assess and appropriately control risks; and
- Develop a long-term financial plan that identifies required expenditures and how the plan will be funded.

### <u>Purpose</u>

The purpose of this report is present to Council the final report for the Asset Management Plan and Asset Management Policy which was presented in draft form to the public on February 5th, 2019. Comments from the public received are identified in the Final Report and include Urban and Environmental Management's response to such comments.

### **Financial Implications**

Discussed throughout the Asset Management Plan

### **Applicable Legislation and Requirements**

Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure

#### **Attachments**

Schedule A - The Township of Puslinch Asset Management Plan

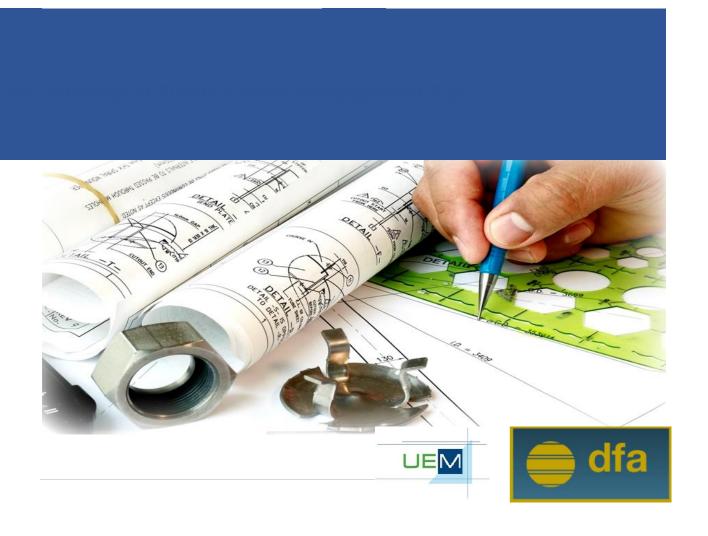


Wayne Wood P. Eng. Urban and Environmental Management 120 Colborne St, Brantford, ON N3T 2G6 UEM Project: 18-400 Date: April 2019

### PREPARED FOR:

### The Township of Puslinch

Mary Hasan, Director of Finance/Treasurer 7404 Wellington Road 34 Puslinch, Ontario NOB 2J0







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# 1.0 Executive Summary

# 1.1 Regulation 588/17

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

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

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

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

#### 1.2 The Asset Registry

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





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

ES - 1 Puslinch Asset Classes

#### 1.3 Levels of Service

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

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

# 1.4 Factors Affecting Levels of Service

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

 Community Expectations: This factor represents one of the major drivers in setting levels of service. Information is needed about the community's expected level of service







and willingness to pay for this service. A balance then needs to be determined between that expected level of service and its associated costs.

- **Legislative requirements:** Legislative standards and regulations affect the way assets are managed. These requirements stipulate the minimum levels of service. Therefore, relevant requirements must be taken into consideration in setting levels of service.
- Policies and objectives: Existing policies and objectives should be considered when developing levels of service, with care taken to remain aligned with an organization's strategic planning documents.
- Resource availability and financial constraints: These constraints play a large role in an organization's ability to provide sustainable levels of service. Therefore, resource constraints play a significant part in determining affordable levels of service.

# 1.5 The Process of Developing a Level of Service Analysis

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

**Levels of Service:** Compliance with all legislated requirements, protect and uphold public safety, community wellbeing and the environment; and, reliably meets the informed expectations of stakeholders and the public.

# Level of Service Analysis can involve:

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

#### 1.6 Developing Levels of Service

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

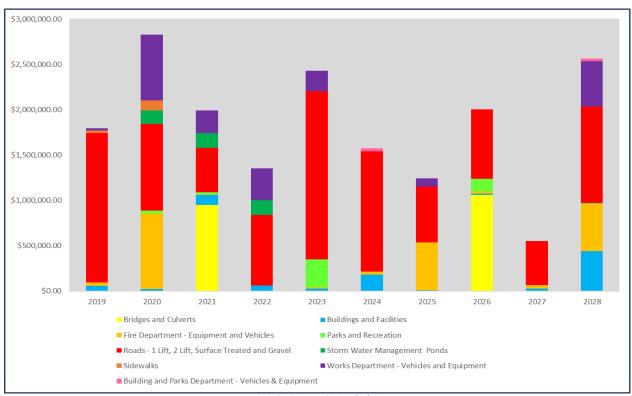




Based upon discussions with Staff and input from Council a series of Level of Service policies were developed and may be found in Section 5 of the Asset Management Plan.

# 1.7 10 Year Capital Plan

Based upon the asset registry which includes all physical assets, associated condition, age, and rehabilitation costs as well as Levels of Service, a 10-year capital plan was developed to model both Static (linear deterioration curve) and dynamic inputs (staff intervention). The following bar chart illustrates the 10-year capital plan.



ES - 2 10 Year Capital Plan

#### 1.8 Financial Plan

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

The use of long-term debt is also necessary to undertake the capital plan in years where available capital financing, including funds within capital asset related reserves, are insufficient to finance the capital plan. Financial policies that govern the level of debt, the capital related reserves, and asset replacement funding are also discussed with policies recommended for the implementation of the financial strategy in Section 12 and 13 and 18.3.



# 1.9 Public Engagement

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

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

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

The public was encouraged to provide comments on asset management topics in general. A presentation in regard to the Asset Management Plan was posted online on the Township's website. A public meeting was held on February 5, 2019 in the Council Chambers of Puslinch. The Sign-in-sheet indicated that 7 individuals attended. As of February 8<sup>th</sup>, two emails were received by the Township.

Verbal comments of concern were as follows:

- 1. There is a need to establish a process that would allow the surface treatment of gravel roads or the paving of roads on which there are homes.
- 2. There was concern in regard to Old Morriston Park and the need for improvements that are not in the Township capital budget.

Verbal areas of clarification were as follows:

- 3. The methodologies used in order to quantify the condition of building components.
- 4. The methodologies used in determining the need for upgrading gravel roads.
- 5. The methodologies used to define level of service policies and their technical levels of service.

Areas of concern in the emails were as follows:

- 6. Service Level Policy for Gravel Roads.
- 7. Lack of Data in regard to condition of Gravel Roads.
- 8. Change in condition of roads to poor.
- 9. Opinion not to borrow money.
- 10. Staff levels for Fire Department and Township as whole.







The preparation of this project was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them."





# 2.0 Introduction

# 2.1 Township of Puslinch Overview

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

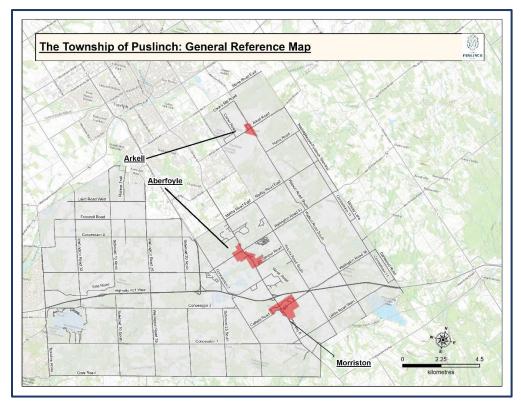
The Township has its own Strategic Plan, with the current version dated 2015 to 2020. Its mission statement is as follows: "Progressing together to provide reliable and sustainable services to our residents, businesses and visitors. We will protect our resources while respectfully building upon our heritage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

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

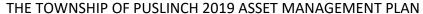
# 2.2 Township of Puslinch: General Information

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

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



2.0 - 1 Township Map





# 2.3 The Goal of Asset Management and Key Elements

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

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

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

# 2.4 The Need for Asset Management

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

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

#### 2.5 Defining Sustainability

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



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

# 2.6 Provincial Requirements for Asset Management Plans

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

# 2.7 Asset Management Policies

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

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

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

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

#### 2.8 Asset Management Plans

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

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- i. Storm Water Management
- ii. Roads
- iii. Bridges and/or Culverts

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

# 2.9 Information Technology Systems Strategy

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

# 2.10 Project Deliverables

The project scope involved developing the following deliverables:

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

#### 2.11 Data and Information Provided

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

Condition Assessments, Inspec	tions, Policy and Insurance
2013 Asset Management Plan	2017 Bridge and Culvert Inspection
2016 Pavement Condition Index Report	2017 Storm Water Management Pond Inspection Report
2008 Road and Bridge Inventory Report	2008 Asset Valuation Report
2014 Building Inspection Report	Playground Equipment Inspection
Development Charges By-Laws	Insurance Schedules
Equipment Replacement Schedule	2019 Capital Budget and Forecast







<u>Delivered Items</u>			
Master Plans			
Community-Based Strategic Plan 2015	Community Improvement Plan 2016		
Puslinch Master Fire Plan	Puslinch Space Needs Analysis		
Recreation and Parks Master Plan	Parks Master Plan – Puslinch Community Centre		
Financial Po	licies		
Investment Policy	Asset Maintenance Trust Fund Program – Council Resolution No. 2014-271		
2017 Fleet Management Policy	Procurement Policy		
Commodity Price Hedging Policy	Financial Policies regarding Establishment and Contribution to Reserves		
Financial Administration and Budget Management	Sale and Other Disposition of Land Policy		
Lease Financing Agreement Policy	Tangible Capital Asset Policy		
Reserve Balances	<u>Documents</u>		
Balances in Discretionary and Restricted Reserves			
Debt Docum	nents		
Amortization Schedule			
<u>Tax Lev</u>	Y		
2017 Final Tax Levy By-Law	2018 Final Tax Levy By-Law		
Tangible Capita	l Listing		
Asset Acquisition List - 2013	Asset Acquisition List - 2014		
Asset Acquisition List - 2015	Asset Acquisition List - 2016		
Asset Acquisition List - 2017	Fixed Asset List 2017		
Service Le	vel		
2010 Fire Establishing By-law	Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways		



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

2.0 - 2 Delivered Documents

# 2.12 Project Methodology

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







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

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

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

# 2.13 Reference Documents for Asset Management

The following documents were utilized in preparing both the Asset Management Policy and Asset Management Plan for the Township of Puslinch.

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

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

# 2.14 Objectives

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

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

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







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

# 2.15 Strategic Plan

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

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

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



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	Fire Master Plan	Incorporate and implement the
	Service Levels and	outcomes of the decisions made on the
	Recommendations	Fire Master Plan recommendations into
		the Township's service delivery standards
		and budget, 2016–2024.
	Recreation and	Incorporate and implement the
	Parks Master Plan	outcomes of the decisions made on the
	Service Levels and	Recreation and Parks Master Plan and
	Recommendations	the ORCP Ad-hoc Committee into the
		Township's service delivery standards
		and budget, 2016–2024.
	Service Delivery	i.) Identify other areas for review i.e.
	review – Other	Public Works, Governance.
	Departments	ii.) Report to Council with an action plan
		to define and outline the departmental
		service delivery items.
		iii.) Report to Council with a proposed
		schedule for review of other
		departments.
		iv.) Incorporate and implement the
		outcomes of the decisions made into the
		Township's service delivery standards,
		2018-2024.
•	2 N - 2 Strategic Di	la ca

2.0 - 3 Strategic Plan

# 2.16 Upper Tier Influences

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

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

# 3.0 Climate Change

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







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

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

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

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

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

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

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

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





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Adaptive strategies fall into three categories:

- 1. protect
- 2. accommodate
- 3. retreat

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

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

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

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

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

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







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

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

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

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

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

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

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

# 4.0 Level of Service Policies

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

Initially, current levels of service were documented as well as the annual cost to each service delivery. Any higher-level service, even at a cost of delivery, in all likelihood will require an







increase in budget. However, such an increase in budget may be justified if a service level change is required to achieve compliance with regulation codes or standards.

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

A Levels of Service analysis includes:

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

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

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

#### 4.1 Identifying Services

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

#### 4.2 Service Reviews

Given that the asset management planning process is in place to determine how assets will provide services to residents and other stakeholders, the identification of services is a critical







"first step" to initiate the Levels of Service analysis. Municipalities provide all of the legally mandated services, as well as other services desired by the residents. The development of a "service-centric" asset management process entails understanding and answering the following questions for all services:

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

# 4.3 Factors Affecting Levels of Service

Several factors affect the levels of service delivery for particular asset types. The Township's policy objectives, community expectations, legislative requirements, and resource constraints are some of the factors that generally influence the levels of services. Some factors are as follows:

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

# 4.4 Current vs Expected Levels of Service

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

UEM

Levels of service are differentiated between:

- Community Expectations: Based on what the customer and community expect to receive;
- Customer Levels of Service: Measuring community expectations against attributes such as reliability, quality, safety, efficiency, and capacity. Outlines what the customer will receive from a levels of service standpoint; and
- Technical Levels of Service: How Puslinch will provide the levels of service, often using operational or technical measures.

# 4.5 The Process of Developing a Levels of Service Analysis

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

#### Levels of Service analysis can involve:

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

#### 4.6 Defining Customer Expectations

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

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

Involving Council and/or public in the process of defining customer expectations provides a direct connection between the community and their expectations that may not be identified through other sources. Other sources can involve assumptions and estimations of customer



expectations. Such direct public impact can be determined by way of public meetings and submission of comments from the public.

# 4.7 Developing Levels of Service

To be effective in developing levels of service, input should be gathered from and communicated to all interested parties. The services being provided, and the community expectations should be documented based upon input from applicable departments and their staff. Levels of service policies must be created and approved by Council.

# 4.8 Consultation, Communication, and Approval

The Levels of Service analysis was completed in 'draft form'. Consultation and Communication was a process that needed to occur to finalize approval of levels of service. From a consultation and communication point of view a public meeting was scheduled to review the draft Levels of Service analysis and to provide feedback. Stakeholders included other staff members, Council, and the public.

The levels of service are approved through the adoption of the Asset Management Plan.

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

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

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

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

# 4.10 Comparing Current Levels of Service to Expected Levels of Service

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







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

# 5.0 Levels of Service Policies

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



# 5.1 Bridges and Culverts

Regulation 588/17 Asset Group: Core Municipal Assets

Major Asset Class: Bridges and Culverts

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

Township Bridges and Culverts are inspected by a Professional Engineer every two years.

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

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

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

# **Lifecycle/Deterioration Rate:**

Expected Life of 50 Years for all Bridge and Culvert Structures.

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

Health and Safety
Financial
Legal/Regulatory Compliance
Environmental

#### **Budget Implications**

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

#### **Source Documents**

Ontario Structure Inspection Manual.

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





#### 5.2 Gravel Roads

Regulation 588/17 Asset Group: Core Municipal Assets

Major Asset Class: Gravel Roads

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

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

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

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

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

- Full regrading is completed more than 6 times during each of two consecutive non-winter periods. The non-winter period is from May 1st to November 1st; and
- an inspection of the gravel base has been completed by a qualified engineer and confirms that the road base can support a hard-top surface, without additional construction required; and
- the average daily traffic volume exceeds 400 vehicles;
   and
- the Township has approved funding for the project.
   For all gravel roads that have been fully graded following the half load season, the PCI will be assumed to be 90.

Note: Regrading is triggered by the following:

- Frost leaving the gravel road.
- Pot holes in the gravel road.
- Rainfall resulting in a significant number of washouts.
- Rutting due to truck traffic.

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

5 PCI points adjustment per grading.

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

Health and Safety Financial

#### **Budget Implications**

Inspection of Gravel Base \$6,000 per average from intersection to intersection as required.

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

Gravel Road Study: \$25,000

#### **Source Documents**

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

Gravel Road Management, Wyoming Technology Transfer Center Sept 2010

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





#### 5.3 Hard Surface Roads

Regulation 588/17 Asset Group: Core Municipal Assets

Major Asset Class: Hard Surface Roads – 1 Lift, 2 Lift & Surface Treated Roads

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

The 2013 Asset Management Plan and 2016
Pavement Condition Index (PCI) Report indicated that
the Township will strive to maintain all hardtop and
non-paved roads in a good to fair condition. For hard
surface roads, this will approximately correspond to a
PCI value of 65 or greater. The 2013 Asset
Management Plan recommended completing a full
PCI update every 5 years.

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

Class 3 roads be rehabilitated or reconstructed at a PCI of 65

Class 4 roads be rehabilitated or reconstructed at a PCI of 60

Class 5 roads be rehabilitated or reconstructed at a PCI of 60

Surface treated roads be rehabilitated every 7 years

The pavement condition index should be renewed in 2021 and should be renewed every 5 years thereafter. A traffic volume study should be undertaken every 5 years beginning in 2020.

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

# **Lifecycle/ Deterioration Rate**

1 Lift and 2 Lift Roads:

Based upon a deterioration rate of 2 PCI points per year the condition decreases from 100 to 60 over 20 years.

**Surface Treated Roads:** 

Based upon a fixed deterioration rate; Surface Treated Roads should be remediated every 7 years

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

Health and Safety Financial

#### **Budget Implications**

Traffic Volume Study, \$25,000 every 5 years.

Pavement Condition Index Report, including the need to evaluate the condition of existing gravel and surface treated roads, \$24,500 every 5 years

#### **Source Documents**

2016 Pavement Condition Index Study.

2011-2017 Traffic Volume Data.





# **5.4 Storm Water Management Ponds**

Regulation 588/17 Asset Group: **Core Municipal Assets** Major Asset Class: **Storm Water Management Ponds** 

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

The Township completes visual, non-documented inspections of storm water management ponds as part of routine road inspections.

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

Inspection of storm water management ponds should occur on average four times per year during the first two years of operation, and then at least annually.

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

# **Lifecycle/ Deterioration Rate**

50 years for pond components and 20 years for Hicken bottom.

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

Environmental Legal/Regulatory Compliance

#### **Budget Implications**

The estimated annual cost of storm water management pond inspections is \$5000.

#### **Source Documents**

Section: 6:3:1 Storm Water Management Planning and Design Manual – Ontario.







# 5.5 Storm Water Management Systems

Regulation 588/17 Asset Group: Core Municipal Assets Major Asset Class: Storm Water Management Systems

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

The Township does not annually inspect the storm water management systems or clean the storm water management systems as required to minimize the movement of silts through the outlets. The Township externally contracts the cleaning out of catch basins every two years as required.

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

In reference to catch basin cleaning, as a general rule it should be done annually but the frequency should be adjusted based upon the volume of material removed. Inspection of storm water management systems should occur on average four times per year during the first two years of operation and then at least annually.

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

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

50 year expected life.

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

Environmental Legal/Regulatory Compliance

#### **Budget Implications**

The estimated annual cost of storm water management systems inspections is \$5,000.

Catch basin cleaning \$1,200 per km.

#### **Source Documents**

Section 4:2:3 Storm Water Management Planning and Design Manual – Ontario)

Section 6:2:3 Storm Water Management and Planning Design Manual – Ontario





# 5.6 Street Trees

Regulation 588/17 Asset Group: Green Infrastructure

Major Asset Class: Street Trees

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

The Township completes required maintenance of trees but there is no schedule for inspection.

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

This service level policy includes all trees that have been assumed by the Township through a development agreement. Subsequent to planting a tree the agency or company planting trees shall be responsible with all maintenance including pruning and replacement if necessary. After acceptance by the Township, the tree shall be inspected after 10 years and shall be inspected every 5 years thereafter to determine any required maintenance.

The Township will hire an arborist or potentially the services of the University of Guelph to visually inspect only the trees planted in the subdivisions within the Township.

It is recognized that there are numerous trees on public lands and road rights of way that may impact the safety of the public and maintenance activities. The Township overtime should document the location of such trees, their condition and required maintenance. However, staff shall develop a tree program taking into consideration the above and present such a program to Council.

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

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

50 Years Expected Life.

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

Environmental

#### **Budget Implications**

Tree Inspections \$6,000 on the year of inspection.

#### **Source Documents**

UEM Professional Recommendation.





# 5.7 Buildings and Facilities

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Buildings and Facilities

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

The Township's last Building Condition Assessment (BCA) report was completed in 2014. The BCA report recommended completion of an Arc Flash Study for all electrical equipment in the Township's facilities. The Township has not completed an Arc Flash Study at this time. The BCA report recommended that as part of a regular operations and maintenance program that all equipment and wire terminations be investigated via infrared scanning every 3 to 5 years. The Township has not completed infrared scanning of all equipment and wire terminations at this time.

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

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

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

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

# Lifecycle/ Deterioration Rate

50 Years Expected Life.

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

**Financial** 

#### **Budget Implications**

Building Condition Assessment \$25,000.

Infra-Red Scanning \$3,000.

Arc Flash Study \$7,500.

#### **Source Documents**

2014 Building Condition Report.

Ontario Electrical Safety Code (OESC).

UEM



### THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

### 5.8 Fire Equipment

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Fire Equipment

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

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

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

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

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

### **Lifecycle/ Deterioration Rate**

Varies depending on type of equipment.

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

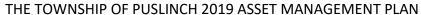
Health and Safety
Internal Demand/Operational
Financial

### **Budget Implications**

No significant budget implications.

#### **Source Documents**

National Fire Protection Association Standards.





#### 5.9 Fire Reservoirs

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Fire Reservoirs

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

The Township completes annual documented inspections of fire reservoirs in accordance with Ontario Fire Code 213/07 and NFPA Standard 25 for the inspection and maintenance of all municipally owned fire reservoirs.

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

The Fire Department shall on an annual basis inspect all fire reservoirs owned by the Township in accordance with the Ontario Fire Code 213/07 and NFPA Standard 25 to ensure that such fire reservoirs can be easily accessible and that any components above the roof of the reservoir are in good condition. Such reservoirs shall not be obstructed by vegetation of any form such as plants, bushes and trees.

The Fire Department shall inspect the reservoirs every 5 years to ensure the integrity of the reservoir.

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

### **Lifecycle/ Deterioration Rate**

50 Years Expected Life.

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

Internal Demand/Operational Financial

### **Budget Implications**

No significant budget implications.

#### **Source Documents**

UEM Professional Recommendation.



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

Regulation 588/17 Asset Group: **Municipal Assets**Major Asset Class: **Fleet – Various Departments** 

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

All Commercial Motor Vehicles owned by the Township require an Annual Inspection Certificate as required by the Ministry of Transportation (MTO).

#### Fire and Rescue Services Fleet:

- Visual non-documented 360-degree inspection prior to the fleet leaving the Fire Station.
- Weekly documented MTO Schedule 1 Inspection completed for commercial motor vehicles.
- Fire and Rescue Services fleet require annual testing of pumps and aerial devices (i.e. ladders) in accordance with NFPA Standard 1911.
- Non-destructive testing of aerial devices (i.e. ladders) is required every 5 years in accordance with NFPA Standard 1911.

#### **Public Works Fleet:**

• Daily documented MTO Schedule 1 Inspection completed for commercial motor vehicles.

#### Non-commercial motor vehicles (i.e. Pick-up trucks):

• Daily documented inspection logbook completed for all non-commercial motor vehicles.

### **Lifecycle/ Deterioration Rate**

Varies from 7-25 years by vehicle type.

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

Internal Demand/Operational Financial

### **Budget Implications**

No significant budget implications.

#### **Source Documents**

Fleet Management Policy: Puslinch

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

Fleet shall be maintained in conformance with licensing practices of the Province of Ontario including the Ministry of Transportation and shall include a daily visual inspection of any licensed vehicle before the vehicle leaves the fleet storage facility of the Township. Fleet of the Township shall be determined for replacement based on the criteria noted in the Fleet Management Policy. Inspection of fire and rescue services vehicles shall also be based on relevant NFPA standards.

Further to the proposed service level policy described above. It is recommended by UEM that the Township retain their current service level policy.

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





#### 5.11 Parks and Recreation

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Parks and Recreation

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

The Township completes visual, non-documented weekly inspections of parks while performing maintenance activities.

The Township completes monthly documented playground inspections.

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

All Parks and Recreation facilities including but not restricted to baseball diamonds, baseball diamond lights, soccer fields, tennis courts and trails available for public use shall be inspected as frost leaves the ground in late winter or early spring to ensure the safety of such Parks and Recreation assets. Included are both internal and external fencing, hard surfaces, bleachers and any other ancillary assets located within Parks and Recreation areas. Upon identification of any surface deficiencies that may endanger the public repairs shall be undertaken prior to such infrastructure being deemed available for public use.

Subsequent inspections should occur monthly until Parks and Recreation assets are closed prior to the winter season.

For assets, an example being "Trails" that may be open for public use throughout the winter inspections shall occur following winter storms to ensure the safety of the public.

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

### **Lifecycle/ Deterioration Rate**

Varies from 15-40 years depending on asset type.

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

**Financial** 

### **Budget Implications**

No significant budget implications.

#### **Source Documents**

UEM Professional Recommendation.





### 5.12 Regulatory Signs/Warning Signs

Regulation 588/17 Asset Group: Municipal Assets Major Asset Class: Regulatory Signs/Warning Signs

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

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

# Lifecycle/ Deterioration Rate

15 years expected life for sign and post.

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

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

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

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

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

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

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

#### **Budget Implications**

No significant budget implications.

#### **Source Documents**

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



#### 5.13 Sidewalks

PUSLINCH

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Sidewalks

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

The Township completes annual documented sidewalk inspections.

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

In accordance with Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways, the standard for the frequency of inspecting sidewalks is once per year with each inspection occurring no more than 16 months from the previous inspection. Any discontinuity that exceeds 2cm shall be treated or repaired within 14 days of the inspection.

Under winter conditions sidewalks must be inspected within 48 hours of the end of snow accumulation to ensure that there is less than 8cm of snow accumulated on the sidewalk and to reduce to the level of 8cm within the same 48-hour period. The same time period of 48 hours shall apply when ice forms on a sidewalk and shall require either removal or a treatment such as sand, salt or a combination of both to the sidewalk within the same 48-hour period.

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

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

20 year expected life.

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

Financial

#### **Budget Implications**

Sidewalk Winter Maintenance \$20,000 annually using staff or contracted clearing.

#### **Source Documents**

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





### 5.14 Street lights and Poles

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Street Lights and Poles

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

The Township completes visual, non-documented yearly inspections to note any light deficiencies.

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

All luminaires shall be inspected once per calendar year with each inspection taking place not more than 16 months from the last inspection. The standard of repair should be as outlined in Section 10 of Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways. The same standard of inspection shall apply to luminaire arms and poles and supporting luminaires that are owned by the Township.

The technology with streetlighting is evolutionary at the present time in Puslinch. The Township is in the process of modifying their streetlighting to LED fixtures while maintaining existing fixtures and poles. After the completion of the conversion to LED fixtures, the policy should be to replace fixtures in a cyclical manner every 20 years. Poles should be inspected by a qualified company/individual every 5 years to determine the need to replace based on a pole life of 30 years.

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

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

30 year expected life for poles and 20 years for fixtures.

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

Health and Safety

### **Budget Implications**

\$20,000 for testing every 5 years.

#### **Source Documents**

Section 10, Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways.







### **5.15** Sewage Assets

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

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





### 5.16 Water Assets

Regulation 588/17 Asset Group: Municipal Assets

Major Asset Class: Water Treatment Plants. Water Pumping Stations, Water Storage

Facilities, Raw Water Supply, Water Distribution Mains

Township Current Level of Service Policy:	Lifecycle/ Deterioration Rate
	Consequence of Failure items
UEM Proposed Level of Service Policy:	impacted by failure to achieve
Orivi Proposed Level of Service Policy.	service level:
	1
	Budget Implications
	Source Documents







### 5.17 Parklands

Regulation 588	/17 Asset Grou	up: Green Infrastructure
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Major Asset Class: Parklands

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





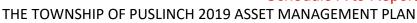
## 6.0 The Asset Registry

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

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

6.0 - 1 Asset Class Hierarchy

This asset registry was developed through the incorporation of all departments input data. Because of the all-inclusive design of the asset registry the Township of Puslinch may assume that the data in this report is the most current. Further, updating is highly recommended to







begin first from this asset registry and amendments should occur through a qualified QA/QC process of the existing assets. The copy of the asset registry may be found in Appendix 20.5.

### **6.1** Types of Asset Attributes

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

Parameter	Yes	No	Description of use
Asset Identifiers,	,		To identify, describe and locate the asset. Will also
Location, and Descriptors	<b>√</b>		define asset in terms of position in an asset hierarchy.
Detailed Technical Data	1		To individualize and quantify each asset from similar
Detailed Technical Data	<b>v</b>		assets.
			Data that allows the organization to assess costs of the
Valuation Data	✓		assets (both historical and current) and record/track
			amortization.
Maintenance Data		<b>√</b>	Data that identifies the work to be completed and
- Wallite Hallee Bata		<b>V</b>	work completed against an asset.
Condition Data	1		Data used to assess asset risk and determine the
Condition Data	<b>v</b>		actual remaining useful lives of assets.
			Data used to allow future behaviour of assets to be
Predictive Data		✓	predicted. These would include deterioration curves
			and treatment effect details.
			Data recording demand and capacity performance.
Performance Data		<b>√</b>	Unplanned maintenance activity is recorded against
Terrormance Data		<b>~</b>	asset including cause and costs. Planned maintenance
			procedures adopted for critical assets.
Risk Data	<b>√</b>		Data used to analyze the risk of an asset's failure and
Nisk Data	<b>V</b>		determine the risk if the asset were to fail.
			Data used to plan future costs associated with
Lifecycle data	<b>√</b>		operations, maintenance, creation, renewal, disposal
Lifecycle data	<b>V</b>		of assets. The cost of any strategy should also be
			determined.
			Data used to optimize analysis of works considering
Optimized Lifecycle Data			the following factors: risk, maintenance, operations,
Optimized Lifecycle Data		$\checkmark$	life extension, age and condition of the asset, asset
			decay, treatment options, and cost.

6.0 - 2 Types of Asset Attributes



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

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

#### 6.3 Detailed Technical Data

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

#### 6.4 Condition Data

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

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

Asset Class	Condition Rating Methodology
Bridges and Culverts	Staff provided report
Hard Surface Roads	Staff provided report
Gravel Roads	Consultation with staff
Storm Water Management Ponds	Staff provided report
Storm Sewers	Consultation with staff
Buildings and Facilities	Staff provided report
Fire Reservoirs	Staff provided data
Parks and Recreation	UEM visual condition assessment
Fire Vehicles	Consultation with staff
Fire Equipment	Staff provided data
Street Trees	Consultation with staff
Sidewalks	UEM visual condition assessment
Works, Building Department and	Consultation with staff
Parks and Recreation Vehicles	Constitution With Stan
Regulatory/Warning Signs	Consultation with staff
Street Lights	UEM visual condition assessment

6.0 - 3 Asset Condition Data Rating Methodology





#### 6.5 Assets with No Condition Data

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

#### 6.6 Condition Data: Standardization

To standardize all condition data UEM employed a 1-5 rating scale. This scale ensured that assets could be incorporated into the same data model and analyzed without assets being over or under-prioritized. A sample of this standardization process has been showcased in the following table:

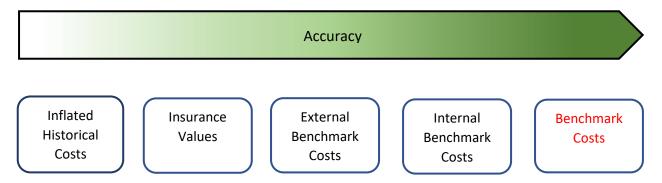
Asset Class	Condition Rating Type	Condition Rating	Condition Index	Condition Index Methodology
Bridges & Culverts	BCI	70	3	Good: BCI Range 70 -100 Fair: BCI Range 60 -70 Poor: BCI Less than 60
Roads	PCI	99	5	UEM standardized condition for Roads where a PCI of 100 converts to 5 for "Excellent', 90 converts to a 4 for "Good", 80 converts to a 3 for "Fair", 70 converts to a 2 for "Poor", and 60 or fewer converts to a 1 for "Critical"
Regulatory /Warning Signs	Condition Rating	5	5	Provided datasets from the Township were already standardized - no intervention required.
Fleet	Fleet Kilometres	55,000	3	UEM adhered to the Township's Current Fleet Management Policy when standardizing each vehicle in the fleet. Each vehicle type has their own metric for determining condition. Further clarification of methods, procedures can be identified more clearly in the Asset Registry.
Fire Equipment	Condition Rating	5	5	Provided datasets from the Township were already standardized - no intervention required.
Park and Recreation	Visual Condition Rating	2	2	UEM through a visual inspection of park and recreation assets devised a condition rating based on the total assessment of each part of the park and recreation asset. In some cases, low condition ratings were given to asset due to the lack of adherence to regulations or codes.

6.0 - 4 Condition Rating Standardization



#### 6.7 Valuation Data: Remediation Costs

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



6.0 - 5 Valuation Methodology

### 6.8 Valuation Data: Replacement Costs

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

- Hard Surface Roads
- Gravel Roads
- Surface Treated Roads
- Parks and Recreation
- Sidewalks
- Regulatory/Warning Signs
- Bridges and Culverts
- All Fleet Assets

- Trees
- Fire Equipment
- Fire Reservoirs
- Regulatory/Warning Signs

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

A summary of the specific methodology for remediation cost and/or replacement costs has been summarized in greater detail in the summary page for each asset class in Section 7.0.

#### 6.9 Data Confidence

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



The Data Confidence Score devised from Figure 7 Table will help the Township identify which assets need more attention.

#### 6.10 Data Confidence Trend

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

To clarify, the Data Confidence Trend is a balance between multiple factors which in the summary indicates the current trend of data quality that has been collected by the Township over time. Using multiple sources of confidence (as showcased in the below stated table 6.0 - 6) a rating methodology of data confidence was devised. Where a 100% confidence means the data can be taken essentially as fact whereas 0% confidence means that the data should be verified in the future.

The (%) for valuation is the confidence of the financial data that has been loaded into the asset registry. The reliability of the summarized trends in data confidence is exclusively related to UEMs understanding of the Township's current policies and practices, data sources and or verification from staff.

Example Factors	High Confidence	Moderate Confidence	Low Confidence
When was the date of data collection?	Data is up to date	There needs to be changes to the data since it's been collected	There are many changes required since it's been collected
What is the relative completeness of the Dataset?	The Data is fully complete and present for the data set	The Data is partially complete and present for the data set	The Data is not complete and present for the data set
What is the source of the data source?	Qualified Consultant/Firm	Unconfirmed Sources	Personal Accounts, Undocumented Sources
Is there Staff confirmation of the reliability of the data?	Full Confirmation across departments	Partial Confirmation to some Departments	No Confirmation from Departments

6.0 - 6 Condition Rating Standardization





Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
Bridges Culverts	100%	75%		<ul> <li>The Inventory data is extensive as it relates to bridge and culvert structures.</li> <li>In 2017 a Bridge and Culvert Inspection was completed which gave a detailed summary of the recommended capital expenditure of the Bridge and Culvert structures over 10 years.</li> <li>The Value of each crossing has been compiled from the Bridge and Culvert Inspection report.</li> </ul>
Hard Surface Roads	75%	85%		<ul> <li>The Inventory data is extensive and has been compiled from the 2016 Road Condition Assessment with further adjustments being completed through consultation with Staff.</li> <li>The Township does not currently follow lifecycle event schedule set out by the condition data.</li> <li>The Valuation of each road segment has been formulated from consultation with staff.</li> </ul>
Gravel Roads	25%	85%		<ul> <li>The Inventory data has been completed through consultation with staff.</li> <li>The Township currently does not have a formal policy for documenting gravel road condition.</li> <li>The Valuation of each road segment has been formulated from consultation with staff.</li> </ul>





Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
Regulatory/ Warning Signs	100%	100%		<ul> <li>The inventory data has been delivered by staff in multiple data formats with extensive detail on the condition and location of each sign.</li> <li>The valuation of each sign has been formulated with consultation from staff.</li> </ul>
Sidewalks	100%	75%		<ul> <li>Inspection data was not adequate in creating condition profiles for each sidewalk.</li> <li>The inventory and condition data for sidewalks has been compiled through a visual assessment in summer of 2018 by UEM staff.         Discontinuity in the sidewalk surface was not verified by UEM staff.     </li> <li>Further, the valuation of each sidewalk has been formulated through professional recommendations from UEM staff.</li> </ul>
Street Lights	25%	75%	<b>↓</b>	<ul> <li>The inventory data for street light fixtures is evolutionary as the Township upgrades to LEDs. The pole locations have been compiled from delivered datasets from the Township.</li> <li>Pole condition has been developed through random sample assessment by UEM staff.</li> <li>The valuation of each street light pole has been developed through recommendations by UEM staff.</li> </ul>





Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
Storm Sewers	25%	50%	<b>↓</b>	<ul> <li>The inventory and condition data for Storm Sewers have been acquired through consultation with Puslinch Staff.</li> <li>There is no condition for any storm sewer asset in the Township of Puslinch.</li> <li>The valuation of each Storm Sewer segment has been developed through recommendations by UEM staff.</li> </ul>
Buildings and Facilities	100%	85%	1	<ul> <li>The inventory data has been compiled from the 2014 Building Inspection report.</li> <li>The valuation of each building component was sourced by UEM staff whereas repair/remediation activities have been sourced from the 2014 Buildings Inspection report.</li> </ul>
Fire Equipment	100%	100%		<ul> <li>The inventory data is extensive and was delivered by Puslinch staff.</li> <li>The valuation of each asset was delivered by Puslinch staff.</li> </ul>
Fire Reservoirs	85%	100%	1	<ul> <li>The inventory data is extensive and was delivered by Puslinch staff. The condition for each Fire Reservoir has been sourced from consultation with Puslinch staff.</li> <li>The valuation of each Fire Reservoir was developed through recommendations by UEM staff.</li> </ul>



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Program Area	Inventory and Condition	Valuation	Data Confidence Trend	Comments
Storm Water Management Ponds	95%	75%		<ul> <li>The inventory data has been compiled from the 2017 Storm Water Management Pond Inspection Report.</li> <li>The valuation of each asset was delivered by Puslinch staff. The valuation of each Storm Water Management Pond has been developed through recommendations by UEM staff.</li> </ul>
Parks and Recreation	95%	75%		<ul> <li>The inventory and condition data for Parks and Recreation was compiled through a visual assessment in summer of 2018 by UEM staff.</li> <li>The valuation of each Park and Recreation asset was delivered by Puslinch staff and through UEM's recommendations.</li> </ul>
All Fleet Assets	100%	100%	1	<ul> <li>The inventory data was compiled by Puslinch staff and from the fleet management analysis report.</li> <li>The condition for each vehicle was compiled from the fleet management analysis report with help by Puslinch staff.</li> <li>The valuation of each vehicle was compiled from the fleet management analysis report.</li> </ul>
Street Trees	50%	100%	-	<ul> <li>The inventory data was delivered by Puslinch staff. This inventory does not reflect all the known Street Tree assets in the Township of Puslinch.</li> <li>The condition of each asset is unknown.</li> <li>The valuation of each tree asset has been delivered by Puslinch staff.</li> </ul>

6.0 - 7 Data Trend Summary Table: Puslinch Asset Classes





### 6.11 Asset Registry Data Quality Score

#### **Data Quality Score Summary:**

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

#### Areas of Improvement:

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

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

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

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

**Storm Sewers:** Verification of location and full condition assessment of each storm sewer catch basin and outlets.



### 7.0 State of The Infrastructure

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

### 7.1 Total Asset Replacement Cost

UEM through data provided by the Township has estimated that the total asset replacement cost for all assets owned by the Township is \$77.6 million dollars as of 2018.

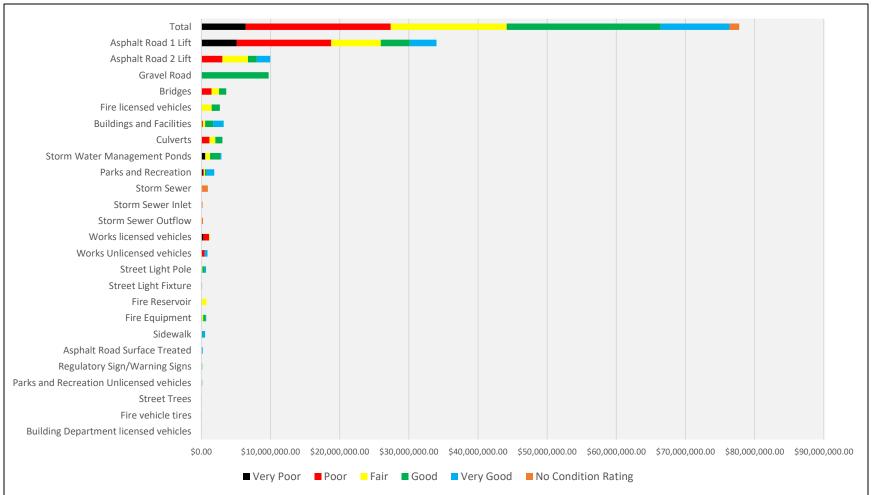
### 7.2 Lifecycle Management Methodology

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





### 7.3 Total Asset Replacement Cost by Asset Class



As stated in section 6 of this report, the replacement cost calculation for each asset has been determined using the best-known information available. Once each asset's replacement cost were calculated each asset was summarized to it's appropriate asset class grouping to acquire the total replacement cost for the asset class. The result of this analytics is the above figure.



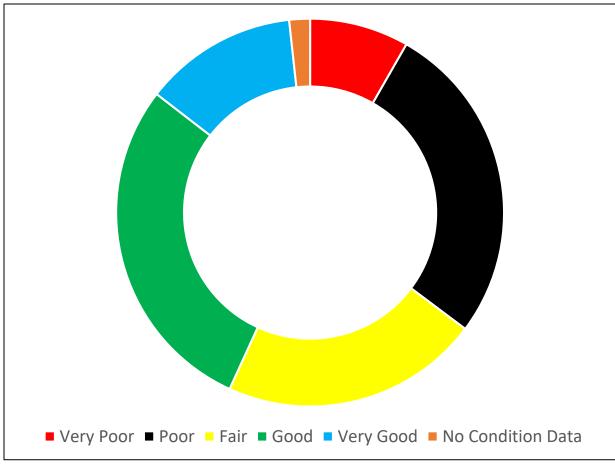


### 7.4 Sum-Total: Puslinch Assets Classes Asset Rating Categories

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

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

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



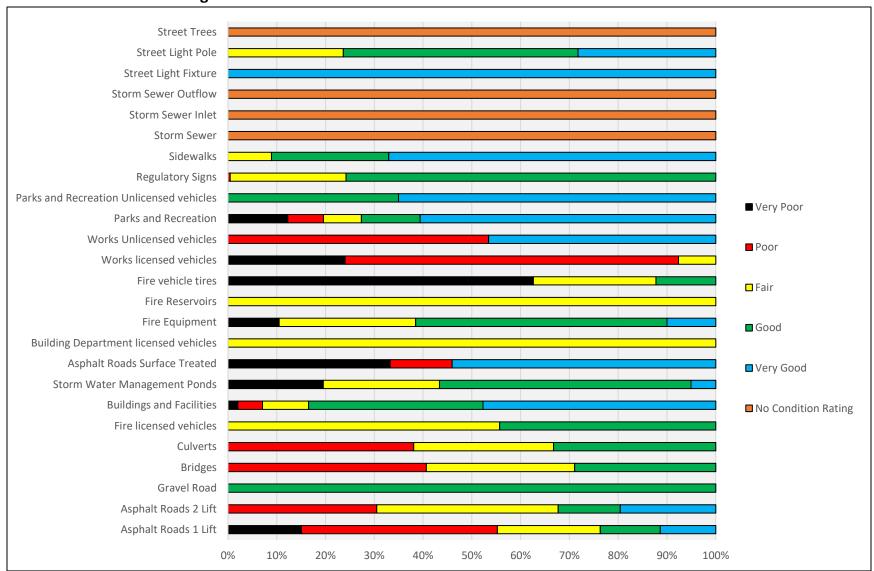
7.0 - 2 Total Asset Replacement Cost by Rating Category

No Condition Rating	Very Poor	Poor	Fair	Good	Very Good	Total
\$1.3	\$6.4	\$20.9	\$16.7	\$22.2	\$9.9	\$77.6
Million	Million	Million	Million	Million	Million	Million





### 7.5 Asset Condition Rating: Puslinch Asset Classes



7.0 - 3 Asset Rating Distribution All Asset Classes





### 7.6 Bridges

### Lifecycle Management Methodology:

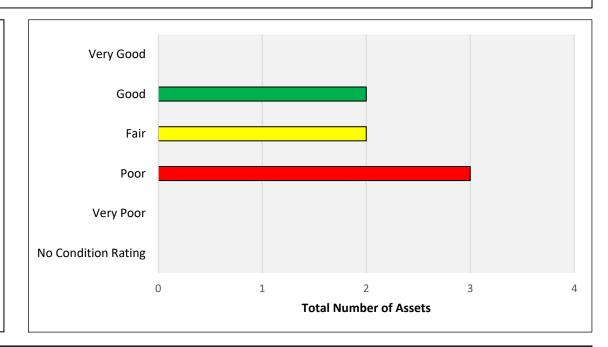
Bridge structures in Puslinch were inspected in 2017 by qualified engineers in order to describe their condition. Bridges based on their BCI on average are in "fair" condition. Though the condition of some bridges is "Poor" the lifecycle management methodology (extracted from the Bridge and Culvert Inspection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

### Replacement Cost Calculation:

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

#### Source Documentation:

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



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





#### 7.7 Culverts

### Lifecycle Management Methodology:

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

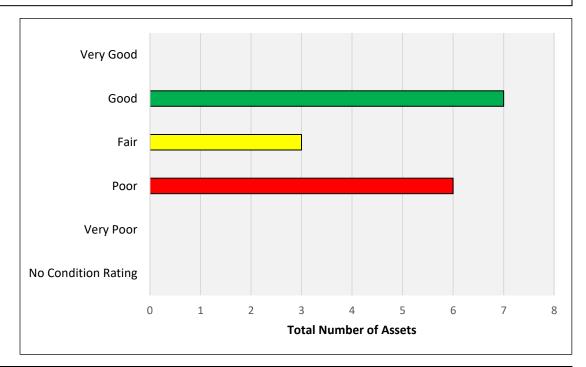
THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

### Replacement Cost Calculation:

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

#### Source Documentation:

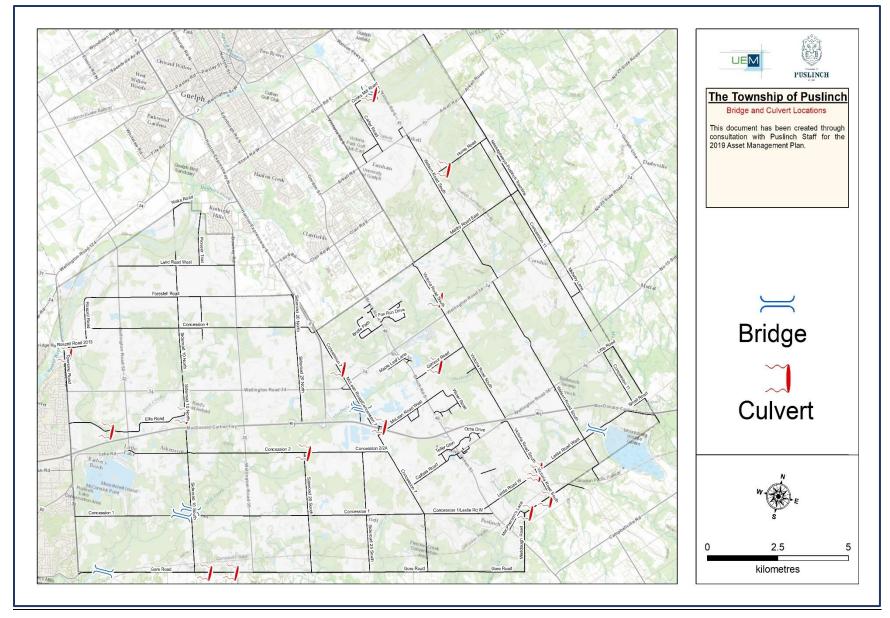
2017 Bridge and Culvert Inspection Summary Report. August 2017



Total Replacement Cost							
Very Poor	Very Poor Poor Fair Good Very Good Total						
\$-	\$1,155,780.00	\$869,535.00	\$1,008,328.50	\$-	\$3,033,643.50		







7.0 - 4 Bridge and Culvert Locations





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

### Lifecycle Management Methodology:

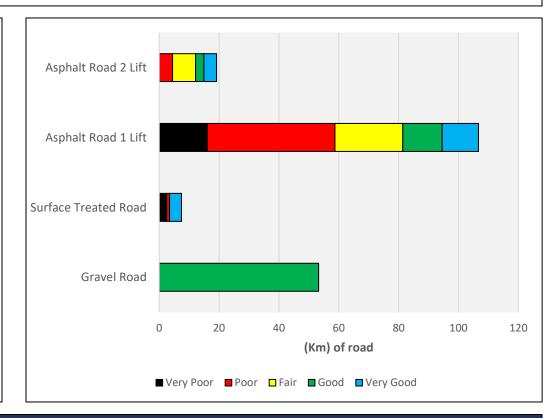
Road structures in Puslinch were inspected in 2016 by qualified engineers to describe their condition. The road network condition based on each road segment's PCI, is on average in "fair" Condition. The lifecycle management methodology for lifecycle activities is based on a threshold PCI index of 65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

### Replacement Cost Calculation:

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

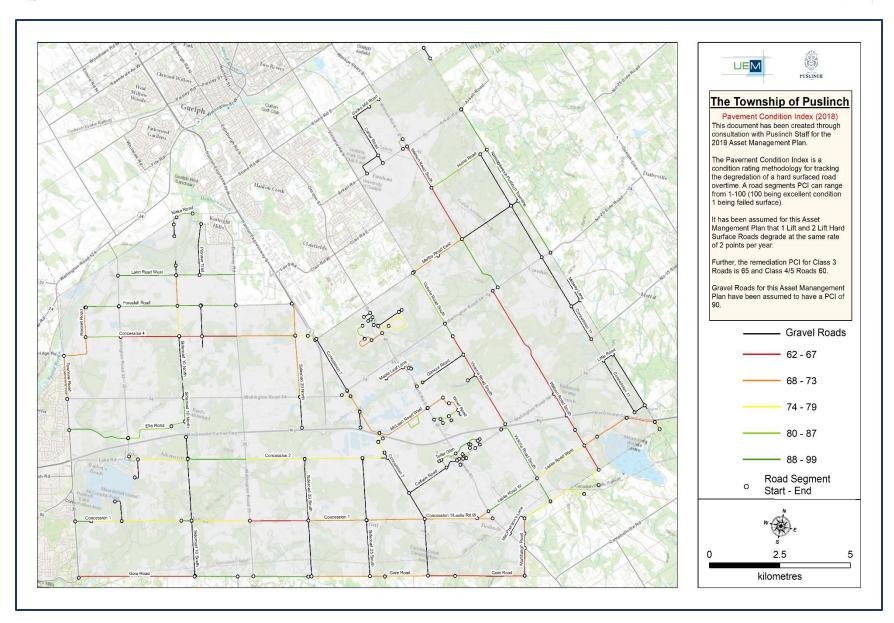
#### Source Documentation

2016 Road Condition Assessment Tender Advertisement 2018 Road Rehabilitation and Culvert Upgrades Township of Puslinch Contract No. PW18-100.



Total Replacement Cost							
Very Poor Poor Fair Good Very Good Total							
\$5,182,937.41	\$16,726,891.38	\$10,848,807.22	\$15,188,380.90	\$5,917,478.54	\$53,864,495.44		

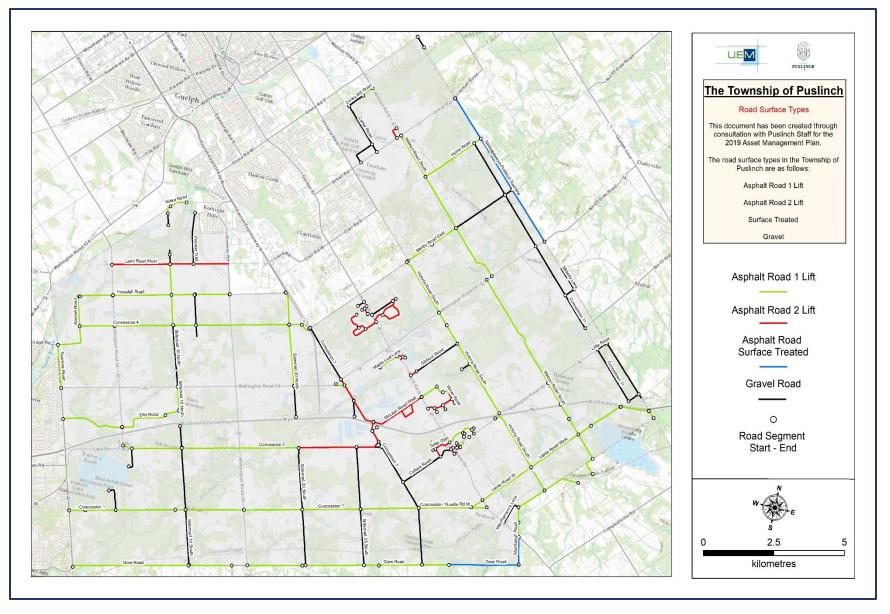




7.0 - 4 Pavement Condition Index







7.0 - 5 Road Surface Type Map





### 7.9 Buildings and Facilities

### Lifecycle Management Methodology:

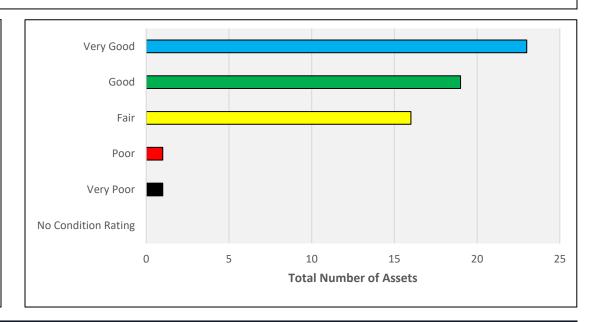
Building and Facilities were broken down into distinct components to create appropriate Lifecycle and Financial attributes. The components are as follows: Structure, Roof, Walls & Windows, Interior Finishes, Mechanical, Electrical, Fire, Life-Safety, and Septic Tank. UEM identified these components and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

### **Replacement Cost Calculation**

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

#### Source Documentation

Square Foot Costs with RS Means Data



	Total Replacement Cost							
Very Poor Poor Fair Good Very Good Total								
\$66,042.05	\$162,750.00	\$306,413.60	\$1,156,772.66	\$1,543,417.20	\$3,235,395.50			





#### 7.10 Parks & Recreation

### Lifecycle Management Methodology:

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

#### **Replacement Cost Calculation**

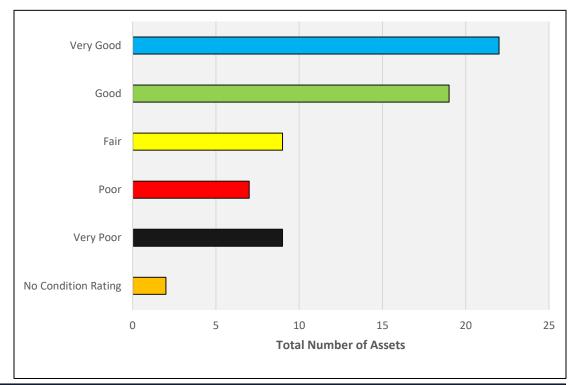
The replacement cost for each Park & Recreation asset has been individually assessed based on the asset type.

Through documents provided by the Township and internal/external research each asset was provided a replacement cost. Further detail in regard to the specific cost calculations for each asset can be referenced in the asset registry.

#### Source Documentation

Township.

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



	Total Replacement Cost							
Very Poor	Very Poor Poor Fair Good Very Good Total							
\$228,053.00	\$136,273.00	\$144,475.00	\$223,506.50	\$1,126,711.00	\$1,859,018.50			





### 7.11 Sidewalks

### Lifecycle Management Methodology:

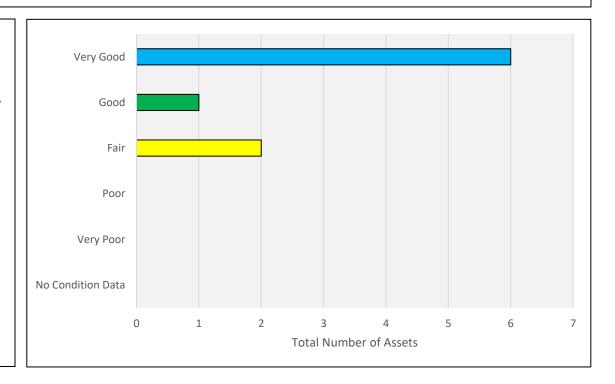
Sidewalk assets were individually assessed by UEM in the summer of 2018 through visual inspections. The assets were given a condition rating on a scale of 1-5 and as well an expected life based on the asset type. For all sidewalks a linear deterioration rate was assumed. Lifecyle (replacement and remediation)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

#### Replacement Cost Calculation:

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

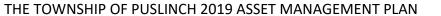
#### Source Documentation

Professional Consultation with industry experts.

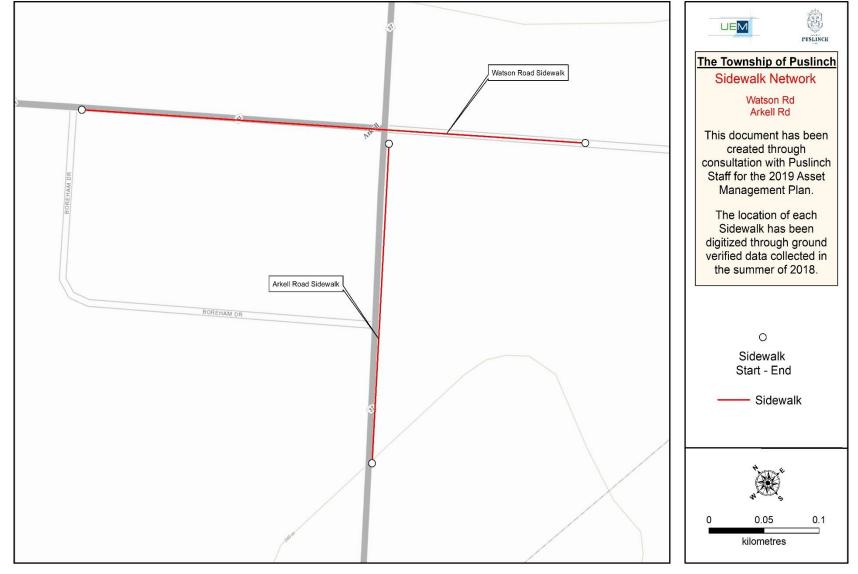


Total Replacement Cost								
Very Poor	Very Poor Poor Fair Good Very Good Total							
\$-	\$-	\$48,620.00	\$131,131.00	\$300,586.00	\$480,337.00			





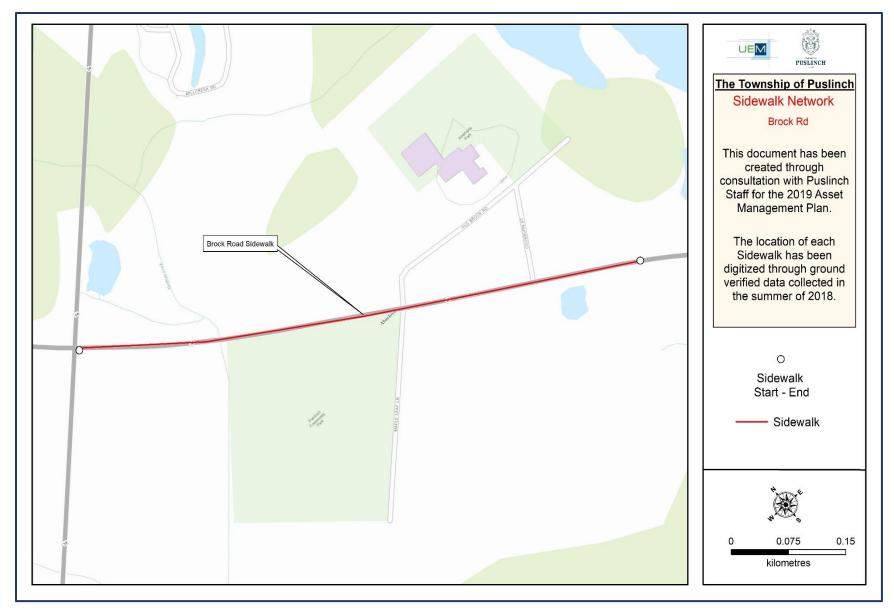




7.0 - 6 Watson Road, Arkell Road



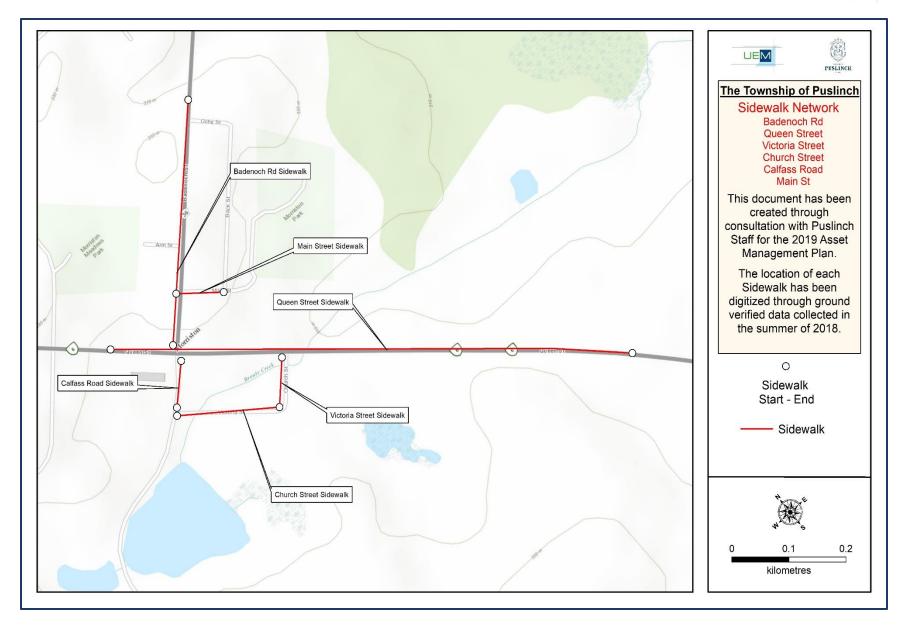




7.0 - 7 Brock Road







7.0 - 8 Badenoch Road, Queen Street, Victoria Street, Church Street, Calfass Road, Main Street





#### 7.12 Fire Reservoirs

## Lifecycle Management Methodology:

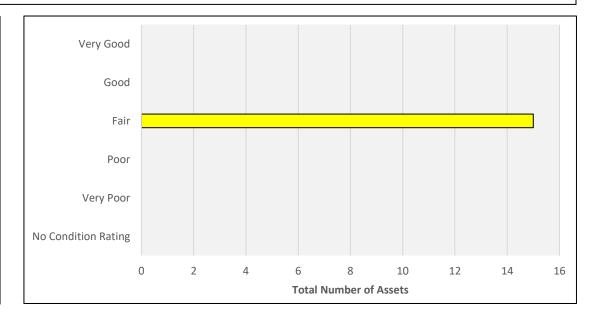
Fire Reservoir assets were identified in the asset registry using the defined lifecycle attributes provided by UEM. Each Fire Reservoir was given a condition rating based on the proximity to its defined end of service life. The physical condition of the reservoir was not considered for condition assessment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

#### Replacement Cost Calculation:

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

#### Source Documentation

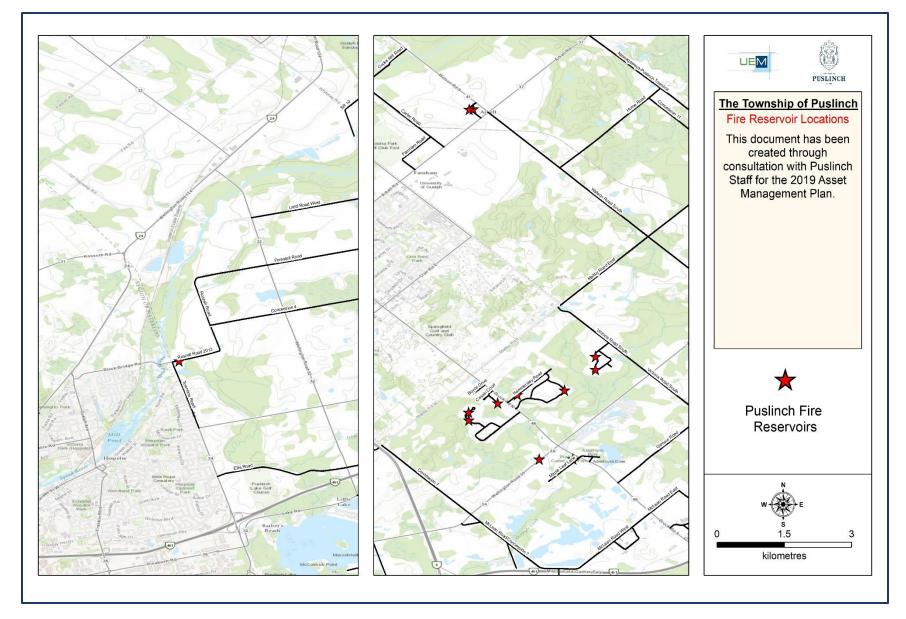
**UEM Professional Recommendation** 



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







7.0 - 9 Puslinch Fire Reservoir Locations





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

## Lifecycle Management Methodology:

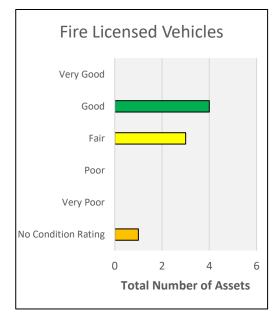
Fire Vehicle assets were identified in the asset registry using the defined lifecycle attributes provided in the 2017 Fleet Management Report. Each Fire Vehicle asset was given a condition rating based on the proximity to its defined end of service life. The physical condition of the vehicle was considered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

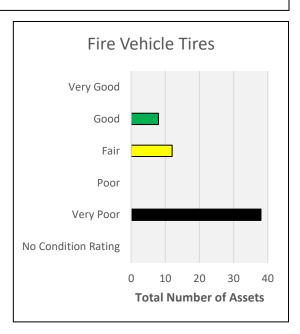
#### **Replacement Cost Calculation:**

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

#### Source Documentation

Provided datasets by Township staff





Total Replacement Cost							
Very Poor	Poor	Fair	Good	Very Good	Total		
\$22,604.00	\$-	\$1,497,066.00	\$1,187,426.00	\$-	\$2,707,096.00		





# 7.14 Storm Water Management Ponds

# Lifecycle Management Methodology:

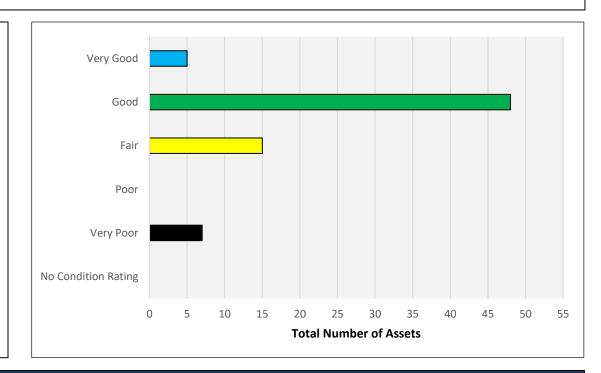
Storm Water Management Ponds were identified in the asset registry with a linear deterioration rate. However, in 2017 the Township acquired the services of a consultant to assess the state of repair of all Storm Water Management Ponds. This assessment provided a remediation schedule and comment on the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

#### **Replacement Cost Calculation:**

The replacement cost of each Storm Water Management Pond component has been individually calculated. The tailwall has been calculated at \$2000, Headwall \$2000, Outlet Device \$2000, and the pond enclosure is the acquisition cost minus the tailwall, headwall and outlet device. The acquisition cost of each storm water management pond has been sourced from the 2013 Asset Management Plan.

#### Source Documentation

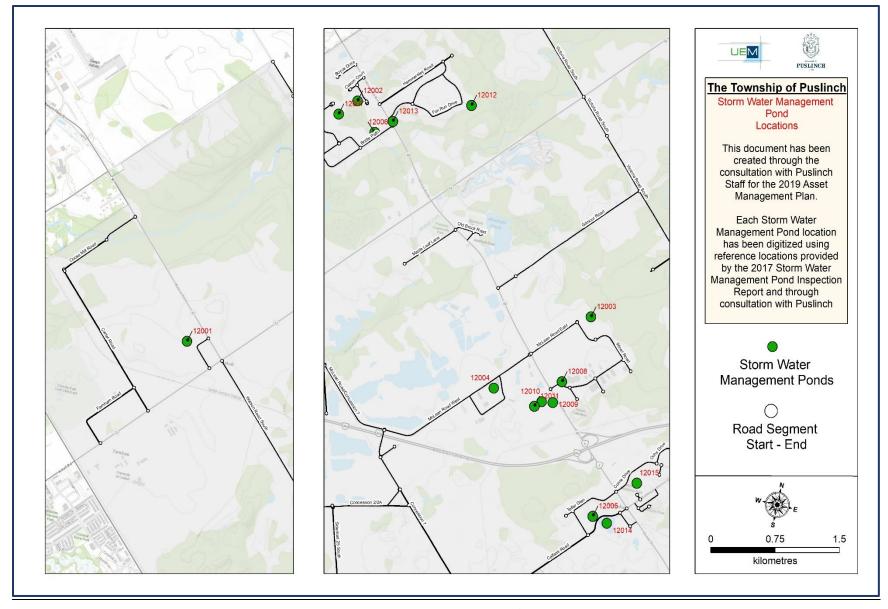
Provided datasets by Township staff.



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







7.0 - 10 Storm Water Management Pond Locations





# 7.15 Parks and Building Department – Licensed & Unlicensed Vehicles

# Lifecycle Management Methodology:

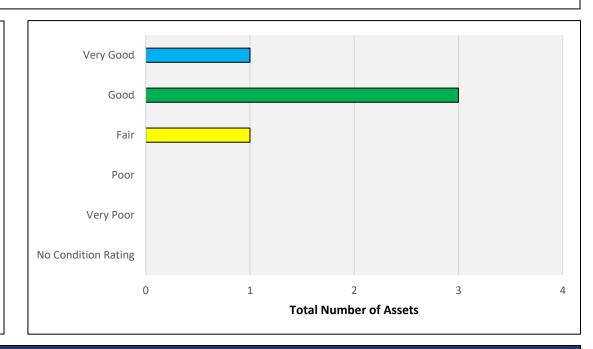
Parks and Building Department vehicle assets were identified in the asset registry using the defined lifecycle attributes provided in the 2017 Fleet Management Report. The physical condition of the vehicle was considered for condition assessment if it was available in the form of vehicle kilometers or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

## Replacement Cost Calculation:

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

#### Source Documentation

Provided datasets by Township staff



Total Replacement Cost							
Very Poor	Poor Poor Fair Good Very Good Tota						
\$-	\$-	\$33,000.00	\$43,000.00	\$80,000.00	\$156,000.00		





# 7.16 Works Department – Licensed & Unlicensed Vehicles

#### Lifecycle Management Methodology:

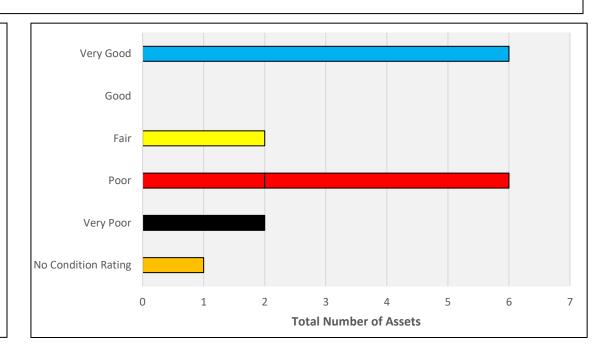
Works Vehicle assets were identified in the asset registry using the defined lifecycle attributes provided in the 2017 Fleet Management Report. The physical condition of the vehicle was considered for condition assessment if it was available in the form of vehicle kilometers or the proximity to its end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

#### **Replacement Cost Calculation:**

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

#### Source Documentation

Provided datasets by Township staff



Total Replacement Cost							
Very Poor Poor Fair Good Very Good Total							
\$290,000.00 \$1,300,000.00 \$92,000.00 \$- \$414,000.00 \$2,00							





#### 7.17 Storm Sewers

## Lifecycle Management Methodology:

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

THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

#### **Geographic Information System**

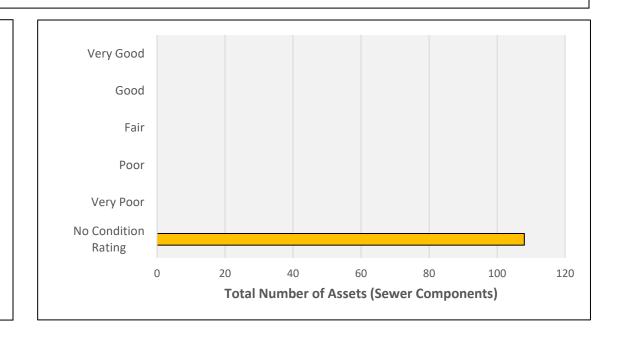
Each Storm Sewer Inlet, and Storm Sewer line has been generated through staff consultation. Field inspections of the spatial referencing has not been completed.

#### **Replacement Cost Calculation:**

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

#### Source Documentation

Town of Friday Harbor, Storm Water Management Plan 2005

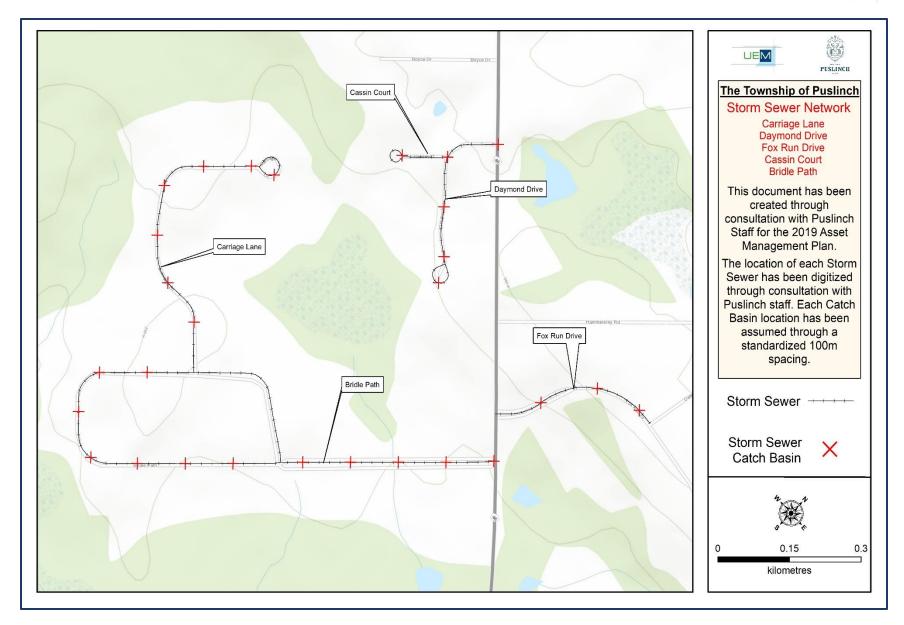


# **Total Replacement Cost**

\$1,282,195.11



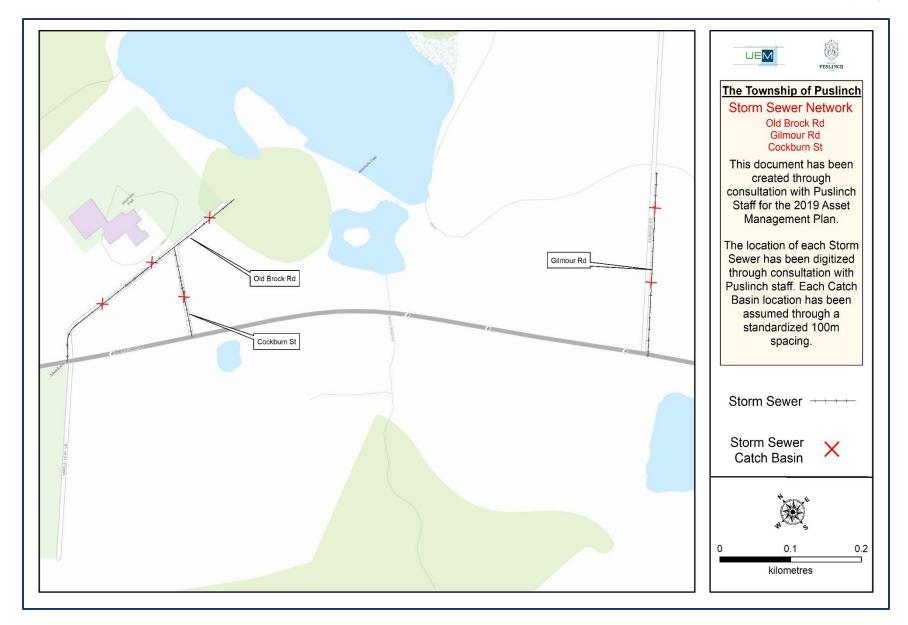




7.0 - 10 Storm Sewer Network: Carriage Lane, Daymond Drive, Fox Run Drive, Cassin Court, Bridle Path



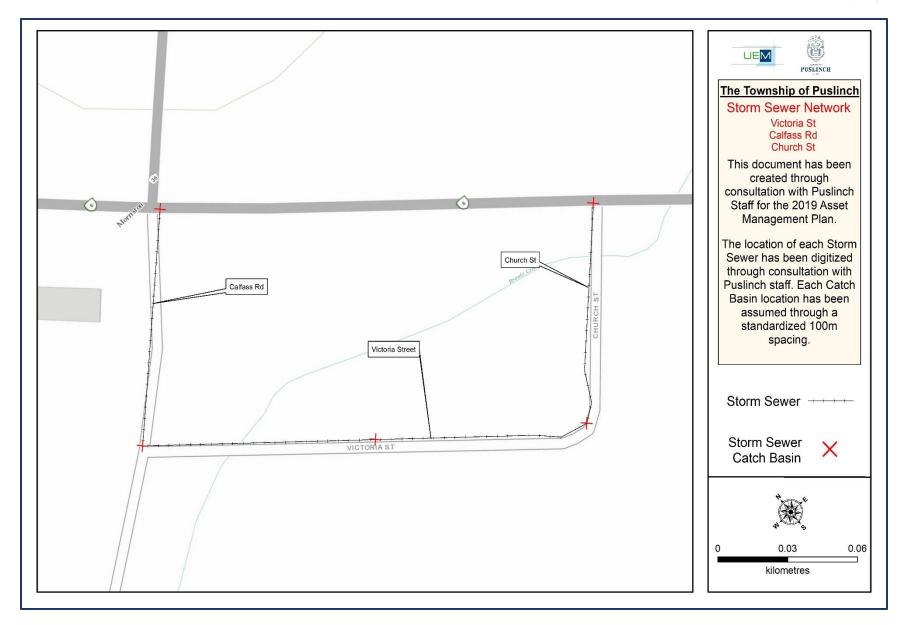




7.0 - 11 Storm Sewer Network: Old Brock Rd, Gilmour Rd







7.0 - 12 Storm Sewer Network: Victoria St, Calfass Rd, Church St





# 7.18 Street Lights

## Lifecycle Management Methodology:

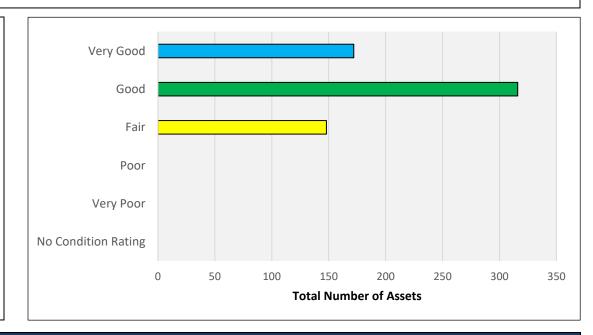
Street Light assets were identified in the asset registry using a linear deterioration rate for each individual asset component. Condition ratings were provided for each pole based on a random sample assessment done by UEM during the summer of 2018.

# Replacement Cost Calculation:

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

#### Source Documentation

**UEM** professional recommendation



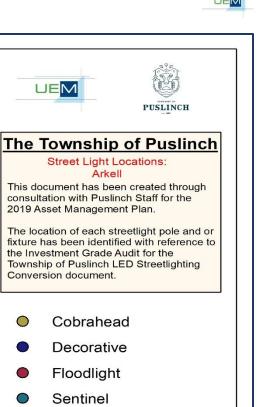
Total Replacement Cost							
Very Poor	Poor Poor Fair Good Very Good Total						
\$-	\$-	\$181,325.39	\$368,581.67	\$215,306.63	\$765,213.69		



0

0

0



**Urban Centre Boundary** 

0.175

kilometres

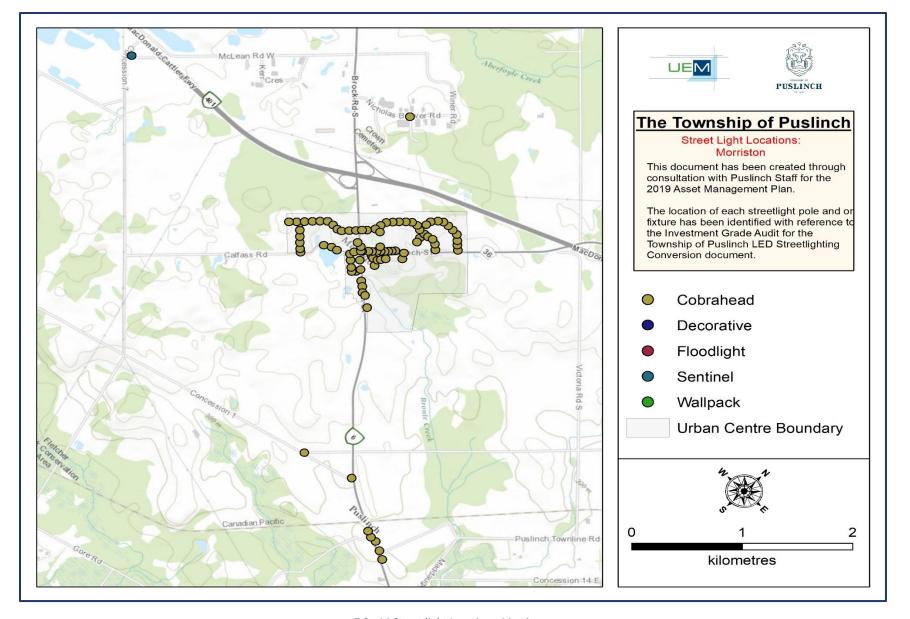
Wallpack



0.35



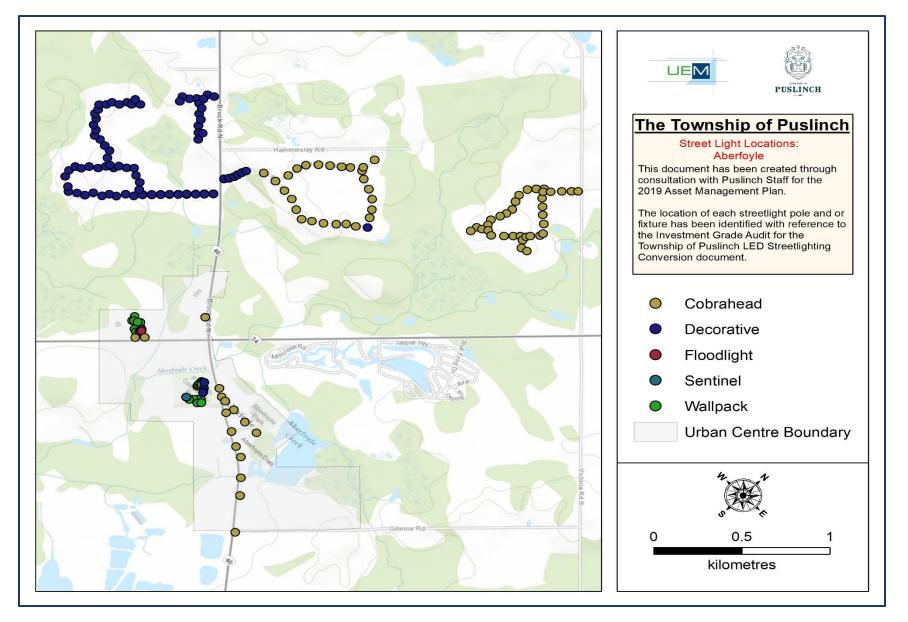




7.0 - 14 Street light Locations: Morriston







7.0 - 15 Streetlight Locations: Aberfoyle





# 7.19 Regulatory/Warnings Signs

## Lifecycle Management Methodology:

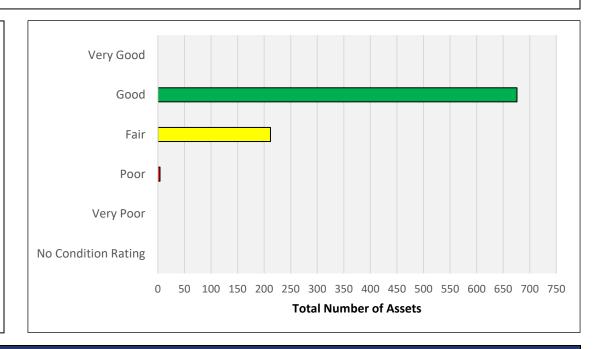
Regulatory & Warnings Sign assets were identified in the asset registry using a linear deterioration rate for each individual asset component. Condition ratings have been provided for each sign based on the last condition assessment of each sign.

## Replacement Cost Calculation:

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

#### Source Documentation

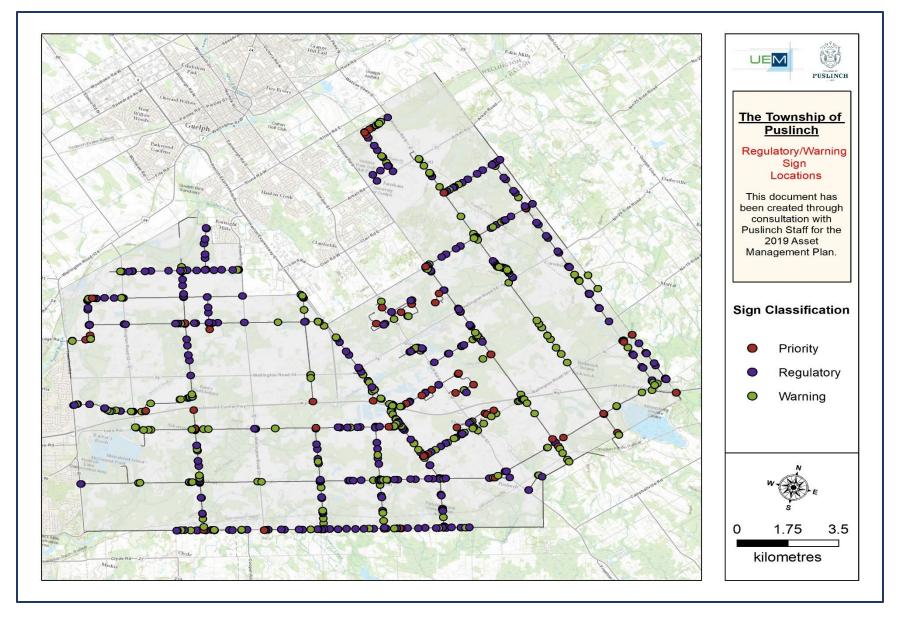
Provided datasets by Township staff



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







7.0 - 16 Regulatory/Warnings Sign Locations





# 7.20 Fire Equipment

# Lifecycle Management Methodology:

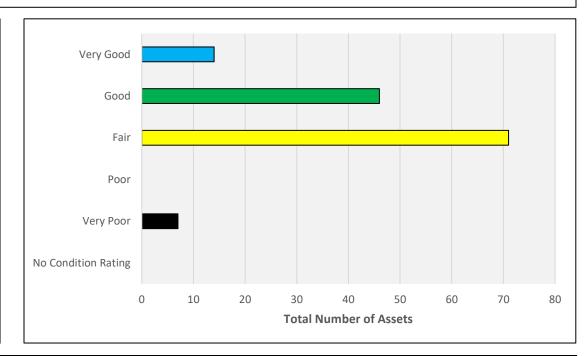
Fire Equipment assets were identified in the asset registry using the defined lifecycle attributes provided by Puslinch Township staff. Each Fire Equipment asset was given a condition rating based on the proximity to its defined end of service level or a predefined condition rating provided by the Township.

#### Replacement Cost Calculation:

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

#### Source Documentation

Provided Datasets from Township.



Total Replacement Cost							
Very Poor Poor Fair Good Very Good Total							
\$73,500.00	\$-	\$196,100.00	\$361,350.00	\$69,990.00	\$700,940.00		







#### 7.21 Street Trees

#### Lifecycle Management Methodology:

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

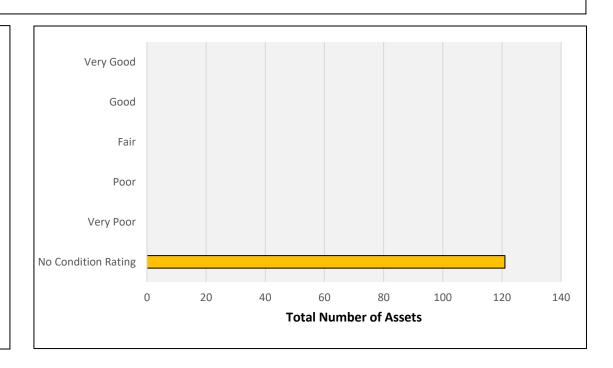
THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

#### Replacement Cost Calculation:

Replacement cost calculations for Street Tree assets have been sourced from Puslinch Township staff. Each asset has been individually assessed through tender documents in order to ensure reliable cost information. The price to replace each tree has been sourced from tender documentation from \$300 to \$700 depending on the species type.

#### Source Documentation

Provided datasets by Township staff



	Total Replacement Cost							
Very Poor	Poor	Fair	Good	Very Good	Total			
\$-	\$-	\$-	\$-	\$-	\$61,429.00			





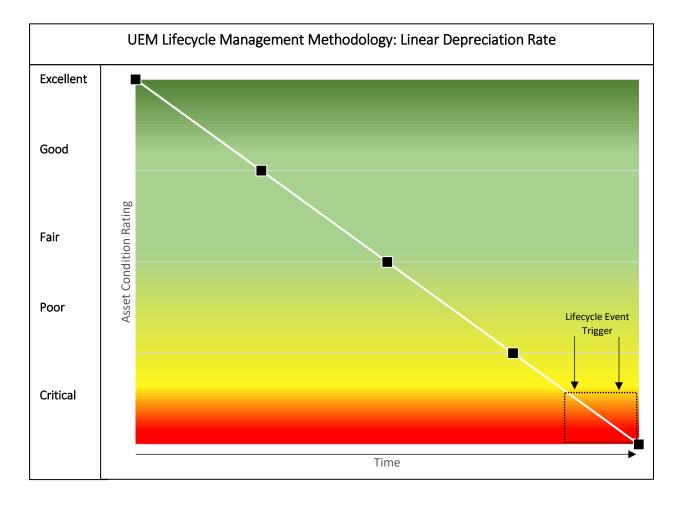
# 8.0 10 Year Capital Plan

# 8.1 Capital Plan: Summary

This 10 Year Capital Plan has been developed using the Asset Registry and through referencing documents provided by the Township described in Section 2.

## 8.2 Capital Plan: Lifecycle Management Methodology

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



8.0 - 2 Lifecycle Management Methodology





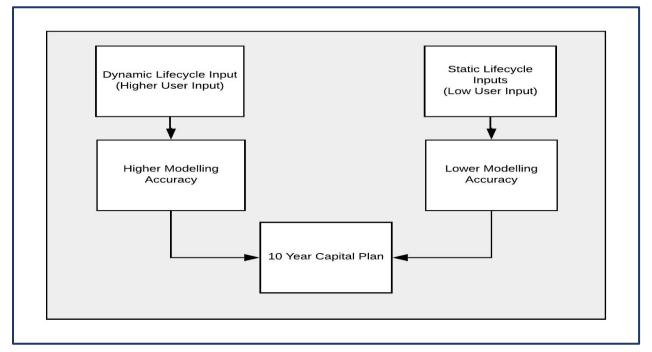
#### 8.3 Static and Dynamic Inputs

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

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

#### 8.4 Static and Dynamic Inputs: Hard Surface Roads

Hard Surface Roads lifecycle activities follow a static methodology. Based on the proposed service level policy a lifecycle activity is only triggered based on class 4 and 5 roads reaching a PCI level of 60 (static input) and Class 3 roads reaching a PCI level of 65 (static inputs). Recognizing that Puslinch's informal road management policy is a combination of staff input and the known PCI rating; roads would have a combination of both staff input and the PCI rating (dynamic inputs). However, for this asset management plan only the proposed service level policy (Static) was considered for capital planning.



8.0 - 3 Capital Plan Modelling Logic





# 8.5 Input Mapping: 10 Year Capital Plan

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

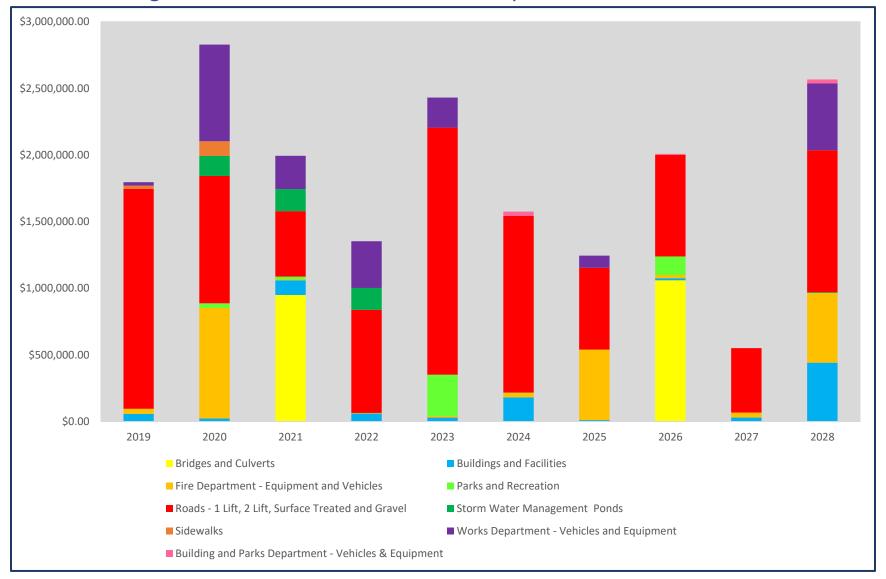
Asset Class	Static	Dynamic	Combination of Both
Bridges		✓	
Culverts		✓	
Buildings and Facilities		<b>√</b>	
Fire Equipment			✓
Parks and Recreation		✓	
Asphalt Roads 1 Lift	<b>√</b>		
Asphalt Roads 2 Lift	<b>√</b>		
Asphalt Roads Surface Treated	✓		
Gravel Roads	<b>√</b>		
Storm Water Management Ponds		<b>√</b>	
Fire Licensed Vehicles			✓
Fire Vehicle Tires			✓
Works Licensed Vehicles			✓
Works Unlicensed Vehicles			✓
Parks and Recreation Unlicensed Vehicles & Building Department Licensed Vehicles			<b>√</b>
Storm Sewers	✓		
Regulatory/ Warning Signs	✓		
Trees	✓		
Fire Reservoirs	✓		
Sidewalks			✓
Streetlight and Poles			<b>√</b>

8.0 - 4 Capital Plan Modelling Logic: Puslinch Asset Classes

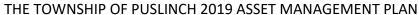




# 9.0 All Existing Infrastructure Included in 10 Year Capital Plan

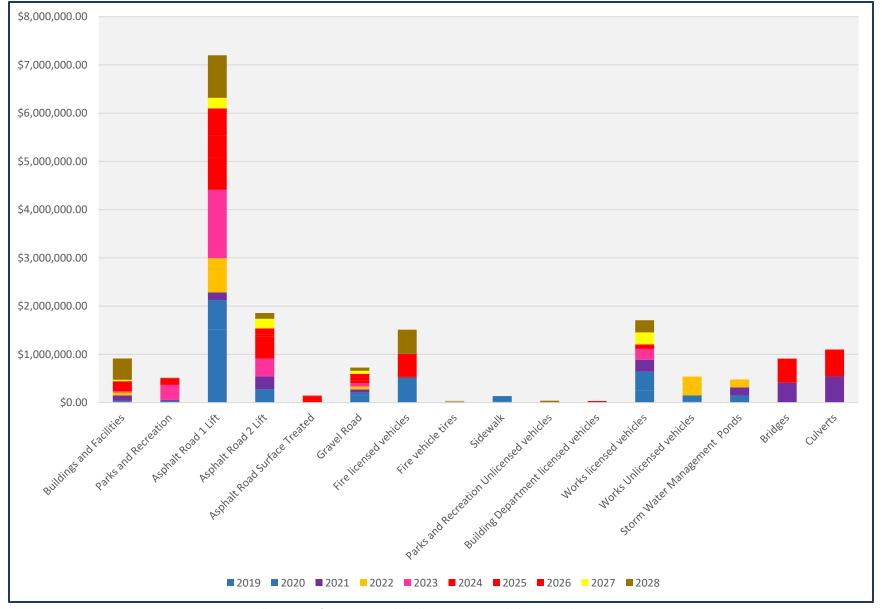


9.0 - 1 All Existing Infrastructure Included in 10 Year Capital Plan Year Over Year









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



# Schedule A to Report FIN-2019-022

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Bridges			\$410,000.00					\$500,000.00			\$910,000.00
Culverts			\$540,000.00					\$560,000.00			\$1,100,000.00
Buildings and Facilities	\$57,750.00	\$22,000.00	\$110,000.00	\$60,000.00	\$30,000.00	\$181,250.00	\$10,000.00	\$15,000.00	\$30,000.00	\$442,087.00	\$958,087.00
Fire Equipment	\$21,000.00	\$308,650.00	\$6,000.00		\$12,000.00	\$9,000.00	\$61,500.00	\$24,000.00	\$37,000.00	\$12,000.00	\$491,150.00
Parks and Recreation		\$34,668.00	\$22,000.00		\$310,000.00	\$1,800.00		\$139,828.00		\$7,740.00	\$516,036.00
Asphalt Road 1 Lift	\$1,509,345.84	\$614,689.29	\$161,136.66	\$708,589.46	\$1,417,522.40	\$679,928.37	\$437,028.21	\$569,296.01	\$219,975.00	\$882,983.79	\$7,200,495.03
Asphalt Road 2		\$276,397.81	\$264,844.32		\$371,396.70	\$450,397.48	\$46,560.00	\$127,550.47	\$199,107.66	\$121,118.06	\$1,857,372.49
Asphalt Road Surface Treated						\$130,291.97	\$64,964.98				\$195,256.95
Gravel Road	\$140,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$725,000.00
Storm Water Management Ponds		\$150,000.00	\$165,000.00	\$165,000.00							\$480,000.00
Fire Licensed vehicles		\$520,000.00				\$23,000.00	\$468,000.00			\$500,000.00	\$1,511,000.00
Fire Vehicle Tires	\$17,146.00	\$1,650.00		\$4,116.00		\$1,650.00				\$5,538.00	\$30,100.00
Sidewalks	\$25,000.00	\$110,000.00									\$135,000.00
Works licensed vehicles		\$600,000.00	\$290,000.00		\$225,000.00		\$92,000.00			\$500,000.00	1,707,000.00
Works Unlicensed vehicles	\$26,000.00	\$125,000.00		\$350,000.00							\$501,000.00
Building Department Licensed Vehicles						\$33,000.00					\$33,000.00
Parks and Recreation Unlicensed Vehicles								\$8,000.00		\$30,000.00	\$38,000.00
Regulatory/Warni ng Signs											\$0
Street Lights											\$0
Street Trees											\$0
Storm Sewers											\$0
Fire Reservoirs											\$0
Total	\$1,796,241.84	\$2,828,055.09	\$2,033,980.98	\$1,352,705.46	\$2,430,919.10	\$1,575,317.82	\$1,245,053.20	\$2,008,674.48	\$551,082.66	\$2,566,466.85	\$18,388,497.48



#### 9.1 Existing Infrastructure not included in the 10 Year Capital Plan

As stated previously in Section 8 of this report - all asset classes that were included into the 10-year capital plan fell into one of three input categories for capital planning: Static, Dynamic or a Combination of Static and Dynamic Inputs. The Assets that are not included in the 10-year capital plan, though defined with either one of the three categories, did not meet the thresholds loaded in their lifecycle OR inspected condition is "Good" and therefore over-steps the defined lifecycle loaded into the asset registry.

For example, all Fire Reservoir assets have been loaded with an expected life of 50 Years. Based on their construction date all of the Fire Reservoirs have a remaining life in excess of 10 years. Therefore, Fire Reservoirs are not included in the 10-year capital plan. If the asset management plan covered a period of 30 years, the majority of the Fire Reservoirs would be included in capital plan. This is because the majority of Fire Reservoirs would be reaching the end of their service life. This logic is consistent for all assets that have been not included into the 10-year capital plan.

Note: In the following tables, the Life Expectancy column (L.E) has been described as L.E in order to reduce the size of the column.

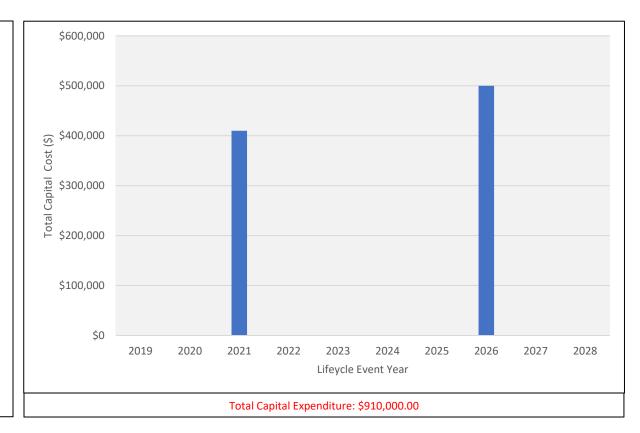




# 9.2 Bridges

# **Capital Plan Summary**

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



Asset	Asset	Lifecycle Event Description	L.E	Replacement Year	<b>Total Capital Costs</b>	Condition (BCI)	Risk
#	Class						
1003	Bridge	Little's Bridge	50	2021	\$240,000.00	22	Very High
1008	Bridge	Galt Creek Bridge Gore Road Lot 2	50	2021	\$170,000.00	60	Very High
1004	Bridge	Moyer's Bridge	50	2026	\$500,000.00	63	Very High

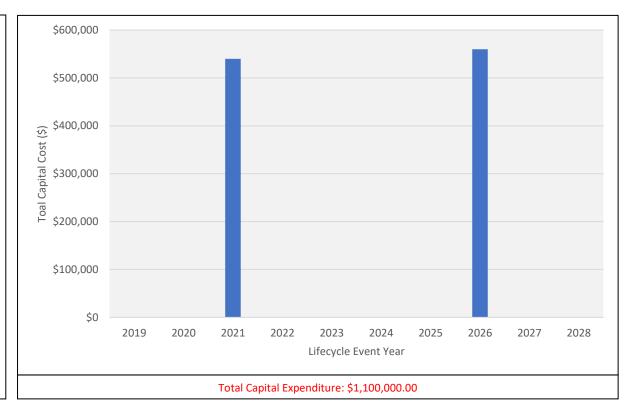




## 9.3 Culverts

# **Capital Plan Summary**

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition (BCI)	Risk
2009	Culvert	Gilmour Rd Culvert Over Aberfoyle Creek	50	2021	\$540,000.00	50	Very High
2006	Culvert	Victoria Road Culvert Over Galt Creek	50	2026	\$65,000.00	72	Very High
2007	Culvert	Irish Creek Culvert on Townline Road	50	2026	\$180,000.00	57	Very High
2010	Culvert	Ellis Road Culvert Over Puslinch Lake Irish Creek	50	2026	\$250,000.00	43	Very High
2013	Culvert	Victoria Road Culvert North of Leslie	50	2026	\$65,000.00	70	Very High



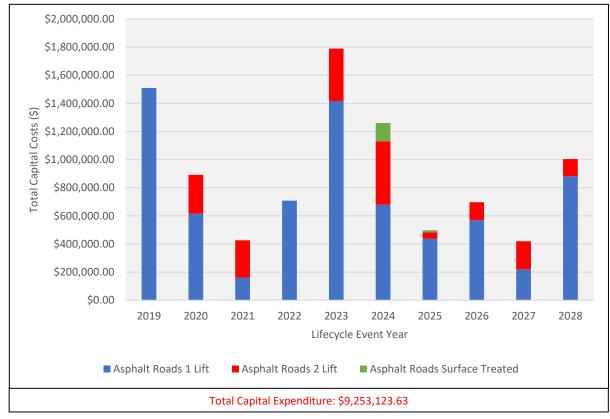


# 9.4 Hard Surface Roads – 1 Lift, 2 Lift, and Surface Treated

## **Capital Plan Summary**

As illustrated in the state of Infrastructure section of this report, Hard Surface Roads follow a linear deterioration rate for lifecycle events. The rate of deterioration is 2 PCI points per year where 100 is "Excellent" and "Critical" is 60. For this capital plan, class 3 roads remediation PCI are 65, class 4 and 5 roads are 60.

Surface Treated roadways were as well modelled to deteriorate 6 points per year. This works out to lifecycle events being triggered every 7 years.



# Capital Plan Summary Static and Dynamic Inputs

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

Note: The condition Data (PCI) described in the following table is as of the year 2018.



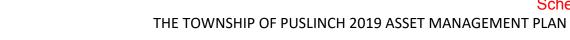
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PUSLINCH

Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Road Class	Condition Index (2018)	Risk
137	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$435,057	3	64	Very High
133	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$103,795	3	65	Very High
139	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$214,310	3	66	Very High
124	Asphalt Road 1 Lift	Victoria Road South Resurfacing	25	2019	\$304,917	3	62	Very High
125A	Asphalt Road 1 Lift	Victoria Road South Resurfacing	25	2019	\$63,753	3	62	Very High
134	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$64,906	3	66	Very High
135	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$60,251	3	66	Very High
136	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$89,556	3	66	Very High
140	Asphalt Road 1 Lift	Watson Road South Resurfacing	25	2019	\$172,801	3	66	Very High
58	Asphalt Road 1 Lift	Concession 4 Resurfacing	25	2020	\$129,704	4	64	Very High
56	Asphalt Road 1 Lift	Concession 4 Resurfacing	25	2020	\$217,480	4	64	Very High
6	Asphalt Road 1 Lift	Gore Road Resurfacing	25	2020	\$50,337	4	64	Very High
40_SURFACE	Asphalt Road 2 Lift	McLean Road West Resurfacing	25	2020	\$276,398	3	68	Very High
1	Asphalt Road 1 Lift	Gore Road Resurfacing	25	2020	\$217,168	4	64	Very High



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Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Road Class	Condition Index (2018)	Risk
52	Asphalt Road 1 Lift	Maple Leaf Lane Resurfacing	25	2021	\$74,719	5	65	Very High
57	Asphalt Road 1 Lift	Concession 4 Resurfacing	25	2021	\$86,417	4	65	Very High
165_SURFACE	Asphalt Road 2 Lift	McLean Road/Concession 7 Resurfacing	25	2021	\$115,798	3	72	Very High
164_SURFACE	Asphalt Road 2 Lift	McLean Road/Concession 7 Resurfacing	25	2021	\$149,046	3	72	Very High
15	Asphalt Road 1 Lift	Concession 1 Resurfacing	25	2022	\$217,671	4	67	Very High
121B	Asphalt Road 1 Lift	Maddaugh Road Resurfacing	25	2022	\$26,658	4	67	Very High
121A	Asphalt Road 1 Lift	Maddaugh Road Resurfacing	25	2022	\$25,594	4	67	Very High
59	Asphalt Road 1 Lift	Concession 4 Resurfacing	25	2022	\$217,097	4	67	Very High
88	Asphalt Road 1 Lift	Townline Road Resurfacing	25	2022	\$153,119	4	68	Very High
158	Asphalt Road 1 Lift	McLean Road East Resurfacing	25	2022	\$68,451	4	67	Very High
148	Asphalt Road 1 Lift	Puslinch-Flamborough Townline Resurfacing	25	2023	\$31,635	5	69	Very High
90	Asphalt Road 1 Lift	Roszell Road Resurfacing	25	2023	\$104,314	4	68	Very High
63B	Asphalt Road 1 Lift	Maltby Road East Resurfacing	25	2023	\$106,047	4	70	Very High



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Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Road Class	Condition Index (2018)	Risk
54A	Asphalt Road 1 Lift	Roszell Road 2013 Resurfacing	25	2023	\$138,648	4	68	Very High
25	Asphalt Road 1 Lift	Leslie Road West Resurfacing	25	2023	\$106,699	4	69	Very High
23	Asphalt Road 1 Lift	Leslie Road West Resurfacing	25	2023	\$128,411	4	69	Very High
22	Asphalt Road 1 Lift	Leslie Road West Resurfacing	25	2023	\$56,595	4	69	Very High
115	Asphalt Road 2 Lift	Concession 7 Resurfacing	25	2023	\$59,774	3	76	High
116	Asphalt Road 2 Lift	Concession 7 Resurfacing	25	2023	\$43,396	3	76	High
97	Asphalt Road 1 Lift	Sideroad 10 North Resurfacing	25	2023	\$108,921	4	69	Very High
17	Asphalt Road 1 Lift	Concession 1 Resurfacing	25	2023	\$216,762	4	69	Very High
204_SURFACE	Asphalt Road 2 Lift	Bridle Path Resurfacing	25	2023	\$155,794	5	70	Very High
63A	Asphalt Road 1 Lift	Maltby Road East Resurfacing	25	2023	\$106,960	4	70	Very High
185_SURFACE	Asphalt Road 2 Lift	Bridle Path Resurfacing	25	2023	\$62,266	5	70	Very High
212B_SURFAC E	Asphalt Road 2 Lift	Winer Road Resurfacing	25	2023	\$50,167	4	70	Very High
212A	Asphalt Road 1 Lift	Winer Road Resurfacing	25	2023	\$62,387	4	70	Very High
108	Asphalt Road 1 Lift	Sideroad 20 North Resurfacing	25	2023	\$214,744	4	69	Very High







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Road Class	Condition Index (2018)	Risk
132	Asphalt Road 1 Lift	McRae Station Road Resurfacing	25	2023	\$35,397	3	74	Very High
71	Asphalt Road 1 Lift	Laird Road West Resurfacing	25	2024	\$42,000	4	70	Very High
18	Asphalt Road 1 Lift	Concession 1/Leslie Rd W Resurfacing	25	2024	\$255,663	4	72	Very High
19	Asphalt Road 1 Lift	Concession 1 Resurfacing	25	2024	\$48,441	4	72	Very High
4	Asphalt Road 1 Lift	Gore Road Resurfacing	25	2024	\$136,801	4	71	Very High
28_SURFACE	Asphalt Road 2 Lift	Victoria Street and Church Street Resurfacing	25	2024	\$39,461	5	71	Very High
5	Asphalt Road 1 Lift	Gore Road Resurfacing	25	2024	\$80,119	4	70	Very High
153	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline Resurfacing	7	2024	\$54,921	4	98	Medium
154	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline Resurfacing	7	2024	\$28,974	4	98	Medium
120	Asphalt Road Surface Treated	Maddaugh Road Resurfacing	7	2024	\$24,785	4	67	Very High
36	Asphalt Road 2 Lift	Concession 2/2A Resurfacing	25	2024	\$124,716	3	77	High
35	Asphalt Road 2 Lift	Concession 2 Resurfacing	25	2024	\$286,221	3	77	High
166	Asphalt Road 1 Lift	Sideroad 20 North Resurfacing	25	2024	\$116,905	4	72	Very High





Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Road Class	Condition Index (2018)	Risk
155	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline Resurfacing	7	2024	\$21,613	4	98	Medium
16	Asphalt Road 1 Lift	Concession 1 Resurfacing	25	2025	\$216,474	4	73	Very High
51_SURFACE	Asphalt Road 2 Lift	Old Brock Road Resurfacing	25	2025	\$46,560	5	73	Very High
7	Asphalt Road Surface Treated	Gore Road Resurfacing	7	2025	\$64,964	4	64	Very High
32	Asphalt Road 1 Lift	Concession 2 Resurfacing	25	2025	\$220,555	4	74	Very High
195	Asphalt Road 2 Lift	Deer View Ridge Resurfacing	25	2026	\$92,917	5	76	High
48	Asphalt Road 1 Lift	Smith Road Resurfacing	25	2026	\$34,843	5	76	High
21	Asphalt Road 1 Lift	Leslie Road West Resurfacing	25	2026	\$211,570	4	76	High
14	Asphalt Road 1 Lift	Concession 1 Resurfacing	25	2026	\$217,139	4	75	High
46_SURFACE	Asphalt Road 2 Lift	Gilmour Road Resurfacing	25	2026	\$34,634	4	75	Very High
160	Asphalt Road 1 Lift	Concession 4 Resurfacing	25	2026	\$46,904	4	75	Very High
161	Asphalt Road 1 Lift	Concession 4 Resurfacing	25	2026	\$35,472	4	75	Very High
38	Asphalt Road 1 Lift	Mason Road Resurfacing	25	2026	\$23,369	5	74	Very High
205	Asphalt Road 2 Lift	Fox Run Drive Resurfacing	25	2027	\$32,823	5	77	High







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Road Class	Condition Index (2018)	Risk
196	Asphalt Road 2 Lift	Fox Run Drive Resurfacing	25	2027	\$57,549	5	77	High
206	Asphalt Road 2 Lift	Fox Run Drive Resurfacing	25	2027	\$17,412	5	77	High
34	Asphalt Road 1 Lift	Concession 2 Resurfacing	25	2027	\$219,975	4	77	High
207	Asphalt Road 2 Lift	Fox Run Drive Resurfacing	25	2027	\$91,324	5	77	High
30	Asphalt Road 1 Lift	Main St And Back Resurfacing	25	2028	\$36,264	5	80	High
190	Asphalt Road 2 Lift	Telfer Glen Resurfacing	25	2028	\$97,421	5	80	High
9	Asphalt Road 1 Lift	Puslinch-Flamborough Townline Resurfacing	25	2028	\$56,748	4	79	High
10	Asphalt Road 1 Lift	Puslinch-Flamborough Townline Resurfacing	25	2028	\$69,805	4	79	High
214	Asphalt Road 2 Lift	Beiber Road Resurfacing	25	2028	\$23,697	5	79	High
13A	Asphalt Road 1 Lift	Concession 1 Resurfacing	25	2028	\$333,716	4	79	High
96	Asphalt Road 1 Lift	Sideroad 10 North Resurfacing	25	2028	\$105,000	4	78	High
78	Asphalt Road 1 Lift	Niska Road Resurfacing	25	2028	\$63,744	3	85	High
126	Asphalt Road 1 Lift	Victoria Road South Resurfacing	25	2028	\$217,705	3	85	High

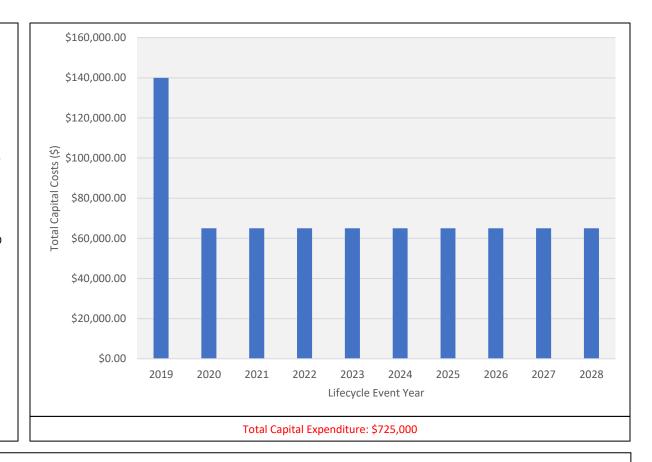




### 9.5 Gravel Roads

# **Capital Plan Summary**

Gravel Road surfaces have been assumed to require \$65,000 of maintenance expenditures annually. This cost is consistent despite weather or traffic volumes. The graph illustrates this linear expenditure over the next 10-year period amounting to \$650,000. Additionally, in 2019, the Township has approved a gravel road conversion project and a gravel road study which amounts to 75,000\$.



# Capital Plan Summary Static and Dynamic Inputs

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







Asset #	Asset	Lifecycle Event Description	Replacement	Total Capital	<b>Condition Index</b>	Risk
	Class		Year	Costs	(2018)	
GRM	Gravel	Gravel Road Study	2019	\$25,000		Medium
	Road					
144	Gravel	Drainage and Repave of Road Surface	2019	\$50,000	90	High
	Road	(Conversion Project)				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2019	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2020	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2021	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2022	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2023	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2024	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2025	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2026	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2027	\$65,000		Medium
	Road	reference				
GRM	Gravel	Gravel Road Maintenance - no asset # to	2028	\$65,000		Medium
	Road	reference				

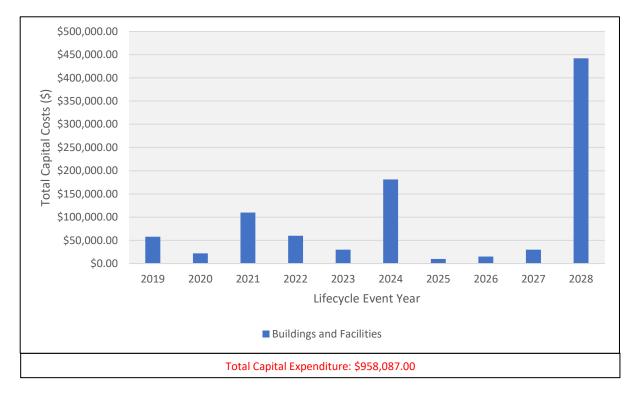




# 9.6 Buildings and Facilities

### **Capital Plan Summary**

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
4002	<b>Buildings and Facilities</b>	Computer Replacement	5	2019	\$10,000.00	5	Low
4001	<b>Buildings and Facilities</b>	Server Replacement	5	2019	\$42,000.00	5	Low
26PCC	Buildings and Facilities	Replacement of Exterior Lighting c/w wiring	40	2019	\$5,000.00	5	Low
59MC	Buildings and Facilities	Replacement of Roads Department Circulating Fans.	40	2019	\$750.00	5	Low
59MC	Buildings and Facilities	Replacement of Hot Water Tank	40	2020	\$5,000.00	5	Low

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Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
59MC	Buildings and Facilities	Replacement of condenser units CU-3, CU-4 - Fire area	40	2020	\$7,000.00	5	Low
4002	<b>Buildings and Facilities</b>	Computer Replacement	5	2020	\$10,000.00	5	Low
46PCC Buildings and Facilities		New cabinets, dishwasher replacement, fridge replacement, flooring, bar door, bar counter, and kitchen washroom.	40	2021	\$100,000.00	5	Low
4002	Buildings and Facilities	Computer Replacement	5	2021	\$10,000.00	5	Low
4002	Buildings and Facilities	Computer Replacement	5	2022	\$10,000.00	5	Low
59MC	<b>Buildings and Facilities</b>	Replacement of HRV Unit	40	2022	\$5,000.00	5	Low
4004	Buildings and Facilities	1.5		2022	\$15,000.00	5	Low
59MC	Buildings and Facilities	ings and Facilities Condenser Units FU-1, FU-2, CU-1, CU2		2022	\$20,000.00	5	Low
59MC	Buildings and Facilities	Replacement of Municipal Offices  Damper Control System	40	2022	\$10,000.00	5	Low
4002	<b>Buildings and Facilities</b>	Computer Replacement	5	2023	\$10,000.00	5	Low
21MC	Buildings and Facilities	Power Distribution Equipment (feeders, panels, main disconnect switch)	40	2023	\$20,000.00	5	Low
93PCC	Buildings and Facilities	Replacement of sanitary pumps and control system	40	2024	\$5,000.00	5	Low
59MC	Buildings and Facilities	Replacement of Roads Department Gas Fired Infra-Red Heaters	40	2024	\$6,000.00	5	Low
59MC	Buildings and Facilities	Replacement of UV Water Treatment System	40	2024	\$10,000.00	5	Low
40PCC	Buildings and Facilities	Fire extinguishers	40	2024	\$750.00	5	Low
93PCC	Buildings and Facilities	Replacement of Water Treatment Equipment	40	2024	\$7,500.00	5	Low
46MC	Buildings and Facilities	Window and door replacement	20	2024	\$100,000.00	4	Medium
4001	<b>Buildings and Facilities</b>	Server Replacement	5	2024	\$42,000.00	5	Low







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
4002	Buildings and Facilities	Computer Replacement	5	2024	\$10,000.00	5	Low
4002	<b>Buildings and Facilities</b>	Computer Replacement	5	2025	\$10,000.00	5	Low
93PCC	Hot Water Tank (Rheem)		40	2026	\$5,000.00	5	Low
4002	<b>Buildings and Facilities</b>	Computer Replacement	5	2026	\$10,000.00	5	Low
4004	<b>Buildings and Facilities</b>	Microsoft Office License Upgrades	5	2027	\$15,000.00	5	Low
4002	Buildings and Facilities	Computer Replacement 5		2027	\$10,000.00	5	Low
93PCC	Buildings and Facilities	Rebalancing of the HVAC System	40	2027	\$5,000.00	5	Low
56MC	Buildings and Facilities	Replace metal roofing panels	40	2028	\$125,000.00	5	Low
71BSBBP CC	Buildings and Facilities	Blue Storage Building Behind PCC Roof Rehabilitation	40	2028	\$30,000.00	3	Medium
67PCC	<b>Buildings and Facilities</b>	Replace metal roofing panels	40	2028	\$100,000.00	5	Low
15002	Buildings and Facilities	Municipal Complex: Parking Lot Municipal Complex	25	2028	\$162,750.00	2	Medium
4002	<b>Buildings and Facilities</b>	Computer Replacement	5	2028	\$10,000.00	5	Low
95RSB	Buildings and Facilities	Roads Storage Building Roof Rehabilitation	40	2028	\$14,337.00	4	Medium

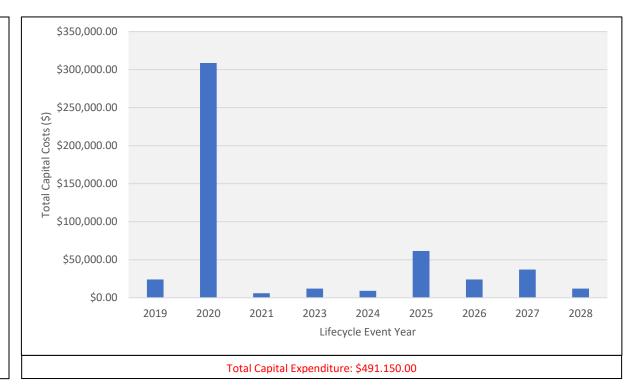




# 9.7 Fire Equipment

### **Capital Plan Summary**

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition (2018)	Risk
67_60FE	Fire Equipment	Bunker Gear #395 1307006351 1104007407	10	2019	\$3,000.00	1	Very High
8_93FE	Fire Equipment	Thermal Imaging Camera	10	2019	\$6,000.00	1	Very High
66_21FE	Fire Equipment	Bunker Gear #317 907001148 907001150	10	2019	\$3,000.00	1	Very High
68_80FE	Fire Equipment	Bunker Gear #376 1104007399 3707960	10	2019	\$3,000.00	1	Very High
69_51FE	Fire Equipment	Bunker Gear #386 1104007401 907001149	10	2019	\$3,000.00	1	Very High
FE_122_1	Fire Equipment	Bunker Gear #351	10	2019	\$3,000.00	1	Very High







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition (2018)	Risk
52_95FE	Fire Equipment	Air Cylinder:347	15	2020	\$1,500.00	3	High
65_29FVT	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
40_31FE	Fire Equipment	Air Cylinder:334	15	2020	\$1,500.00	3	High
41_37FE	Fire Equipment	Air Cylinder:335	15	2020	\$1,500.00	3	High
42_79FE	Fire Equipment	Air Cylinder:336	15	2020	\$1,500.00	3	High
43_107FE	Fire Equipment	Air Cylinder:337	15	2020	\$1,500.00	3	High
44_55FE	Fire Equipment	Air Cylinder:339	15	2020	\$1,500.00	3	High
45_27FE	Fire Equipment	Air Cylinder:340	15	2020	\$1,500.00	3	High
46_91FE	Fire Equipment	Air Cylinder:341	15	2020	\$1,500.00	3	High
47_55FE	Fire Equipment	Air Cylinder:342	15	2020	\$1,500.00	3	High
48_109FE	Fire Equipment	Air Cylinder:343	15	2020	\$1,500.00	3	High
49_104FE	Fire Equipment	Air Cylinder:344	15	2020	\$1,500.00	3	High
38_15FE	Fire Equipment	Air Cylinder:320	15	2020	\$1,500.00	3	High
51_94FE	Fire Equipment	Air Cylinder:346	15	2020	\$1,500.00	3	High
37_107FE	Fire Equipment	Air Cylinder:319	15	2020	\$1,500.00	3	High
53_40FE	Fire Equipment	Air Cylinder:348	15	2020	\$1,500.00	3	High
54_31FE	Fire Equipment	Air Cylinder:349	15	2020	\$1,500.00	3	High
55_41FE	Fire Equipment	Air Cylinder:350	15	2020	\$1,500.00	3	High
56_58FE	Fire Equipment	Air Cylinder:351	15	2020	\$1,500.00	3	High
57_105FE	Fire Equipment	Air Cylinder:352	15	2020	\$1,500.00	3	High
58_88FE	Fire Equipment	Air Cylinder:353	15	2020	\$1,500.00	3	High
59_35FE	Fire Equipment	Air Cylinder:354	15	2020	\$1,500.00	3	High
60_57FE	Fire Equipment	Air Cylinder:355	15	2020	\$1,500.00	3	High
61_17FE	Fire Equipment	Air Cylinder:356	15	2020	\$1,500.00	3	High
65_4FE	Fire Equipment	Air Cylinder:360	15	2020	\$1,500.00	3	High
63_48FE	Fire Equipment	Air Cylinder:358	15	2020	\$1,500.00	3	High
72_79FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
50_57FE	Fire Equipment	Air Cylinder:345	15	2020	\$1,500.00	3	High
24_94FE	Fire Equipment	Air Cylinder:106	15	2020	\$1,500.00	3	High
6_70FE	Fire Equipment	Power Hydraulic Tool set	20	2020	\$52,500.00	1	Very High
66_17FVT	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition (2018)	Risk
11_103FE	Fire Equipment	Rapid Deployment Water Craft	10	2020	\$6,000.00	4	Medium
14_25FE	Fire Equipment	Air Cylinder:84	15	2020	\$1,500.00	3	High
15_87FE	Fire Equipment	Air Cylinder:85	15	2020	\$1,500.00	3	High
16_87FE	Fire Equipment	Air Cylinder:87	15	2020	\$1,500.00	3	High
17_76FE	Fire Equipment	Air Cylinder:88	15	2020	\$1,500.00	3	High
18_90FE	Fire Equipment	Air Cylinder:100	15	2020	\$1,500.00	3	High
19_90FE	Fire Equipment	Air Cylinder:101	15	2020	\$1,500.00	3	High
20_85FE	Fire Equipment	Air Cylinder:102	15	2020	\$1,500.00	3	High
21_85FE	Fire Equipment	Air Cylinder:103	15	2020	\$1,500.00	3	High
39_99FE	Fire Equipment	Air Cylinder:323	15	2020	\$1,500.00	3	High
23_42FE	Fire Equipment	Air Cylinder:105	15	2020	\$1,500.00	3	High
64_106FE	Fire Equipment	Air Cylinder:359	15	2020	\$1,500.00	3	High
25_35FE	Fire Equipment	Air Cylinder:107	15	2020	\$1,500.00	3	High
26_23FE	Fire Equipment	Air Cylinder:108	15	2020	\$1,500.00	3	High
27_67FE	Fire Equipment	Air Cylinder:109	15	2020	\$1,500.00	3	High
28_48FE	Fire Equipment	Air Cylinder:310	15	2020	\$1,500.00	3	High
29_64FE	Fire Equipment	Air Cylinder:311	15	2020	\$1,500.00	3	High
30_89FE	Fire Equipment	Air Cylinder:312	15	2020	\$1,500.00	3	High
31_89FE	Fire Equipment	Air Cylinder:313	15	2020	\$1,500.00	3	High
32_104FE	Fire Equipment	Air Cylinder:314	15	2020	\$1,500.00	3	High
33_34FE	Fire Equipment	Air Cylinder:315	15	2020	\$1,500.00	3	High
34_30FE	Fire Equipment	Air Cylinder:316	15	2020	\$1,500.00	3	High
35_104FE	Fire Equipment	Air Cylinder:317	15	2020	\$1,500.00	3	High
36_48FE	Fire Equipment	Air Cylinder:318	15	2020	\$1,500.00	3	High
22_9FE	Fire Equipment	Air Cylinder:104	15	2020	\$1,500.00	3	High
62_23FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
70_84FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
67_17FVT	Fire Equipment	SCBA Masks	15	2020	\$8,250.00	4	Medium
68_20FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
61_92FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
73_30FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition (2018)	Risk
77_9FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
78_16FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
79_57FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
80_30FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	3	High
69_41FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
74_27FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
75_43FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
62_96FE	Fire Equipment	Air Cylinder:357	15	2020	\$1,500.00	3	High
59_56FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
67_99FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
60_51FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
71_45FVT	Fire Equipment	Fire Hawk 2002	15	2020	\$7,450.00	4	Medium
64_69FVT	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
63_86FVT	Fire Equipment	Fire Hawk M7	15	2020	\$7,450.00	4	Medium
76_67FVT	Fire Equipment	Ultralight MMR 2000	15	2020	\$7,450.00	4	Medium
72_58FE	Fire Equipment	Bunker Gear #378 1104007403 1104007408	10	2021	\$3,000.00	3	High
71_102FE	Fire Equipment	Bunker Gear #308	10	2021	\$3,000.00	3	High
74_22FE	Fire Equipment	Bunker Gear #336 1301002757 1301002762	10	2023	\$3,000.00	3	High
75_67FE	Fire Equipment	Bunker Gear #392 1301002758 1301002763	10	2023	\$3,000.00	4	Medium
76_55FE	Fire Equipment	Bunker Gear #337 1301002760 1301002765	10	2023	\$3,000.00	4	Medium
73_67FE	Fire Equipment	Bunker Gear #301 1301002761 1301002766	10	2023	\$3,000.00	3	High
77_100FE	Fire Equipment	Bunker Gear #388 4748801 4749620	10	2024	\$3,000.00	4	Medium
78_9FE	Fire Equipment	Bunker Gear #318	10	2024	\$3,000.00	4	Medium
79_75FE	Fire Equipment	Bunker Gear #310 4748800 4749619	10	2024	\$3,000.00	4	Medium
93_73FE	Fire Equipment	Bunker Gear #320 4924094 4924087	10	2025	\$3,000.00	4	Medium
1212_41FE	Fire Equipment	Defibrillators - Municipal Buildings	8	2025	\$4,500.00	5	Medium







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition (2018)	Risk
12_41FE	Fire Equipment	Defibrillators Fire & Rescue Service Trucks	8	2025	\$15,000.00	3	High
90_29FE	Fire Equipment	Bunker Gear #380 4992303 4992306	10	2025	\$3,000.00	4	Medium
80_57FE	Fire Equipment	Bunker Gear #333 4924090 4924085	10	2025	\$3,000.00	4	Medium
81_37FE	Fire Equipment	Bunker Gear #387 4924092 4924080	10	2025	\$3,000.00	4	Medium
83_94FE	Fire Equipment	Bunker Gear #326 4924091 4924082	10	2025	\$3,000.00	4	Medium
84_89FE	Fire Equipment	Bunker Gear #321 4992302 4924081	10	2025	\$3,000.00	4	Medium
85_11FE	Fire Equipment	Bunker Gear #370 4924095 4924083	10	2025	\$3,000.00	4	Medium
86_72FE	Fire Equipment	Bunker Gear #381 4924093 4924086	10	2025	\$3,000.00	4	Medium
87_51FE	Fire Equipment	Bunker Gear #306 4992301 4992304	10	2025	\$3,000.00	4	Medium
89_97FE	Fire Equipment	Bunker Gear #307 4924089 4924079	10	2025	\$3,000.00	4	Medium
91_44FE	Fire Equipment	Bunker Gear #375 4924077 4992305	10	2025	\$3,000.00	4	Medium
92_20FE	Fire Equipment	Bunker Gear #303 5017234 5017235	10	2025	\$3,000.00	4	Medium
94_89FE	Fire Equipment	Bunker Gear #355 4924088 4924078	10	2025	\$3,000.00	4	Medium
88_35FE	Fire Equipment	Bunker Gear #309 4924096 4924084	10	2025	\$3,000.00	4	Medium
95_47FE	Fire Equipment	Bunker Gear #315 5085806 5085940	10	2026	\$3,000.00	5	Medium
13_89FE	Fire Equipment	Portable Pumps	20	2026	\$15,000.00	4	Medium
96_14FE	Fire Equipment	Bunker Gear #319 5122954 5085938	10	2026	\$3,000.00	5	Medium
97_58FE	Fire Equipment	Bunker Gear #391 5085805 5085939	10	2026	\$3,000.00	5	Medium
9_104FE	Fire Equipment	Washer/Extractor	10	2027	\$10,000.00	4	Medium
98_23FE	Fire Equipment	Bunker Gear #379 5312492 5312493	10	2027	\$3,000.00	5	Medium
10_2FE	Fire Equipment	Gear Dryer	10	2027	\$6,000.00	4	Medium
102_20FE	Fire Equipment	Bunker Gear #322 5310556 5310561	10	2027	\$3,000.00	5	Medium
101_49FE	Fire Equipment	Bunker Gear #385 5310557 5310562	10	2027	\$3,000.00	5	Medium
99_1FE	Fire Equipment	Bunker Gear #382 5310558 5310560	10	2027	\$3,000.00	5	Medium
8_94FE	Fire Equipment	Thermal Imaging Camera Replacement	10	2027	\$6,000.00	3	High
100_87FE	Fire Equipment	Bunker Gear #323 5310555 5310559	10	2027	\$3,000.00	5	Medium
106_92FE	Fire Equipment	Bunker Gear #305 5483613 5483618	10	2028	\$3,000.00	5	Medium
105_24FE	Fire Equipment	Bunker Gear #302 5483614 5483619	10	2028	\$3,000.00	5	Medium
104_60FE	Fire Equipment	Bunker Gear #335 5483615 5483621	10	2028	\$3,000.00	5	Medium
103_101FE	Fire Equipment	Bunker Gear #350 5483616 5483622	10	2028	\$3,000.00	5	Medium





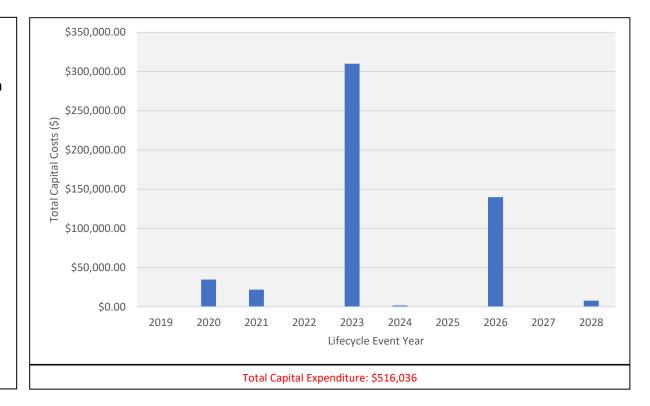
### 9.8 Parks and Recreation

Capital Plan Summary

Parks and Recreation assets

lifecycle activity schedule has been

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Lifecycle Event Cost	Condition Index (2018)	Risk
3047	Parks and Recreation	Morriston Meadows: Benches Replacement	20	2020	\$1,000.00	1	High
3036	Parks and Recreation	Community Centre Complex: Horse Paddock Bleachers Replacement	20	2020	\$30,000.00	1	High
3059	Parks and Recreation	Old Morriston: Fencing Backstop Replacement	20	2020	\$3,668.00	1	High



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Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Lifecycle Event Cost	Condition Index (2018)	Risk
3053	Parks and Recreation	Morriston Meadows: 6 Seat High Bleachers Replacement	25	2021	\$5,000.00	1	High
3052	Parks and Recreation	Morriston Meadows: 6 Seat High Bleachers Replacement	25	2021	\$5,000.00	1	High
3068	Parks and Recreation	Badenoch Soccer Field: 3 Seat Bleacher Replacement	25	2021	\$2,000.00	1	High
3046	Parks and Recreation	Morriston Meadows: Bleachers Replacement	25	2021	\$10,000.00	1	High
3060	Parks and Recreation	Old Morriston: 6 seat Concrete Bleachers Replacement	50	2023	\$10,000.00	1	High
3082	Parks and Recreation	Parking Lot & Associated Enhancements (curbing, entrance, and additional lighting)	25	2023	\$300,000.00	2	High
3025	Parks and Recreation	Community Centre Complex: Wooden Fences Beside Batting Cages Replacement	15	2024	\$1,800.00	2	High
3070	Parks and Recreation	Badenoch Soccer Field: Fencing (East Side) Replacement	20	2026	\$14,934.00	2	High
3075	Parks and Recreation	Modernizing the playground at Boreham Park with creative play equipment	25	2026	\$100,000.00	5	Medium
14003	Parks and Recreation	Community Centre Complex Tennis Court Fencing: installation of wind and noise screening) and to convert the third court (furthest from the road) into a public court	40	2026	\$10,000.00	5	Medium
3029	Parks and Recreation	Community Centre Complex: Fencing Replacement	20	2026	\$9,694.00	2	High
3028	Parks and Recreation	Community Centre Complex: Light Poles Replacement	20	2026	\$5,200.00	2	High
3056	Parks and Recreation	Old Morriston: Gravel Road Rehabilitation	25	2028	\$7,740.00	2	High

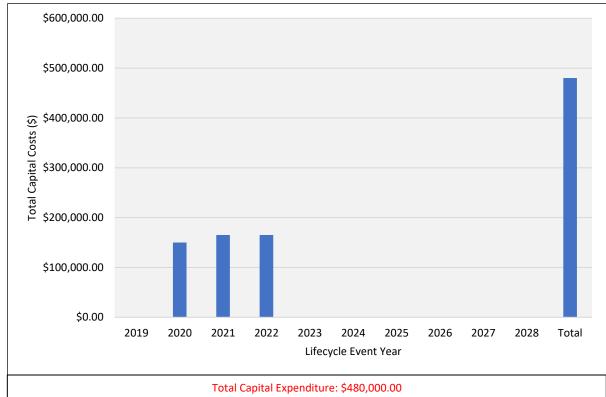




# 9.9 Storm Water Management Ponds

### **Capital Plan Summary**

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



### Capital Plan Summary Cont'd

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

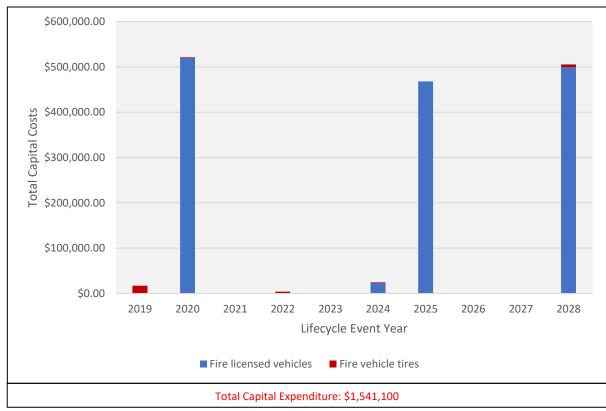




### 9.10 Fire Vehicles - Licensed Vehicles & Tires

# **Capital Plan Summary**

As stated in the State of the Infrastructure section of this report all Fire Vehicle assets have been loaded into the asset registry with high level of dynamic input. The expected remediation schedule set out for fire vehicle's lifecycle attributes has not been applied. The schedule that is visualized in the graph and chart has been formulated from staff and recommendations from the 2017 Fleet Management Report.



Asset #	Asset Class	Lifecycle Event  Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
15_73FVT	Fire vehicle tires	Tire Replacement	8	2019	\$825.00	3	Medium
31_1FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
30_35FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
29_40FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
28_4FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
27_69FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
32_77FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High



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Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
16_16FVT	Fire vehicle tires	Tire Replacement	8	2019	\$825.00	3	Medium
18_76FVT	Fire vehicle tires	Tire Replacement	8	2019	\$825.00	3	Medium
6_77FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
5_81FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
4_96FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
3_3FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
2_11FVT	Fire vehicle tires	Tire Replacement	10	2019	\$648.00	1	High
1_66FVT	Fire vehicle tires	Tire Replacement	10	2019	\$648.00	1	High
17_74FVT	Fire vehicle tires	Tire Replacement	8	2019	\$825.00	3	Medium
45_1FVT	Fire vehicle tires	Tire Replacement	10	2019	\$250.00	1	High
46_31FVT	Fire vehicle tires	Tire Replacement	10	2019	\$250.00	1	High
47_71FVT	Fire vehicle tires	Tire Replacement	10	2019	\$250.00	1	High
48_70FVT	Fire vehicle tires	Tire Replacement	10	2019	\$250.00	1	High
34_59FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
41_1FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
40_1FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
33_70FVT	Fire vehicle tires	Tire Replacement	10	2019	\$825.00	1	High
14_38FVT	Fire vehicle tires	Tire Replacement	8	2020	\$825.00	3	Medium
5035	Fire licensed vehicles	Rescue Truck 35 Replacement	20	2020	\$520,000.00	3	Medium
13_63FVT	Fire vehicle tires	Tire Replacement	8	2020	\$825.00	3	Medium
10_14FVT	Fire vehicle tires	Tire Replacement	10	2022	\$686.00	3	Medium
7_64FVT	Fire vehicle tires	Tire Replacement	10	2022	\$686.00	3	Medium
9_22FVT	Fire vehicle tires	Tire Replacement	10	2022	\$686.00	3	Medium
11_90FVT	Fire vehicle tires	Tire Replacement	10	2022	\$686.00	3	Medium
12_46FVT	Fire vehicle tires	Tire Replacement	10	2022	\$686.00	3	Medium
8_19FVT	Fire vehicle tires	Tire Replacement	10	2022	\$686.00	3	Medium
26_100FV T	Fire vehicle tires	Tire Replacement	10	2024	\$825.00	4	Medium
7005A	Fire licensed vehicles	2013 Vehicle For Fire & Rescue Replacement	7	2024	\$23,000.00	4	Medium







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
25_57FVT	Fire vehicle tires	Tire Replacement	10	2024	\$825.00	4	Medium
5031	Fire licensed vehicles	Fire Pumper 31 Replacement	20	2025	\$468,000.00	3	Medium
43_24FVT	Fire vehicle tires	Tire Replacement	10	2028	\$648.00	1	High
42_14FVT	Fire vehicle tires	Tire Replacement	10	2028	\$648.00	1	High
38_76FVT	Fire vehicle tires	Tire Replacement	10	2028	\$648.00	1	High
14_38FVT	Fire vehicle tires	Tire Replacement	8	2028	\$825.00	3	Medium
36_27FVT	Fire vehicle tires	Tire Replacement	10	2028	\$825.00	1	High
5033	Fire licensed vehicles	Aerial 33 Replacement	25	2028	\$500,000.00	3	Medium
37_60FVT	Fire vehicle tires	Tire Replacement	10	2028	\$648.00	1	High
44_8FVT	Fire vehicle tires	Tire Replacement	10	2028	\$648.00	1	High
35_18FVT	Fire vehicle tires	Tire Replacement	10	2028	\$825.00	1	High
39_53FVT	Fire vehicle tires	Tire Replacement	10	2028	\$648.00	1	High

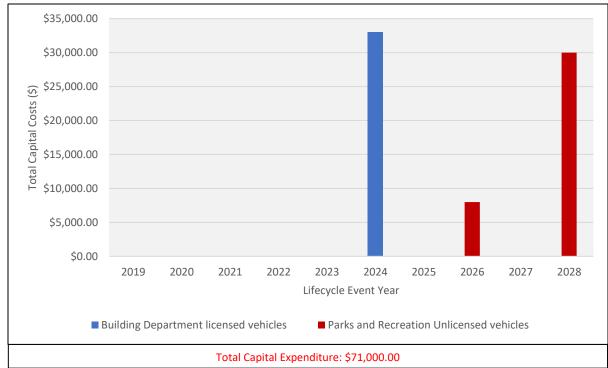




### 9.11 Parks and Recreation and Building Department Vehicles

# **Capital Plan Summary**

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
7005B	Building Department licensed vehicles	2016 Mid-Size Pickup	7	2024	\$33,000.00	3	Medium
4060	Parks and Recreation Unlicensed vehicles	Floor Scrubber	10	2026	\$8,000.00	4	Medium
7007	Parks and Recreation Unlicensed vehicles	Lawn Tractor	10	2028	\$30,000.00	4	Medium

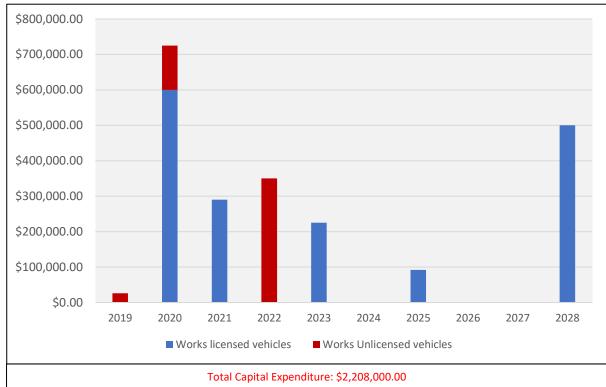




# 9.12 Works Department – Licensed and Unlicensed Vehicles & Equipment

# **Capital Plan Summary**

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
8002	Works Unlicensed vehicles	2000 Gravel Packer – New Equipment for Grader	25	2019	\$26,000.00	2	Medium
7003	Works licensed vehicles	2008 1 Ton Dump/Plow 305 Replacement	12	2020	\$100,000.00	2	Medium
8013	Works licensed vehicles	2011 Single Axle Truck 304 Replacement	8	2020	\$250,000.00	1	High
8014	Works licensed vehicles	2012 Dump/Plow 302 Replacement	8	2020	\$250,000.00	2	Medium







Asset #	Asset Class	Lifecycle Event Description	L.E	Replacement Year	Total Capital Costs	Condition Index (2018)	Risk
8001	Works Unlicensed vehicles	2008 JCB Backhoe 6 Replacement	12	2020	\$125,000.00	2	Medium
7008	Works licensed vehicles	2011 Chevy Silverado Pickup 4 Replacement	10	2021	\$40,000.00	1	High
8016	Works licensed vehicles	2013 International Plow Truck 301 Replacement	8	2021	\$250,000.00	2	Medium
8002	Works Unlicensed vehicles	2000 Road Grader G740 501 Replacement	25	2022	\$350,000.00	2	Medium
8017	Works licensed vehicles	2015 International Plow Truck - 303 Replacement	8	2023	\$225,000.00	2	Medium
7009	Works licensed vehicles	2017 Pickup Truck - Staff - 3/4 Ton Replacement	8	2025	\$52,000.00	3	Medium
8019	Works licensed vehicles	2020 GMC Sierra 1500 Replacement	10	2025	\$40,000.00	3	Medium
8013	Works licensed vehicles	2020 Single Axle Truck 304 Replacement	8	2028	\$250,000.00	1	High
8014	Works licensed vehicles	2020 Dump/Plow 302 Replacement	8	2028	\$250,000.00	2	Medium

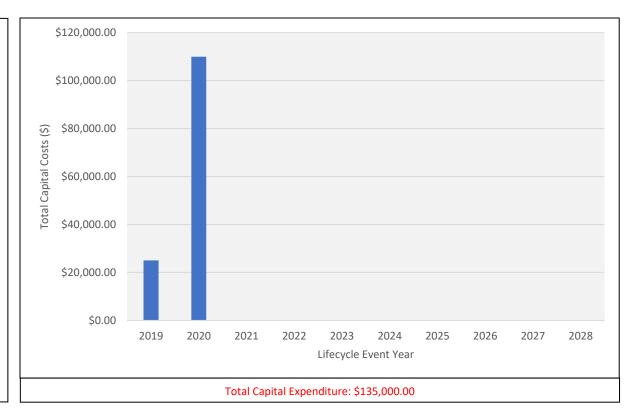




### 9.13 Sidewalks

**Capital Plan Summary** 

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



Asset #	Asset Class	Lifecycle Event Description	L.E	Lifecycle Event Year	Lifecycle Event Cost	Condition Index (2018)	Risk
304	Sidewalk	Brock Road Sidewalk Remediation for AODA Compliance (Phase 1)	20	2019	\$25,000.00	4	Medium
304	Sidewalk	Brock Road Sidewalk Remediation for AODA Compliance (Phase 2)	20	2020	\$110,000.00	4	Medium



# 10.0 Risk

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

Risk is the combination of the Consequence of Failure CoF and the Probability of Failure PoF of an asset as shown in Figure 10.0 - 1. The PoF of an asset is determined using the estimated service life of the asset, the age of the asset, and the assessed condition of the asset. CoF is determined for each asset class based on five weighted consequence of failure factors such as Health and Safety, Financial, Environmental, Legal & Regulatory, and Operational & Internal Demand.

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

			Consequ	uence of Fail	ure (CoF)	
	Risk Matrix	Insignificant	Low	Medium	High	Very High
F)	Almost Certain	High	High	Very High	Very High	Very High
ıre (Pol	Highly Likely	Moderate	Moderate	High	High	Very High
Probability of Failure (PoF)	Likely	Low	Low	Moderate	High	High
bability	Unlikely	Very Low	Low	Low	Moderate	Moderate
Pro	Almost Certainly Not	Very Low	Very Low	Very Low	Low	Low

10.0 - 1 Risk Matrix



### 10.1 Probability of Failure

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

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

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

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

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

Further, when condition data was not available an assets risk was calculated based on the remaining service life of the asset. For example, for many of the vehicles in the asset registry condition data was not available. Thus, in order to create a risk profile for the asset the remaining service life of the asset was used. Both of the above processes to calculate Probability of Failure are illustrated in Sections 10.3 (Calculating Probability of Failure Based on Remaining Service Life) and 10.4 (Calculating Probability of Failure Based on Condition).

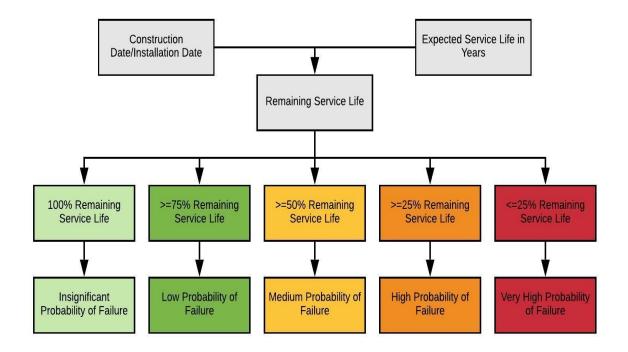
### 10.2 Consequence of Failure

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

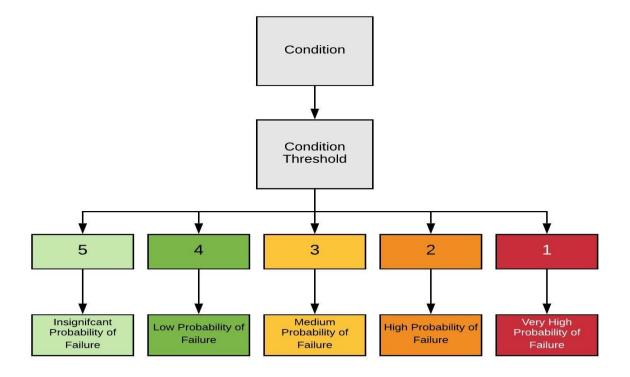


# PUSLINCH

# 10.3 Calculating Probability of Failure Based on Remaining Service Life



# 10.4 Calculating Probability of Failure Based on Condition







### 10.5 Consequence of Failure Factors

Health and Safety: Considers the impacts to Public and Employee health

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

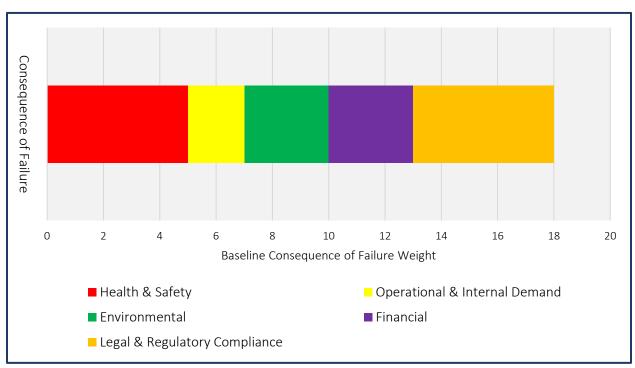
<u>Environmental</u>: Considers the direct impacts to the natural environment as the result of asset failure

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

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

### 10.6 Consequence of Failure: Establishing Baseline Risk

These factors, when considered collectively were given a baseline weighting factor in order to justify their relative importance against other factors. This weighting factor is a number that would give each asset class a pre-conceived/overall risk weighting. This was necessitated in order to justify each assets baseline risk despite it's condition ratings. To establish this Baseline Risk workshops were held with Staff in order to classify the most important (highest weighted) consequence of failure factors. The results of these workshops are illustrated in Figure 10.0 - 2.



10.0 - 2 Baseline Risk Calculation



### 10.7 Consequence of Failure: Quantifying the Qualitative Methodology

To further quantify each asset class and create full risk profiles for each of the factors: Health and Safety, Operational & Internal Demand, Environmental, Financial and Legal & Regulatory Compliance. UEM converted the qualitative consequence of failure matrix (charts 10.0 - 3 to 10.0 - 7) into a quantitative format which are illustrated in chart 10.0 - 8. Each respective qualitative category was converted to a number that ranged from 1-10. Where 1 means insignificant consequence of failure impact and 10 means very high consequence of failure impact.

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

10.0 - 3 Qualitative Methodology: Health and Safety

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

10.0 - 4 Qualitative Methodology: Operational & Internal Demand





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

10.0 - 5 Qualitative Methodology: Environmental

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

10.0 - 6 Qualitative Methodology: Financial

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

10.0 – 7 Qualitative Methodology: Operational & Internal Demand





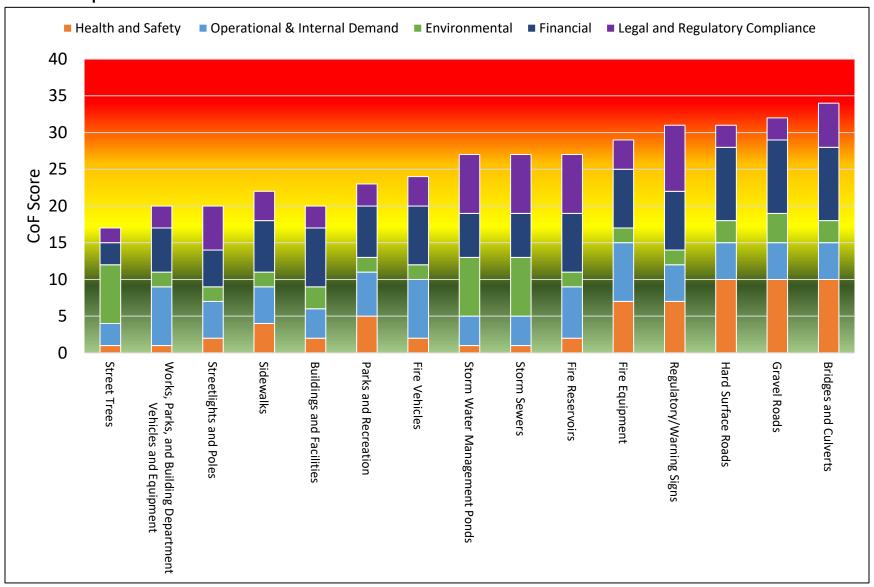
#### Consequence of Failure Score Card Health Internal Environmental Financial Legal and Total Consequence Baseline and Demand & Regulatory Weight of Failure Safety Operational Compliance Score **Bridges and Culverts Gravel Roads Hard Surface Roads** Regulatory/Warning Signs Fire Equipment Fire Reservoirs Storm Water Management Ponds and Storm Sewers Fire Vehicles and Tires Parks and Recreation Sidewalks **Buildings and Facilities** Works, Parks, and Building Department Vehicles and Equipment Street lights and Poles Trees

10.0 - 8 Consequence of Failure Scores all Asset Classes





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

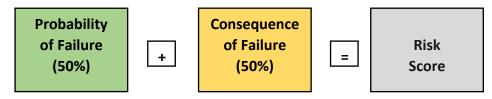


10.0 - 9 Consequence of Failure Classification all Asset Classes (Stacked Bar Chart)



### 10.9 Technical Walkthrough: Calculating Risk & Risk Profiling

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



10.0 - 10 Risk Calculation

There are many methods for calculating a risk score, UEM for this asset management plan employed a simple ratio algorithm where a risk score is weighted 50% on its Consequence of Failure and 50% on its Probability of Failure. Figure 10.0-11 illustrates that a risk score is devised first from the addition of the Probability of Failure and Consequence of Failure scores and second divided by two to generate a Risk Score.

Table 10.0 - 11 was intentionally designed to illustrate that a high Probability of Failure when joined to a low Consequence of Failure results in a Risk score of 3. The result is the same if there is a high Consequence of Failure and low Probability of Failure, resulting in a Risk score of 3.

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

10.0 - 11 Example Risk Calculation

### 10.10 Risk: Summary of Methods

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

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







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

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

Standardizing Consequence of Failure Scores							
Hard Surface Roads	Gravel Roads	Bridges and Culverts					
COF Score: 31 -> 5	COF Score: 32 -> 5	COF Score: 34 -> 5					
Buildings and Facilities COF Score: 20 -> 3	Works, Parks, and Building Department Vehicles and Equipment COF Score: 20 -> 2	Fire Vehicles COF Score: 20 -> 3					
Parks and Recreation	Fire Reservoirs	Street lights and Poles					
COF Score: 24 -> 3	COF Score: 23 -> 4	COF Score: 20 ->2					
Sidewalks	Fire Equipment	Regulatory/Warning Signs					
COF Score: 22 -> 2	COF Score: 29 -> 4	COF Score: 31 -> 4					
Storm Water Management Ponds COF Score: Ponds 27 -> 3	Storm Sewers COF Score: 27 -> 3	Street Trees COF Score: 17-> 1					

10.0 - 12 Standardization of Consequence of Failure Scores

UEM



PUSLINCH

### THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

### 10.11 10 Year Capital Plan Risk Matrix

The following table 10.0 - 13 illustrates the relative risk across all asset classes included in the 10-year capital plan. The table below encompasses the spread of risk in a risk matrix in order to map the relative risk incurred by the Township should they defer the projects proposed in the capital plan.

**Risk Matrix: 10 Year Capital Plan Total Costs** 

	(POF)									
ence		\$-	\$-	\$-	\$-	\$8,672,357.22				
Consequence <sup>-</sup> ailure	:0F)	(COF)			(:	\$-	\$-	\$-	\$4,154,979.85	\$-
			\$-	\$-	\$4,323,173.40	\$-	\$-			
Assets	((	\$-	\$651,000.00	\$586,987.00	\$-	\$-				
AII A		\$-	\$-	\$-	\$-	\$-				

10.0 -13 10 Year Capital Plan Total Expenditure

# 11.0 Asset Class Risk Summaries

This section summarizes each asset class in the asset registry using the logic and procedures necessary for risk profiling each asset class. These logics have already been stated in Section 10.7 Quantifying the Qualitative Methodology. The financial figures included in each summary page represent the outputs from the 10-year capital plan. Thus, for all asset classes that are not included in the capital plan, there will be a "No Data" in the title header.





# 11.1 Bridges

### **Consequence of Failure Descriptions**

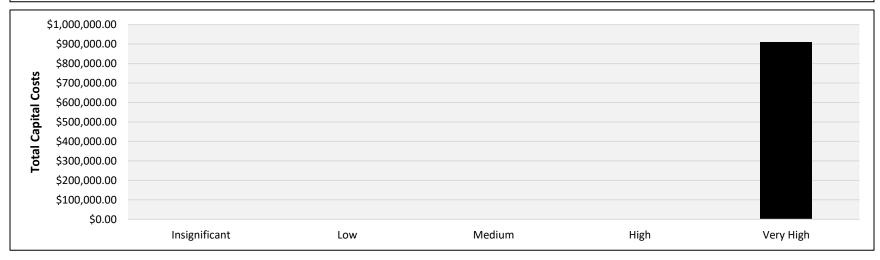
Health and Safety: Definite certainty for death or multiple deaths with possible permanent disabilities.

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

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

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

Legal & Regulatory Compliance: Possible Claims and charges by interest groups or Government Agencies.



	Probability of Failure (PoF)									
	ce oF)	\$	-	\$	-	\$	-	\$	-	\$ 910,000.00
es	(Cc	\$	-	\$	-	\$	-	\$	-	\$ -
idges	equ ure	\$	-	\$	-	\$	-	\$	-	\$ -
Br	onse Fail	\$	-	\$	-	\$	-	\$	-	\$ -
	) J	\$	-	\$	-	\$	-	\$	-	\$ -





### 11.2 Culverts

### **Consequence of Failure Descriptions**

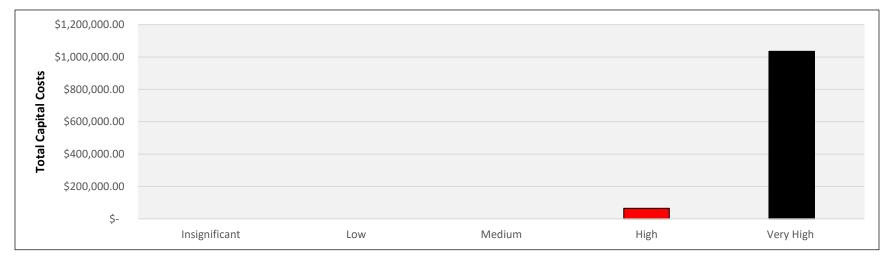
Health and Safety: Definite certainty for death or multiple deaths with possible permanent disabilities.

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

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

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

**Legal & Regulatory Compliance:** Possible Claims and charges by interest groups or Government Agencies.



	Probability of Failure (PoF)									
	ce oF)	\$	-	\$	-	\$	-		\$ 1,03	35,000.00
rts	(C	\$	-	\$	-	\$	-	\$ 65,000.00	\$	-
<u>                                     </u>	equ	\$	-	\$	-	\$	-	\$ -	\$	-
C	onse Fail	\$	-	\$	-	\$	-	\$ -	\$	-
	of J	\$	-	\$	-	\$	-	\$ -	\$	-





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

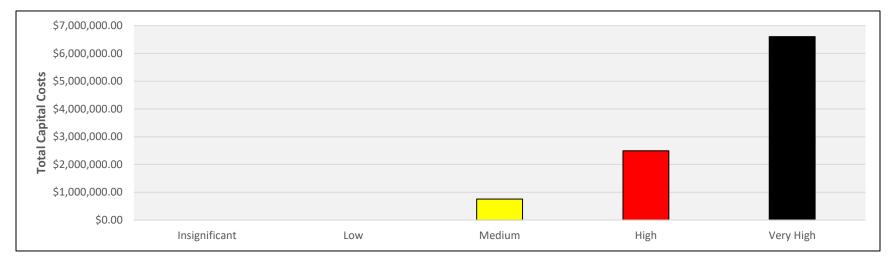
### **Consequence of Failure Descriptions**

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

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days. **Environmental**: Material damage of local importance. Minor, short-term (within 6 months) very isolated damage to the environment.

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

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



				Probability of Failu	re (PoF)	
Se	ce oF)	\$-	\$-	\$-	\$-	\$6,653,857.22
face	Surfaces equence lure (CoF	\$-	\$-	\$-	\$2,543,759.85	\$-
_		\$-	\$-	\$780,507.40	\$-	\$-
	onse Fail	\$-	\$-	\$-	\$-	\$-
Road	CC of I	\$-	\$-	\$-	\$-	\$-





# 11.4 Buildings and Facilities

### **Consequence of Failure Descriptions**

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

Legal & Regulatory Compliance: Claims by an individual possible.

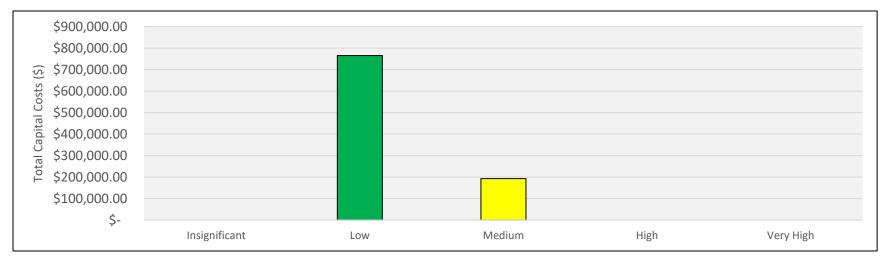
**Financial**: Cost of Reactive response and replacement are over 125% to 200% of proactive replacement and Increase in cost to

providing service is over 25%.

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

environment.

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



	Probability of Failure (PoF)								
þ	ce oF)	\$-	\$-	\$-	\$-	\$-			
s ar ies	(C eu	\$-	\$-	\$-	\$-	\$-			
ings	equ	\$-	\$-	\$192,750.00	\$-	\$-			
uild Fa	onse Fail	\$-	\$651,000.00	\$114,337.00	\$-	\$-			
BL	of o	\$-	\$-	\$-	\$-	\$-			





### 11.5 Parks and Recreation

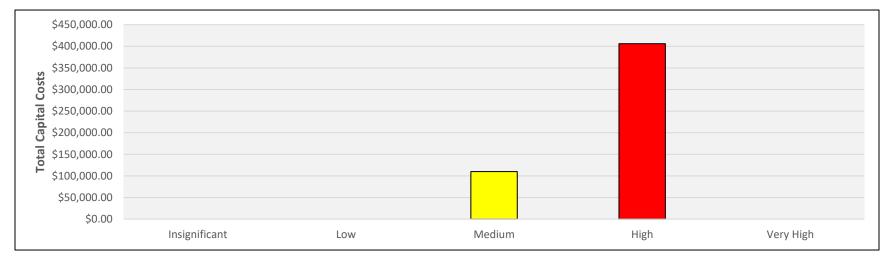
### **Consequence of Failure Descriptions**

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

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days. **Environmental:** Very negligible impact. Reversible within 1 week.

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

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



	Probability of Failure (PoF)								
_	ce oF)	\$-	\$-	\$-	\$-	\$-			
and	(C	\$-	\$-	\$-	\$406,036.00	\$-			
	equ	\$-	\$-	\$-	\$-	\$-			
Parks	ons(	\$-	\$-	\$110,000.00	\$-	\$-			
	O Jo	\$-	\$-	\$-	\$-	\$-			





# 11.6 Works Department – Licensed & Unlicensed Vehicles and Equipment

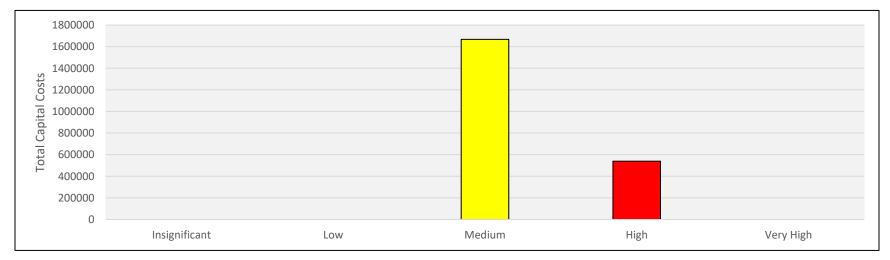
# **Consequence of Failure Descriptions**

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

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

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

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



				Probability of Failure (I	PoF)	
ks. ts.	ce oF)	\$-	\$-	\$-	\$-	<b>\$</b> -
arl	C(	\$-	\$-	\$-	\$540,000.00	\$-
s, P ng	edu ure	\$-	\$-	\$1,576,000.00	\$-	\$-
ork iildi	ons Fail	\$-	\$-	\$92,000.00	\$-	\$-
N W B∪	CC Of I	\$-	\$-	\$-	\$-	\$-





#### 11.7 Parks and Recreation Unlicensed vehicles

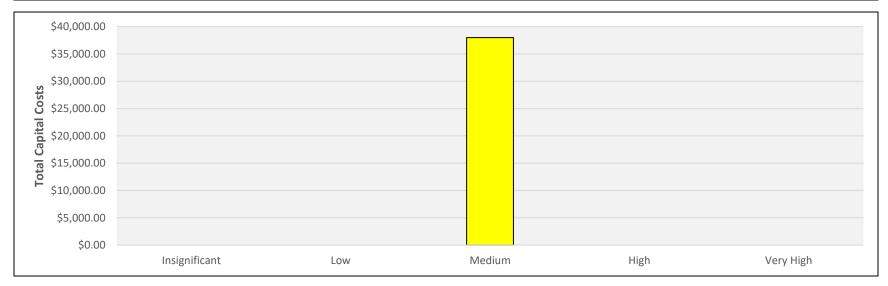
# **Consequence of Failure Descriptions**

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

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

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

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



	Probability of Failure (PoF)										
Ф	se oF)	\$-	\$-	\$-	\$-	\$-					
R Isec	eu (C	\$-	\$-	\$-	\$	\$-					
∞ 9	equ ure	\$-	\$-	\$	\$-	\$-					
l P ilu	nse Fail	\$-	\$-	\$38,000.00	\$-	\$-					
	2	\$-	\$-	\$-	\$-	\$-					





# 11.8 Building Department Licensed Vehicles

# **Consequence of Failure Descriptions**

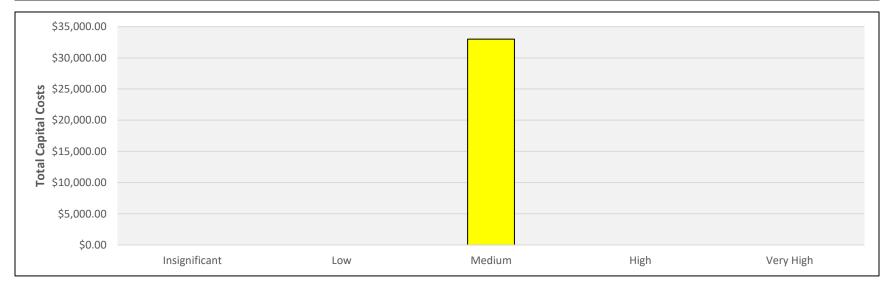
Health and Safety: No obvious potential for injury or impacts to health.

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

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

Financial: Cost of Reactive response and replacement is over 110% to 125% of proactive replacement and Increase in cost to

providing service is over 10%.



	Probability of Failure (PoF)										
р	ce oF)	\$-	\$-	\$-	\$-	\$-					
nse les		\$-	\$-	\$-	\$	\$-					
icer hicl	equ	<b>\$</b> -	<b>\$</b> -	\$33,000.00	\$-	\$-					
D Li	ons( Fail	\$-	\$-	\$	\$-	\$-					
В	of l	\$-	\$-	\$-	\$-	\$-					





# 11.9 Fire Licensed Vehicles (Vehicles and Tires)

# **Consequence of Failure Description**

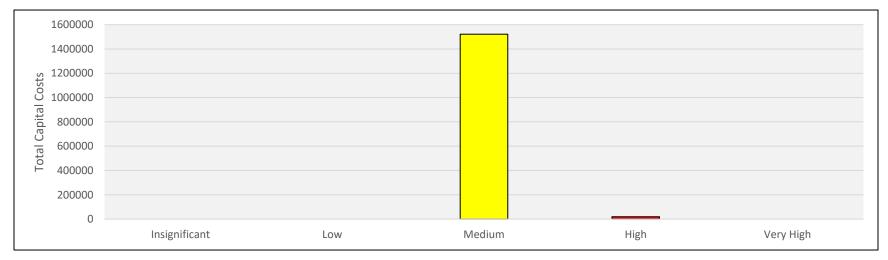
Health and Safety: No obvious potential for injury or impacts to health.

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

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

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

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



	Probability of Failure (PoF)											
Б	ce oF)	\$-	\$-	\$-	\$-	\$-						
nse	en (C	\$-	\$-	\$-	\$19,384.00	\$-						
Lice	aqu ure	\$-	\$-	\$1,497,066.00	\$-	\$-						
ire L Ve	onse Failu	\$-	\$-	\$24,650.00	\$-	\$-						
证	CC	\$-	\$-	\$-	\$-	\$-						





# 11.10 Fire Equipment

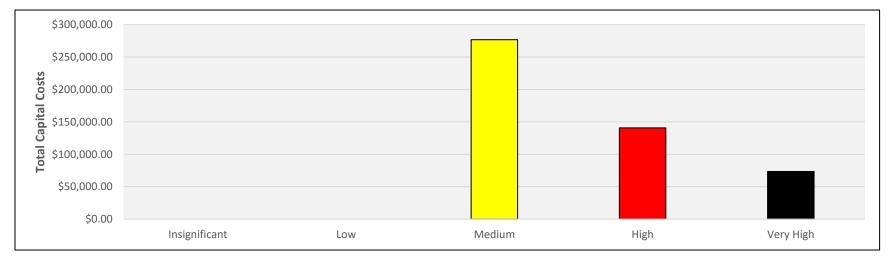
# **Consequence of Failure Descriptions**

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

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

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

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



				Probability of Failu	re (PoF)	
ent	ce oF)	\$-	\$-	<b>\$</b> -	\$-	\$73,500.00
bme	(Ct	\$-	\$-	\$-	\$140,800.00	\$-
quik	equ	\$-	\$-	\$276,850.00	\$-	\$-
e Ec	onse Fail	\$-	\$-	\$-	\$-	\$-
H E	) j	\$-	\$-	\$-	\$-	\$-





# 11.11 Storm Water Management Ponds

# **Consequence of Failure Descriptions**

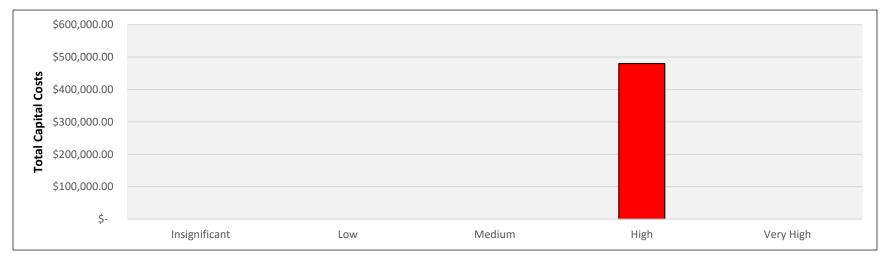
Health and Safety: No obvious potential for injury or impacts to health.

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

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

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

Legal & Regulatory Compliance: Possible Claims and charges by interest groups or Government Agencies.



				Probability of Fa	ailure (PoF)	
r	ce oF)	\$-	\$-	\$-	\$-	\$-
ate, ner	(C	\$-	\$-	\$-	\$480,000.00	\$-
m W ager	equ	\$-	\$-	\$-	\$-	\$-
Storr Mana	ns ail	\$-	\$-	\$-	\$-	\$-
S Z	Of F	\$-	\$-	\$-	\$-	\$-





# 11.12 Street lights and Poles (No Data)

# **Consequence of Failure Descriptions**

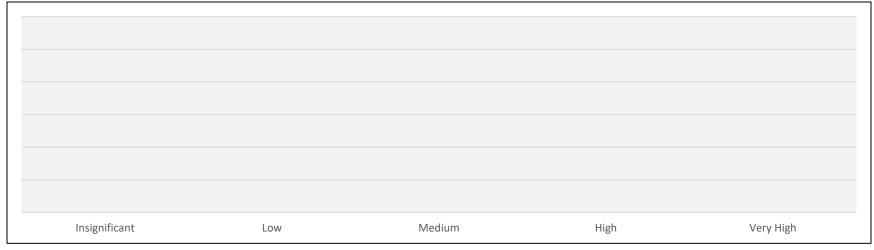
**Health and Safety:** No obvious potential for injury or impacts to health.

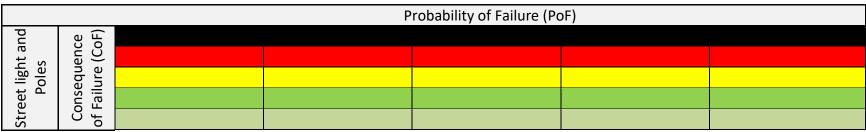
Operational & Internal Demand: Significant localized service disruption: 200 - 1,000 people affected, Service interrupted 1-5 days.

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

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

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









### 11.13 Sidewalks

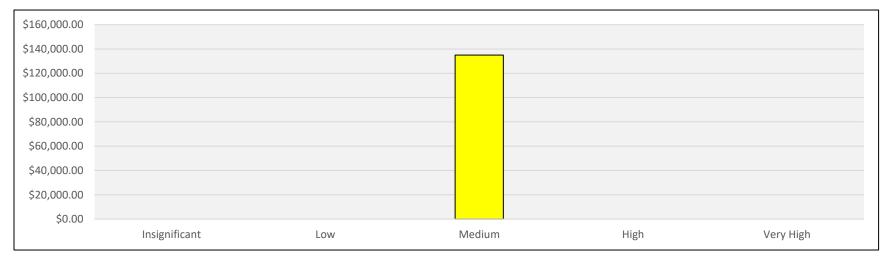
# **Consequence of Failure Descriptions**

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

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

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

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



				Probability of Failure	(PoF)	
	ce oF)	\$-	\$-	\$-	<b>\$</b> -	\$-
alks	CC (CC	\$-	\$-	\$-	\$-	\$-
ew.	equ ure	\$-	\$-	\$-	\$-	\$-
Side	ons( Fail	\$-	\$-	\$135,000.00	\$-	\$-
	CC	\$-	\$-	\$-	\$-	\$-





# 11.14 Fire Reservoirs (No Data)

# **Consequence of Failure Descriptions**

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

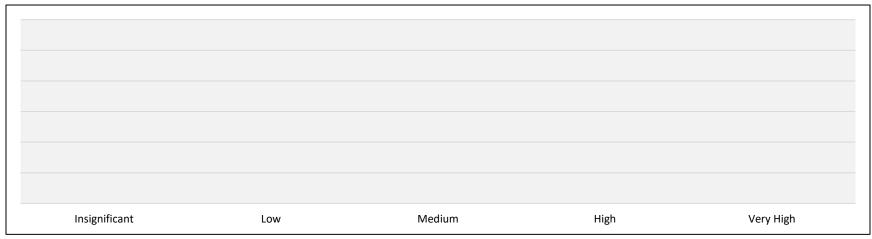
Operational & Internal Demand: Major localized disruption: 1,000 - 5,000 people affected, Service interrupted 5-30 days.

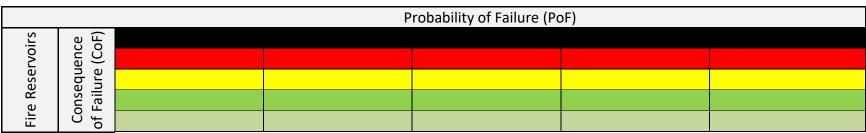
**Environmental**: Very negligible impact. Reversible within 1 week.

Financial: Cost of Reactive response and replacement are over 125% to 200% of proactive replacement and Increase in cost to

providing service is over 25%.

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









# 11.15 Regulatory/Warnings Signs (No Data)

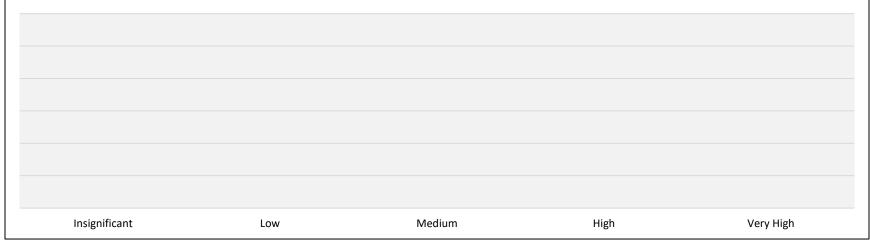
# **Consequence of Failure Descriptions**

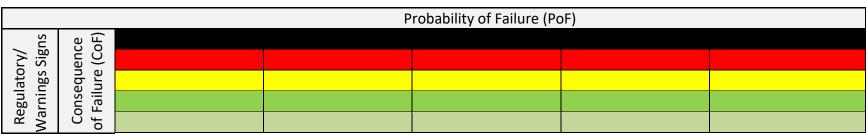
**Health and Safety:** Probable likelihood for serious injury or impacts to the health of one or more individuals with a possibility for loss of a life and the possibility of long-term disabilities.

**Operational & Internal Demand:** Significant localized service disruption:200 - 1,000 people affected, Service interrupted 1-5 days. **Environmental:** Very negligible impact. Reversible within 1 week.

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

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









# 11.16 Storm Sewers (No Data)

# **Consequence of Failure Descriptions**

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

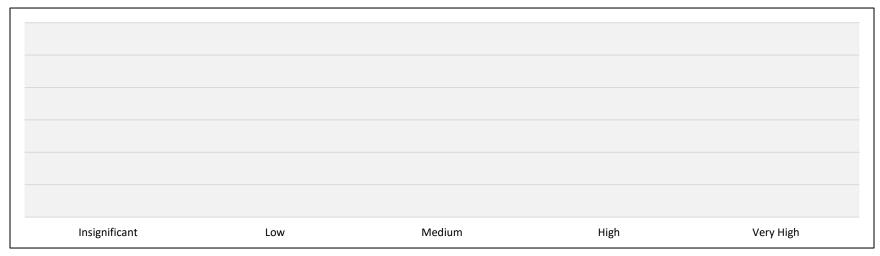
**Operational & Internal Demand:** Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day.

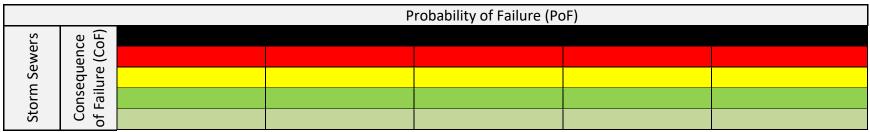
**Environmental**: Significant long-term (> 1 year) widespread damage to the environment.

Financial: Cost of Reactive response and replacement is over 110% to 125% of proactive replacement and Increase in cost to

providing service is over 10%.

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









# 11.17 Street Trees (No Data)

# **Consequence of Failure Descriptions**

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

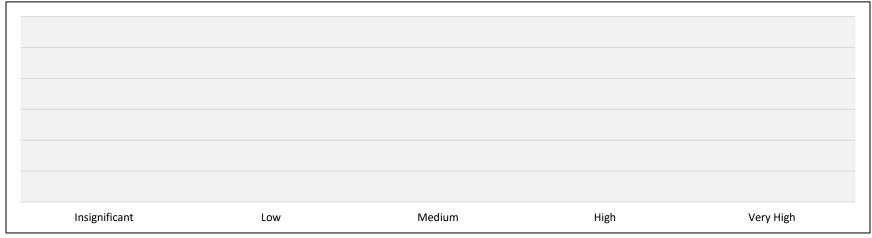
Operational & Internal Demand: Service disruption at a localized level: 10 - 200 people affected, service interrupted 1 day.

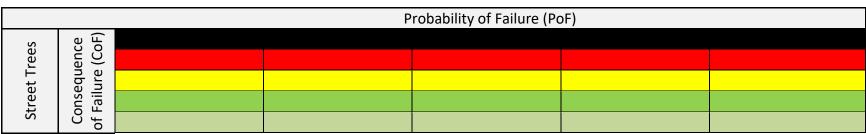
**Environmental**: Significant long-term (> 1 year) widespread damage to the environment.

Financial: Cost of Reactive response and replacement is 110% to 120% of proactive replacement and Increase in cost to providing

service is over 5%.

Legal & Regulatory Compliance: No claims or charges.









# 12.0 Financial Plan

### 12.1 Legislative Requirement

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

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

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

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

# 12.2 Financial Strategy Assumptions

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

# 12.3 Capital Financing Assumptions

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

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







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

It has also been assumed that a portion of the Aggregate Revenue received annually by the Township would be available for financing Asset Management Plan capital related activities. As well, approximately \$80,000 has been assumed to be available from the Public Works Development Charges (DC) Restricted Reserves for financing the asset management lifecycles activities. This is consistent with the 2014 Development Charges Study that identified 15.6% of roads projects to be deemed growth-related, and therefore eligible for use of DC funds.

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

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

# 12.4 Capital Asset Replacement Discretionary Reserve Assumptions

There are several discretionary reserves which have been established by the Township for a variety of purposes. All discretionary reserves were reviewed with Township staff, and capital asset replacement related reserves were identified. It is assumed that the projected balances contained in these capital asset replacement related discretionary reserves would be available towards the funding of asset management lifecycle activities as recommended in this report. A one-time infusion of \$507,627 was provided into these reserves from the Township's 2018 Surplus. The sum-total of the 2019 opening balances of these capital asset replacement related discretionary reserves is estimated at \$2,838,841. For purposes of the development of the financing strategy options it is assumed that there will be one consolidated discretionary reserve for capital asset management lifecycle activities. It is assumed that contributions to this reserve will come from the Township's annual capital levy, with annual draws going towards funding the recommended asset management lifecycle activities. Assumptions regarding the annual Asset Management Plan capital levy and the asset management lifecycle activities are discussed below.

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



### 12.5 Asset Management Lifecycle Activities Assumptions

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

### 12.6 Annual Asset Management Plan Capital Levy Assumptions

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

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

### 12.7 Debt Management Assumptions

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

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

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

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



# 13.0 Financial Policy Considerations

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

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

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

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

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

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

# 13.2 Recommended Capital Asset Replacement Discretionary Reserve Target Balances

It is not uncommon for a municipality to have upper and lower target balances for their respective reserves. Under this Financial Policy Consideration, the minimum and maximum target balances of the capital asset replacement discretionary reserve be recommended such that the minimum reserve balance be set at an amount that would represent 10% of the inflated 10-year asset management lifecycle activity expenditures, with the maximum target balance not to exceed an amount that would represent 20% of the inflated 10-year asset management lifecycle activity expenditures. For purposes of the financial strategy options, the capital asset replacement discretionary reserve shall have a minimum balance of \$2.0 million and a target balance of \$4 million. This Financial Policy Consideration regarding target balances are considered best practice for asset replacement related reserves and is in-line with target balances of other municipalities.



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

### 13.3 Recommended Long-Term Debt Capacity Restrictions

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

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

# 14.0 Financial Strategy Options

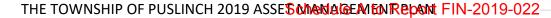
As noted earlier in this section three financial strategy options were developed. Under the financial strategy options, different levels of annual Asset Management Plan capital levy funding increases are presented. The financial details of each of these options can be found in Financial Strategy Options Appendices 20.1, 20.2 and 20.3.

# 14.1 Asset Management Plan Capital Levy

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

The Asset Management Plan capital levy funding increase considered under the three financial strategy options are:

 Option 1 – Annual Asset Management Plan Capital Levy Increase is Equivalent to a 1% Tax Impact on the Typical Single Family Detached Dwelling.







- Option 2 Annual Asset Management Plan Capital Levy Increase is Equivalent to a 2% Tax Impact on the Typical Single Family Detached Dwelling.
- Option 3 Annual Asset Management Plan Capital Levy Increase is Equivalent to a 3% Tax Impact on the Typical Single Family Detached Dwelling.

In 2019 a \$38,500 increase in the capital levy represents an approximate 1% tax impact on the typical single detached dwelling. \$77,300 represents a 2% impact, with \$115,950 representing an approximate 3% impact. The dollar amounts of the capital levy increases will increase each year as projected changes occur in the Township's future assessment values, as well as changes in the median value of a typical single family detached dwelling. A comparison of projected annual capital levy increases over the forecast period for the three financial strategy options can be found below in Table 14.0 - 1 (Comparison of Annual Capital Levy Increases - \$).

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	38,500	39,000	39,400	39,700	40,100	40,500	40,900	41,300	41,700	42,200
Option 2	77,300	78,800	80,400	82,000	84,000	83,761	34,222	34,907	35,604	36,317
Option 3	115,950	91,310	122,400	100,272	22,778	33,551	34,222	34,907	35,604	36,317

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

It should be noted however that the annual Asset Management Plan capital levy increase will occur each year at the same % impact rate for each of the respective financial strategy options when the recommended Asset Management Plan target funding, or sustainable funding level is not achieved. In years when the Asset Management Plan target funding level is achieved then only necessary increases in the Capital Levy will occur to ensure that the Asset Management Plan target funding level is maintained. A comparison of projected annual capital levy % impact rates over the forecast period for the three financial strategy options can be found below in Table 14.0 - 2 (Comparison of Annual Capital Levy Increases - %)

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Option 2	2.00%	2.00%	2.00%	2.00%	2.00%	1.96%	0.79%	0.80%	0.81%	0.82%
Option 3	3.00%	2.29%	3.00%	2.40%	0.54%	0.79%	0.80%	0.81%	0.82%	0.83%

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

Table 14.0 - 3 (Comparison of Annual Capital Levy - \$) provides a comparison of the total capital levy generated each year under the three financial strategy options.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	731,012	770,012	809,412	849,112	889,212	929,712	970,612	1,011,912	1,053,612	1,095,812
Option 2	769,812	848,612	929,012	1,011,012	1,095,012	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823
Option 3	808,462	899,772	1,022,172	1,122,444	1,145,222	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823

14.0 – 3 (Comparison of Annual Asset Management Plan Capital Levy - \$)

The total capital levy is allocated between two Asset Management Plan related costs:

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

Table 14.0 – 4 (Comparison of Transfers of Capital Levy to Capital Asset Replacement Discretionary Reserve - \$) details for each financial strategy option the amounts that the Asset Management Plan Reserve will receive from the annual capital Levy. As can be noted in this table, the transfers under Option 1 are decreasing. This is due to the significant increase in debt servicing noted in Table 14.0 - 5. The increased debt servicing is the direct result





of the need for larger amounts of long-term debt to finance the asset management lifecycle activities under that option.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	731,012	770,012	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151
Option 2	769,812	848,612	829,368	824,440	892,654	831,366	820,429	855,336	781,209	817,526
Option 3	808,462	899,772	933,327	959,171	981,949	881,603	876,705	911,612	851,019	887,336

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

Table 14.0 - 5 (Comparison of Servicing of Asset Management Plan Long Term Debt) details for each financial strategy option the amount of debt servicing which results from the financing of the asset management lifecycle activities. As noted, all three financial strategy options will require long-term debt in financing the asset management lifecycle activities.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	-	-	113,760	216,766	255,650	431,852	517,113	560,383	719,519	728,661
Option 2	-	-	99,643	186,572	202,358	347,406	392,566	392,566	502,297	502,297
Option 3	-	-	88,844	163,273	163,273	297,170	336,289	336,289	432,487	432,487

14.0 – 5 (Comparison of Servicing of Asset Management Plan Long-Term Debt - \$)

## 14.2 Asset Management Plan Funding

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

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

The capital levy amount shown in Table 14.0 - 3, when combined with the other Asset Management Plan funding sources as detailed in Table 14.0 - 6 (Other Sources of Asset Management Plan Funding - \$) show the total funds dedicated by the Township towards funding asset management related costs (see Table 14.0 - 7).

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

14.0 – 6 (Other Sources of Asset Management Plan Funding - \$)

Table 14.0 - 7 (Comparison of Asset Management Plan Funding Levels - \$) details the Target Asset Management Plan funding levels over the forecast period and compares that target level to the Asset Management Plan Funding Levels provided under each financial strategy option. As can be seen in Table 14.0 - 7, Option 1 does not achieve a sustainable level of funding over the forecast period, whereas Option 2 achieves sustainable funding by 2024 and maintained for the balance of the forecast period. Option 3 achieves sustainable funding by 2020, however due to a reduction in Asset Management Plan funding from other







sources in 2021, a sustainable level of funding is not achieved in that year. A sustainable level of Asset Management Plan funding is again achieved in 2022 and maintained for the balance of the forecast period under Option 3.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Target AMP Funding Level (2% of Capital Asset Values)	1,549,806	1,580,802	1,612,418	1,644,666	1,677,559	1,711,111	1,745,333	1,780,239	1,815,844	1,852,161
Option 1	1,440,540	1,451,042	1,331,634	1,371,334	1,421,550	1,462,050	1,502,950	1,544,250	1,585,950	1,628,150
Option 2	1,479,340	1,529,642	1,451,234	1,533,234	1,627,350	1,711,111	1,745,333	1,780,240	1,815,844	1,852,161
Option 3	1,517,990	1,580,802	1,544,394	1,644,666	1,677,560	1,711,111	1,745,333	1,780,240	1,815,844	1,852,161

14.0 - 7 (Comparison of Asset Management Plan Funding Levels - \$)

Table 14.0 - 8 (Inflated Asset Management Lifecycle Activities - \$) presents the 2019-2028 asset management lifecycle activities' expenditures. As noted earlier in this section, these amounts reflect the asset management lifecycle activities' expenditure as presented in Sections 8-9 but have been adjusted to account for inflation over the forecast period.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Bridges	=	-	426,564	-	-	-	-	574,343	-	-
Culverts	=	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	15,750	22,440	114,444	63,672	32,473	200,115	11,262	17,230	35,150	528,335
Fire Equipment	21,000	314,823	6,242		12,989	9,937	69,259	27,568	43,351	14,341
Parks and Recreation	-	35,361	22,889		335,554	1,987	-	160,618	-	9,250
Asphalt Road 1 Lift	1,509,346	626,983	167,647	751,961	1,534,372	750,696	492,165	653,942	257,736	1,055,247
Asphalt Road 2 Lift	-	281,926	275,544	-	402,012	497,275	52,434	146,515	233,286	144,747
Asphalt Road Surface Treated	-	-	-	-	-	143,853	16,723	-	-	-
Gravel Road	140,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Ponds	-	153,000	171,666	175,099	-	-	-	-	-	
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	17,146	1,683	-	4,368	-	1,822	-	-	3,866	8,590
Sidewalk	25,000	112,200	-	-	-	-	-	-	-	-
Works licensed vehicles	-	652,800	260,100	-	243,547	-	103,607	-	292,915	298,773
Works Unlicensed vehicles	26,000	127,500	-	413,871	-	-	-	-	-	-
Building Department licensed vehicles	-	-	-	-	-	36,435	-	-	-	-
Parks and Recreation Unlicensed vehicles	-	-	-	-	-	-	-	9,189	-	35,853
Total Inflated Asset Management Lifecycle Activities Expenditures	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364

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

The asset management lifecycle activities expenditure is financed from various Asset Management Plan financing sources. These Asset Management Plan financing sources consist of:

- Ontario Community Infrastructure Grant (OCIF)
- Gas Tax Funding
- County Accessibility Grant
- Aggregate Levy
- Public Works Development Charges
- Transfers to the Capital Asset Replacement Discretionary Reserve
- Long-Term Debt

Only the mix of transfers from the Capital Asset Replacement Discretionary Reserve and the use of long-term debt vary among the three financial strategy options. This mix of reserve transfer/debt is determined by the financial strategy option and the proposed increase in the Asset Management Plan Capital Levy in that option. Table 14.0 - 9 (Asset Management Plan Capital Financing Sources - \$) details the 2019 – 2028 sources of capital financing.



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Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
(Total of AMP Reserve / Long-Term Debt)	1,044,714	2,244,386	1,552,316	955,728	2,098,967	1,206,940	813,356	1,774,998	410,124	2,238,026
Total AMP Capital Financing Sources	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364

14.0 – 9 (Asset Management Plan Capital Financing Sources - \$)

The 2019-2028 Asset Management Plan Reserve Financing is detailed for each financial strategy option in Table 14.0 - 10 (Comparison of Asset Management Plan Reserve Financing - \$). The 2019-2028 Long-Term Debt Financing under each financial strategy option is detailed in Table 14.0 - 11 (Comparison of Asset Management Plan Debt Financing - \$)

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	1,044,714	1,298,292	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151
Option 2	1,044,714	1,415,692	829,368	824,441	892,654	831,366	813,356	862,409	410,124	1,188,610
Option 3	1,044,714	1,505,502	933,327	955,728	985,393	881,602	813,356	974,962	410,124	1,328,232

14.0 – 10 (Comparison of Asset Management Plan Reserve Financing - \$)

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	=	946,094	856,664	323,382	1,465,405	709,081	359,857	1,323,469	76,031	1,870,875
Option 2	-	828,694	722,948	131,287	1,206,313	375,574	-	912,589	-	1,049,416
Option 3	-	738,884	618,989	-	1,113,574	325,338	-	800,036	-	909,794

14.0 – 11 (Comparison of Asset Management Plan Debt Financing - \$)

#### 14.3 Capital Asset Replacement Discretionary Reserve

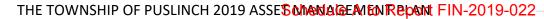
As noted earlier, contributions to the capital asset replacement discretionary reserve come from the Township's annual capital levy, with annual draws going towards funding the recommended asset management lifecycle activities. With consideration given to the recommended financial policy regarding the minimum target balance of the capital asset replacement discretionary reserve, Table 14.0 - 12 (Comparison of Asset Management Plan Reserve Balances - \$) provides a comparison of the recommended minimum target balance with the forecast reserve balances under each financial strategy option. As can be seen in this table, for each option the reserve levels are at the minimum recommended balances for many of the years in the forecast period. This is due to the magnitude of the asset management lifecycle activities and the need for long-term debt to finance these costs. The associated long-term debt servicing reduces the amount of capital levy that is able to be transferred into the capital asset replacement discretionary reserve, thereby reducing the reserve funds available to finance future asset management lifecycle activities, which in-turn leads to the need for more long-term debt financing.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Minimum Balance at 10% of 10 year Capital Plan	1,996,859	1,996,859	1,996,859	1,996,859	1,996,859	1,996,859	1,996,859	1,996,859	1,996,859	1,996,859
Option 1	2,525,139	1,996,859	1,996,859	1,996,858	1,996,858	1,996,859	1,996,858	1,996,858	1,996,858	1,996,858
Option 2	2,563,939	1,996,859	1,996,859	1,996,858	1,996,858	1,996,859	2,003,931	1,996,858	2,367,943	1,996,859
Option 3	2,602,589	1,996,859	1,996,859	2,000,302	1,996,858	1,996,859	2,060,208	1,996,859	2,437,754	1,996,858

14.0 – 12 (Comparison of Asset Management Plan Reserve Balances - \$)

### 14.4 Long-Term Debt

Long-term debt is required under each financing strategy option to fund the asset management lifecycle activities. The amount of required debt was previously detailed in Table 14.0 - 11 (Comparison of Asset







Management Plan Debt Financing - \$) with the resulting long-term debt servicing being previously detailed in Table 14.0-5 (Comparison of Servicing of Asset Management Plan Long-Term Debt - \$).

Table 14.0 - 13 (Comparison of Outstanding Long-Term Debt - \$) details the outstanding debt balances over the forecast period for each financial strategy option. As can be seen Option 1 contains the highest level of outstanding debt at the end of the forecast period at \$5.2 million, with Option 3 with the lowest level of outstanding debt at \$2.8 million.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	-	946,094	1,722,112	1,889,001	3,164,872	3,552,871	3,519,965	4,406,250	3,916,981	5,196,290
Option 2	-	828,694	1,481,003	1,477,554	2,533,223	2,650,054	2,350,240	2,952,521	2,553,562	3,190,056
Option 3	-	738,884	1,294,890	1,176,938	2,168,432	2,272,495	2,015,744	2,550,041	2,206,806	2,761,352

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

The recommended long-term debt capacity restriction noted in the Financial Policy Considerations limits the repayment of long-term debt to an amount that would represent 10% of the Township's net revenues. Table 14.0 - 14 (Comparison of Debt Repayment Limit - \$) details the remaining debt servicing capacity under each financial strategy option.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Option 1	556,512	584,337	499,795	427,466	420,794	278,413	228,666	222,685	102,703	134,672
Option 2	556,512	584,337	513,911	457,660	474,086	362,859	353,213	390,502	319,924	361,036
Option 3	556,512	584,337	524,710	480,959	513,171	413,096	409,490	446,779	389,735	430,846

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

Table 14.0 - 15 (Comparison of Remaining Debt Servicing Limit - %) views the long-term debt capacity restrictions from the perspective of a percentage of the limit remaining. Option 1 at the end of the forecast period has approximately 16% of the debt capacity available at the end of the forecast period. Option 2 has approximately 42% of the debt capacity remaining at the end of the forecast period, with Option 3 having half of the debt capacity available at the end of the forecast period.

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Option 1	100%	100%	81%	66%	62%	39%	31%	28%	12%	16%
Option 2	100%	100%	84%	71%	70%	51%	47%	50%	39%	42%
Option 3	100%	100%	86%	75%	76%	58%	55%	57%	47%	50%

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

### 14.5 Assessment of Financial Strategy Options

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

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

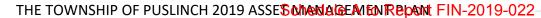






Table 14.0 - 16 (2019-2028 Asset Management Plan Funding - \$) totals all Asset Management Plan funding sources over the forecast period, including other sources of Asset Management Plan funding as well as the capital levy funding, which will vary by financial strategy option. As noted in Table 14.0 - 16, Option 3 provides the highest level of Asset Management Plan financing over the forecast period, with \$16.9 million.

Description	Total Other AMP Funding Sources	Total AMP Capital Levy	Total AMP Funding
Option 1	5,629,030	9,110,418	14,739,448
Option 2	5,629,030	10,896,457	16,525,487
Option 3	5,629,030	11,241,069	16,870,099

14.0 – 16 (2019-2028 Asset Management Plan Funding-\$)

Table 14.0 - 17 (2019-2028 Capital Levy Allocation) allocates the capital levy funding noted in Table 14.0 - 16 between the transfers to the capital asset replacement discretionary reserve and servicing of Asset Management Plan related long-term debt.

Description	Total AMP Capital Levy	Total AMP Debt Servicing	Total Transferred in AMP Reserve
Option 1	9,110,418	3,543,703	5,566,714
Option 2	10,896,457	2,625,705	8,270,752
Option 3	11,241,069	2,250,111	8,990,957

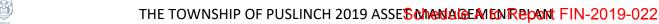
14.0 – 17 (2019-2028 Capital Levy Allocation - \$)

As noted in Table 14.0 - 17, Option 1 provides the lowest level of tax supported funding (capital levy) over the forecast period with \$9.1 million, with Option 2 at \$10.9 million and Option 3 with the highest level of tax supported funding at \$11.2 million. While it should be noted that no funding shortfalls occurred in any of the financial strategy options presented, the use of long-term debt was necessary in all options to the ensure that required asset management lifecycle activities could be undertaken.

The use of long-term debt requires debt servicing in the future, and therefore reduces the amount of the capital levy that can be transferred into the capital asset replacement discretionary reserve. The degree to which long-term debt was required under each option over the forecast period is evidenced by the amount Asset Management Plan debt servicing shown is Table 14.0 - 17.

Option 3 has the least debt servicing with \$2.3 million of the total capital levy going towards servicing long-term debt that was required to fund the asset management lifecycle activities, with Option 2 requiring \$2.6 million and Option 1 requiring \$3.5 million of the capital levy to servicing long-term debt.

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





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As can be seen in Table 14.0 - 17, over the forecast period, Option 1 transferred the least amount of funds into the capital asset replacement discretionary reserve at \$5.6 million, with Option 2 transferring \$8.3 million and Option 3 transferring the most at \$9.0 million. The transfers into the capital asset replacement discretionary reserve allow for the reserve financing of the asset management lifecycle activities, thereby reducing the need for long-term debt financing, and therefore the need to service that debt in the future.

Table 14.0 - 18 (2019-2028 Reserve vs Debt Financing) provides the level of total reserve financing vs. the level of total debt financing for each financial strategy option over the forecast period.

Description	Total AMP Reserve Financing	Total AMP Debt Financing	Total AMP Reserve/Debt Financing
Option 1	6,408,697	7,930,858	14,339,555
Option 2	9,112,734	5,226,821	14,339,555
Option 3	9,832,940	4,506,615	14,339,555

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



# 15.0 Resources

# 15.1 Information Technology Strategy

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

### 15.2 Possible Database/Software Solutions

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

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

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

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

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

#### 15.3 Technology-Related Requirements

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

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



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

### 15.4 Asset Management Tools

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

# 16.0 Council Approval and Public Engagement

# 16.1 Council Approval

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

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

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



### 16.2 Public Engagement

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

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

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

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

The Public were made aware of a public meeting. The public were encouraged to provide comments on asset management topics in general. Prior to the meeting, the presentation was posted online on the Township's website.

The Public Meeting was held on February 5, 2019 in the Council Chambers of Puslinch. The Sign-in-sheet indicated that 7 individuals attended. As of February 8th two emails were received by the Township. One individual requested response. A copy of the response provided by UEM may be found in Appendix 20.6

Verbal concerns were as follows:

- 1. There is a need to establish a process that would allow the surface treatment of gravel roads or the paving of roads on which there are homes.
- 2. There was concern in regard to needed improvements to Old Morriston Park which were not identified in the Township capital budget.

Verbal areas of clarification were as follows:

- 3. The methodologies used in order to quantify the condition of building components.
- 4. The methodologies use in determining the need for upgrading gravel roads.
- 5. The methodologies used to define level of service policies and their technical levels of service.



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#### Areas of concern in the emails were as follows:

- 6. Service Level Policy for Gravel Roads.
- 7. Lack of Data in regard to condition of Gravel Roads.
- 8. Change in condition of roads to poor.
- 9. Opinion not to borrow money.
- 10. Staff levels for the Fire Department and the Township as a whole.

### In regard to concerns and areas of clarification information is as follows:

- 1. UEM in development of the service level policy for Gravel Roads did not consider the spatial significance of gravel roads as they relate to proximity to lived in homes.
- 2. UEM identified in the asset registry that Old Morriston Park has many assets that are in poor condition. However, the decision for remediation activities to assets at the park are subject to the policies and objectives of the Township.
- 3. The methodologies used to quantify the condition of buildings have been extracted from the recent Building Condition Assessment. This assessment did not use a condition index in order to assess condition but instead a visual inspection of relevant components of the building structure.
- 4. The methodologies used to determine the need to upgrade a gravel road have been developed through the review of reports, staff input, input from neighboring municipalities in Wellington County, Minimum Maintenance Standards Ontario Regulation 239/02, and policies of jurisdictions primarily in the United States.
- 5. Asset Class Level of service policies were developed using information sourced from relevant provincial policies, regulations, internal expert opinion, and the recommendations of staff.
- 6. The lack of Data for Gravel Roads is an issue that may be improved by way of the regular collection of maintenance information for each gravel road segment.
- 7. The condition of road surfaces has not changed, only the methodology for classifying how their condition is interpreted has changed. This asset management plan considers that a road surface is in "poor" or "critical" condition based on how soon it is expected to be scheduled for remediation work. The capital planning methodology for road surfaces for the Township for this asset management plan is more conservative and specific than the last asset management plans past methodologies. The current condition classification methodology states that a road is to be remediated when it's pavement condition index (PCI) reaches a threshold of 65 for class 3 roads, and 60 for class 4 and 5 roads. Based on the adopted expected deterioration rate of 2 pavement condition points per year class roads 3 are expected to be remediated every 17 years and class 4 and 5 roads every 20. This results in the majority of roads being classified as "Good" to "Fair" with the balance "Poor" to "Critical" due to expected remediation work for the road surface.
- 8. UEM and DFA have stated what is required by way of capital costs to maintain the Township assets based on the level of service policies included in the report. Any change in the financial recommendations would result in the Township not meeting the level of service.
- 9. A review of staffing levels of the Fire Department and the Township as a whole are beyond the scope of this Asset Management Plan.





# THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN



# 17.0 Conclusions

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

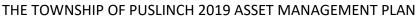
- Enhanced customer satisfaction from improved performance;
- Improved financial planning for maintenance and replacement of key infrastructure assets;
- Improved Risk Management Strategies;
- Optimized return on investment and/or growth;
- Improved health, safety and environmental performance;
- · Sustainable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

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

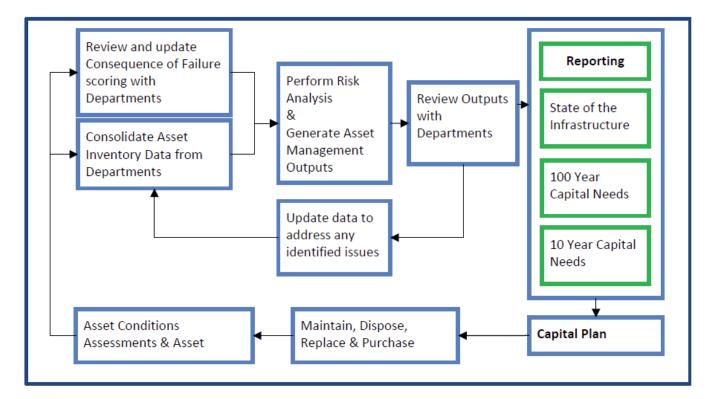
Scientific evidence that human activity is resulting in climate change is documented and accepted as changes in climate are now a significant factor in the design and management of assets. However, the ability to project the impact of climate change and establish a time frame for impacts on infrastructure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

### 17.1 Ongoing Maintenance of the Asset Management Program

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







17 - 1 Asset Management Maintenance

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

The Township of Puslinch should consider additional staff and technical resources to assist the Director of Finance/Treasurer with the consolidation of the asset inventory into the asset registry and the generation of reports consistent with the requirements of Regulation 588/17 and Council as well as any other reports associated with the management of the physical assets of the Township.

### 17.2 Capital Program

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

# THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN



### 17.3 Service Level Policy: Hard Surface Roads

The Township of Puslinch through their Pavement Condition Study accepts a Remediation Pavement Condition Index for hard surface roads of 65 for class 3 roads, 65 for class 4 roads, and 65 for class 5 roads. However, the Township takes into consideration other factors in preparing their capital budget as outlined in Section 9.0 of this report. Rather than relying on the Remediation Pavement Condition Index such other factors impact in part inclusion in the capital budget. Based upon a review of previous projects Pavement Condition Index has not fallen below 60 for class 3 roads, 60 for class 4 roads and 60 for class 5 roads prior to a recommendation being formulated for inclusion into the capital budget. Therefore, the UEM team is prepared to recommend that the minimum Remediation Pavement Condition Index be 65 for class 3 roads, 60 for class 4 roads and 60 for class 5 roads. This recommendation is presented in the UEM proposed level of service policy for Hard Surface Roads.

# 18.0 Recommendations

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

### 18.1 Proposed Level of Service Policies

**Recommendation:** That the level of the service policies in Section 5 of this report be approved.

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

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

#### **18.2 Staff**

Formalized Asset Management Policies should be developed to detail roles, responsibilities and procedures for the execution of the Asset Management Plan.

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

Asset Management processes.

Estimated Cost: Minimal internal cost

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

responsible for the assets.

**Estimated Cost:** Minimal internal cost

**Recommendation:** Additional staff and technical resources consistent with section 17.1, paragraph 3.

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



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**Recommendation:** Identify the Director of Finance/Treasurer as the lead responsible for asset

management.

**Estimated Cost:** Minimal internal cost

### 18.3 Financial Strategy

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

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

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

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

#### 18.4 Fleet

All Vehicle Assets (Fire, Works, Building Department and Parks & Recreation) were entered into the Asset Registry utilizing replacement costs provided in the 2017 BDO Fleet Management Report. Council in an initial review raised the question of purchasing used vehicles rather than new vehicles. The UEM Team are not experts that would be capable of assessing the value of used vehicles nor the purchase price of used equipment especially when dealing with fire and works department vehicles. The Asset Registry cannot project the year in which Council may wish to purchase used vehicles. However, the Asset Registry could be modified subsequent to the purchasing of used vehicles.

Council also requested that the asset registry and 10-year capital plan include the residual value (sale) of fleet (or equipment) at the time of disposal. As with the purchase of used equipment the UEM team are not experts in evaluating the value of used equipment in that value of used equipment tends to be very subjective based upon the opinion of equipment suppliers.

### 18.5 Boundary Roads - Road Structures & Bridges and Culverts

The Township entered into boundary road agreements with adjacent municipalities. The information provided to the UEM Team was that the responsibility for capital improvements to such boundary roads lies with the adjacent municipalities. However, in completing the Asset Registry capital improvements were provided in the



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registry based on 50% the total reconstruction costs of such boundary roads. In the future, the Township should request a capital program for boundary roads that would include replacement costs and proposed year of improvements. Although the UEM Team was not provided with the boundary road agreements it is only natural that if there are conflicts that discussions occur between municipal staff to determine accurate data to be entered into the asset registry that would impact the capital program of Puslinch.

Replacement Costs in regard to Bridge and Culverts on boundary roads were based on full replacement cost. However, remediation costs that have been entered into the asset inventory were based upon the costs identified in the 2017 OSIM report. Appendix D of the OSIM report relate to roadside safety improvements which were the installation of guard rails as an unfunded component of bridge rehabilitation. In reviewing the 2017 OSIM report such guard rails are to be installed on the approaches to the Bridge and or Culvert structures. It is suggested that the terms of reference for the next update of the OSIM report include direction that such guard rails deemed necessary to meet the design standards of the Province of Ontario include that guardrails are a component of either rehabilitation or replacement.

# 18.6 Technical Levels of Service

Currently the sole Technical Levels of Service (TLOS) used to determine the Probability of Failure is condition or remaining service life. Condition is based on the visual or physical analysis of the asset whereas remaining service life is based on the age and condition of assets. For higher quality technical levels of service tracking UEM recommends incorporating Performance-based levels of service in the future. Performance-based TLOS relate to measurements that are not directly related to condition/remaining service life such as the accessibility of buildings for persons with disabilities. Performance TLOS may be mandated by legislation, like the Storm Water Management Planning and Design Manual, or explicitly identified by the Township in a Service Level Agreement. New business and reporting practices will need to be implemented in order to collect and maintain the data required to evaluate performance- based TLOS.

**Recommendation:** Develop & incorporate Performance TLOS

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

#### 18.7 Technology Related Requirements

As previously indicated in Section 15.4 of this report, the Ontario Good Roads Association makes available, at no cost, a tool identified as the Municipal Data Works (MDW) that will maintain asset data.

**Recommendation:** Negotiate with the Ontario Good Road Association for access to Municipal Data Works

and allow the importation of Puslinch data into MDW.

**Estimated Cost:** minimal costs.

#### 18.8 Climate Change

Recommendation: Climate Change should be a consideration in all asset condition assessment reports in

the future in order to project deterioration rates associated with such climate change.

**Estimated Cost:** Minimal internal cost.



# 19.0 Asset Registry Recommendations

# 19.1 Bridges and Culverts:

Recommendation:

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

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

**Estimated Cost:** 

Refer to Budget Implications in Section 19.15

#### 19.2 Hard Surface Roads:

**Recommendation:** 

Hard Road surfaces (1 Lift, 2 Lift & Surface Treated) and Gravel Roads be inspected by a qualified engineer every 5 years. Subsequent inspections should follow the same methodologies of the one prior.

The 2016 pavement condition study used Pavement Condition Index as a condition rating methodology. Thus, every subsequent study should be consistent unless some revolutionary methodology is deemed more appropriate. Following the same condition methodologies will help the Township better update their asset registry and as well allow for the ability to conduct trend analysis. Each replacement/remediation schedule should be integrated into the Asset Registry as a separate table in order to track remediations to each road segment over time. Furthermore, the delivered report should maintain the current data structure as it's been formed in the asset registry and as well should be stored in a data format that allows for seamless updating of the asset registry. Future pavement condition studies should include a determination of providing a hard surface to existing gravel roads as outlined in the following section 19.3 Gravel Roads.

**Estimated Cost:** 

Refer to Budget Implications in Section 19.15

#### 19.3 Gravel Roads:

Recommendation:

The Township should collect condition data for each gravel road segment during routine inspections. When and if a Gravel Road requires regrading it should be documented according to the grading triggers listed in the proposed service level policy (Section 5.2) provided in this document. Each regrading activity should be considered as a lifecycle event. Grading events result from frost leaving the gravel road, Pot holes in the gravel road, Rainfall resulting in a significant number of washouts and rutting due to truck traffic. In addition to grading events, the Township should be tracking any ditching that could improve drainage and any other activities that may have a positive or negative impact on the condition of the road base.



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Tracking of lifecycle events will assist the Township in long-term financial planning for gravel road surfaces and as well assist in achieving the proposed service level policy for Gravel Roads. Further, the proposed service level policy states that to qualify a gravel road for hard surfacing certain data be available for consideration. Such data can be collected through regular inspections of the surface, collection and storage of grading frequencies and traffic volume studies.

In addition to data collected by staff, Puslinch should include the inspection of gravel roads as a part of the Pavement Condition Index Study by a qualified engineer every 5 years. In order to determine as a minimum, the following:

- granular thickness
- adequacy of drainage
- presence of contaminants in the granular
- presence of organic material
- adequacy of underlying soil

**Estimated Cost:** Refer to Budget Implications in Section 19.15

### 19.4 Traffic Volume Study

**Recommendation:** To better manage the lifecycle of each road segment UEM recommends that a traffic

volume study be completed every 5 years for all road surfaces. Traffic volume data will help the Township optimize their lifecycle model for roads by increasing or decreasing the deterioration rate of two PCI points per year based on the expected traffic on that

surface over time.

**Estimated Cost:** Refer to Budget Implications in Section 19.15

#### 19.5 Buildings and Facilities:

**Recommendation:** Each Building and Facility in the Township of Puslinch should be inspected every 5 years.

Subsequent inspections should follow the same methodologies of the one prior such as the vernacular used to describe each building component and data structure that surrounds it. A remediation schedule will be provided and delivered in the same template as the previous report to allow for seamless updating of the asset registry. Furthermore, each schedule should be integrated into the Asset Registry as a separate table to track remediations to each component over time. The Township should conduct Arch Flash Studies and Infra-Red Scanning of all electric equipment and wire

terminations every 5 years.

**Estimated Cost:** Refer to Budget Implications in Section 19.15





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### 19.6 Storm Water Management Ponds

Recommendation: Follow the remediation schedule provided by the qualified engineer.

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

**Estimated Cost:** Refer to Budget Implications in Section 19.15

#### 19.7 Fire Reservoirs

Recommendation: Document each inspection of each Fire Reservoir in a tabular format and update the

> condition of each Fire Reservoir in the asset registry with a condition score that ranges from 1 (Very Poor Condition) to 5 (Excellent Condition) subsequent to each inspection. The condition score that was rated prior should be stored as a separate record in order

to track how the lifecycle of each fire reservoir is being managed overtime.

**Estimated Cost:** No Costs.

#### 19.8 Fire Equipment

Recommendation: Standardize Fire Equipment assets in the asset registry for more effective management

of lifecycle, lifecycle events, and condition ratings.

Implement an inspection table and a lifecycle event activity table for Fire Equipment

assets.

**Estimated Cost:** No Costs.

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

Recommendation: The Township implement an inspection table for each vehicle and as well a lifecycle

event activity table.

Each inspection should document vehicle hours (if applicable to the service level policy) and vehicle kilometers. Documented vehicle hours should be standardized to a 1-5 scale in order to be consistent with the condition standard for other asset classes. The Lifecycle activity table should document any major vehicle servicing and any major accident or mechanical failure associated with the vehicle. These tables should become

the primary methodology for establishing vehicle condition and lifecycle.

**Estimated Cost:** No Costs.







#### 19.10 Parks and Recreation, Sidewalks

**Recommendation:** Implement an inspection table and lifecycle event table for each Parks and Recreation,

Sidewalk, and Street Light & Pole asset.

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

lifecycle of the parks and recreation asset.

**Estimated Cost:** No Costs.

### 19.11 Street Lights and Poles

**Recommendation:** Implement an inspection table and lifecycle event table for each Street Light & Pole

asset.

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

lifecycle of the parks and recreation asset.

**Estimated Cost:** Refer to Budget Implications in Section 19.15

19.12 Street Trees

**Recommendation:** Update the asset registry in order to create a more comprehensive inventory of the

current stock of street trees managed by the Township. Including an inspection table

and lifecycle event table for each Street Tree asset.

**Estimated Cost:** Refer to Budget Implications in Section 19.15

19.13 Storm Sewers

**Recommendation:** 

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

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

Each Storm Sewer should have each cleaning event loaded into a lifecycle event table to account for the condition of the asset. Such condition shall be established by observing the amount of waste in each catch basin and manhole in the storm sewer system based







upon the installation date of the storm sewer system, a structural inspection should not be necessary for the next 10-year period. However, if any significant repairs occur to a Storm Sewer asset such repairs should be loaded into an asset lifecycle event table.

**Estimated Cost:** Refer to Budget Implications in Section 19.15

## 19.14 Inspection & Lifecycle Tables

**Recommendation:** The storage of condition assessment data and lifecycle events data should be

documented in separate tables than in the Asset Tables in the Asset Registry Database. By storing the data in separate tables, the historical data quality is maintained and allows for multi-step data verification and over time the ability to conduct trend

analysis.

If the Township chooses to rely on only "updating" the condition column, and replacement year column of an asset table with current condition data, or impending

lifecycle events historical data will be lost.

**Estimated Cost:** No Costs.





# **19.15** Budget Implications

The following table summarizes recommendations that have an associated cost

	В	udget Implications for this Ass	et Management Plan	
Major Grouping	Budget Item	Description	Frequency	Cost
Service Level Policies	Bridges and Culverts	Bridge and Culvert Inspection Reports	Every 2 Years	\$15,000
		Gravel Base Inspection	Subject to Review of Gravel Road Surface Treatment	\$6,000
		Gravel Road Study	Once.	\$25,000
	Gravel Roads	Gravel Road surface treatment. Costs associated with reconstruction of base and drainage works excluded.	Subject to Review of Gravel Road Surface Treatment.	\$52,000/km
	Hand Confere Dands	<b>Pavement Condition Study</b>	Every 5 Years	\$24,500
	Hard Surface Roads	Traffic Volume Study	Every 5 Years	\$25,000
	Storm Water Management Ponds	Pond Inspections	At Least Once Per Year	\$5,000
	Storm Sewer	Sewer Inspections and Cleaning	At Least Once Per Year	\$5,000 per Inspection and \$1,200 per km for Cleaning
	Storm Sewer	Geolocation of catch basins	Once	\$5,000
	Street Trees	Tree Inspections	On the Year of Inspection	\$6,000
	Street Light & Poles	Pole and Arm Inspections	Every 5 Years	\$20,000
		Building Condition Assessment	Every 5 Years	\$25,000
	Buildings and Facilities	Infra-Red Scanning	Every 5 Years	\$3,000
	Buildings and Facilities	Arc Flash Study	Every 5 Years	\$7,500
	Sidewalks	Sidewalk Winter Maintenance	Routine Maintenance of Sidewalks During Winter Periods	\$20,000
Asset Management Maintenance	Staffing	Additional staff and technical resources	-	\$50,000.00/ Year







# 20.0 Appendices





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

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

Description			Table		Fore	cast				
Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Capital Expenditures										
Bridges	-	-	426,564	-	-	-	-	574,343	-	-
Culverts	-	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	15,750	22,440	114,444	63,672	32,473	200,115	11,262	17,230	35,150	528,335
Fire Equipment	21,000	314,823	6,242	-	12,989	9,937	69,259	27,568	43,351	14,341
Parks and Recreation	-	35,361	22,889	-	335,554	1,987	-	160,618	-	9,250
Asphalt Road 1 Lift	1,509,346	626,983	167,647	751,961	1,534,372	750,696	492,165	653,942	257,736	1,055,247
Asphalt Road 2 Lift	-	281,926	275,544	-	402,012	497,275	52,434	146,515	233,286	144,747
Asphalt Road Surface Treated	-	-	-	-	-	143,853	16,723	-	-	-
Gravel Road	140,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Ponds	-	153,000	171,666	175,099	-	-	-	-	-	-
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	17,146	1,683	-	4,368	-	1,822	-	-	3,866	8,590
Sidewalk	25,000	112,200	-	-	-	-	-	-	-	-
Works licensed vehicles	-	652,800	260,100	-	243,547	-	103,607	-	292,915	298,773
Works Unlicensed vehicles	26,000	127,500	-	413,871	-	-	-	-	-	-
Building Department licensed vehicles	-	-	-	-	-	36,435	-	-	-	-
Parks and Recreation Unlicensed vehicles	-	-	-	-	-	-	-	9,189	-	35,853
Total Capital Expenditures - Capital Program	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364
Capital Financing										
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
Non-Growth Related Debenture Requirements	-	946,094	856,664	323,382	1,465,405	709,081	359,857	1,323,469	76,031	1,870,875
Capital Asset Replacement Discretionary Reserve	1,044,714	1,298,292	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151
Total Capital Financing	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364





# Township of Puslinch Option 1

#### Capital Asset Replacement Discretionary Reserve

#### Table 2

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Balance	2,838,841	2,525,139	1,996,859	1,996,859	1,996,858	1,996,858	1,996,859	1,996,858	1,996,858	1,996,858
Transfer from Operating (AMP Capital Levy)	731,012	770,012	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151
Transfer to Capital	1,044,714	1,298,292	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151
Closing Balance	2,525,139	1,996,859	1,996,859	1,996,858	1,996,858	1,996,859	1,996,858	1,996,858	1,996,858	1,996,858
			Reserve Targ	et Balances						
Minimum Balance at 10% of 10 year Capital Plan	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859
Closing Reserve Balance	\$ 2,525,139	\$ 1,996,859	\$ 1,996,859	\$ 1,996,858	\$ 1,996,858	\$ 1,996,859	\$ 1,996,858	\$ 1,996,858	\$ 1,996,858	\$ 1,996,858
Target Balance at 20% of 10 year Capital Plan	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717

#### Township of Puslinch Option 1

#### Operating Budget Forecast - AMP Capital Related

#### Table 3

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<u>Capital-Related</u>										
New Non-Growth Related Debt (Principal)	-	-	80,646	156,492	189,535	321,082	392,763	437,184	565,300	591,566
New Non-Growth Related Debt (Interest)	-	-	33,113	60,274	66,115	110,771	124,350	123,199	154,219	137,094
Transfer to Capital Asset Replacement Discretionary Reserve	731,012	770,012	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151
Total AMP Capital Related Expenditures	731,012	770,012	809,412	849,112	889,212	929,712	970,612	1,011,912	1,053,612	1,095,812

#### Township of Puslinch Option 1 AMP Capital Levy Impact

Table 4											
Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
AMP Capital Levy (Previous Year)	692,512	731,012	770,012	809,412	849,112	889,212	929,712	970,612	1,011,912	1,053,612	
AMP Capital Levy Increase	38,500	39,000	39,400	39,700	40,100	40,500	40,900	41,300	41,700	42,200	
Percent Tax Impact on Median Value SFD	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
AMP Capital Levy (Current Year)	731,012	770,012	809,412	849,112	889,212	929,712	970,612	1,011,912	1,053,612	1,095,812	
Total Non-Growth Debt Servicing	-	-	113,760	216,766	255,650	431,852	517,113	560,383	719,519	728,661	
Transfer to Capital Asset Replacement Discretionary Reserve	731,012	770,012	695,652	632,346	633,562	497,859	453,499	451,529	334,093	367,151	





#### Township of Puslinch Option 1 AMP Funding Target Levels Table 5

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Value of Capital Assets	77,490,278	79,040,084	80,620,885	82,233,303	83,877,969	85,555,528	87,266,639	89,011,972	90,792,211	92,608,055
Target AMP Funding Level (2% of Capital Asset Values)	1,549,806	1,580,802	1,612,418	1,644,666	1,677,559	1,711,111	1,745,333	1,780,239	1,815,844	1,852,161
AMP Capital Levy	731,012	770,012	809,412	849,112	889,212	929,712	970,612	1,011,912	1,053,612	1,095,812
Other Sources of AMP Capital Financing	709,528	681,030	522,222	522,222	532,338	532,338	532,338	532,338	532,338	532,338
Total Available AMP Funding	1,440,540	1,451,042	1,331,634	1,371,334	1,421,550	1,462,050	1,502,950	1,544,250	1,585,950	1,628,150
Above or (below) target level of AMP Funding	(109,266)	(129,760)	(280,784)	(273,332)	(256,010)	(249,061)	(242,383)	(235,990)	(229,894)	(224,011)

# Township of Puslinch Option 1 AMP Debt Table 6a

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Debt Balance	-	-	946,094	1,722,112	1,889,001	3,164,872	3,552,871	3,519,965	4,406,250	3,916,981
Total Debt Servicing	-	-	113,760	216,766	255,650	431,852	517,113	560,383	719,519	728,661
Interest on Debt	-	-	33,113	60,274	66,115	110,771	124,350	123,199	154,219	137,094
Principal Repayment	-	-	80,646	156,492	189,535	321,082	392,763	437,184	565,300	591,566
New Debt Issue	-	946,094	856,664	323,382	1,465,405	709,081	359,857	1,323,469	76,031	1,870,875
Closing Balance	-	946,094	1,722,112	1,889,001	3,164,872	3,552,871	3,519,965	4,406,250	3,916,981	5,196,290

#### Township of Puslinch Option 1 AMP Annual Repayment Limit - 10% Table 6b

			Tubio	0.0						
Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Net Township Revenues	5,565,118	5,843,374	6,135,543	6,442,320	6,764,436	7,102,657	7,457,790	7,830,680	8,222,214	8,633,325
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Debt Limit Remaining \$	556,512	584,337	499,795	427,466	420,794	278,413	228,666	222,685	102,703	134,672
Percent of Limit Remaining	100%	100%	81%	66%	62%	39%	31%	28%	12%	16%





# 20.2 Financial Strategy Option 2 (2 Percent Impact)

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

Description					Fore	cast				
Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Capital Expenditures										
-	-	-	426,564	-	-	-	-	574,343	-	-
-	-	-	561,816	-	-	-	-	643,264	-	-
-	15,750	22,440	114,444	63,672	32,473	200,115	11,262	17,230	35,150	528,335
-	21,000	314,823	6,242	-	12,989	9,937	69,259	27,568	43,351	14,341
-	-	35,361	22,889	-	335,554	1,987	-	160,618	-	9,250
-	1,509,346	626,983	167,647	751,961	1,534,372	750,696	492,165	653,942	257,736	1,055,247
-	-	281,926	275,544	-	402,012	497,275	52,434	146,515	233,286	144,747
-	-	-	-	-	-	143,853	16,723	-	-	-
-	140,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
-	-	153,000	171,666	175,099	-	-	-	-	-	-
-	-	530,400	-	-	-	25,394	527,044	-	-	597,546
-	17,146	1,683	-	4,368	-	1,822	-	-	3,866	8,590
-	25,000	112,200	-	_	-	-	-	-	-	
-	-	652,800	260,100	-	243,547	-	103,607	-	292,915	298,773
-	26,000	127,500	-	413,871	-	-	-	-	-	-
Total Capital Expenditures - Capital Program	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364
Capital Financing										
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
Non-Growth Related Debenture Requirements	-	828,694	722,948	131,287	1,206,313	375,574	-	912,589	-	1,049,416
Capital Asset Replacement Discretionary Reserve	1,044,714	1,415,692	829,368	824,441	892,654	831,366	813,356	862,409	410,124	1,188,610
Total Capital Financing	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364





# Township of Puslinch Option 2 unital Asset Replacement Discretion

## Capital Asset Replacement Discretionary Reserve

Ta	bl	е	2
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Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Balance	2,838,841	2,563,939	1,996,859	1,996,859	1,996,858	1,996,858	1,996,859	2,003,931	1,996,858	2,367,943
Transfer from Operating (AMP Capital Levy)	769,812	848,612	829,368	824,440	892,654	831,366	820,429	855,336	781,209	817,526
Transfer to Capital	1,044,714	1,415,692	829,368	824,441	892,654	831,366	813,356	862,409	410,124	1,188,610
Closing Balance	2,563,939	1,996,859	1,996,859	1,996,858	1,996,858	1,996,859	2,003,931	1,996,858	2,367,943	1,996,859
			Reserve Targ	et Balances						
Minimum Balance at 10% of 10 year Capital Plan	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859
Closing Reserve Balance	\$ 2,563,939	\$ 1,996,859	\$ 1,996,859	\$ 1,996,858	\$ 1,996,858	\$ 1,996,859	\$ 2,003,931	\$ 1,996,858	\$ 2,367,943	\$ 1,996,859
Target Balance at 20% of 10 year Capital Plan	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717

# Township of Puslinch Option 2

## Operating Budget Forecast - AMP Capital Related

#### Table 3

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Capital-Related										
New Non-Growth Related Debt (Principal)	-	-	70,639	134,736	150,643	258,744	299,814	310,308	398,959	412,922
New Non-Growth Related Debt (Interest)	-	-	29,004	51,835	51,714	88,663	92,752	82,258	103,338	89,375
Transfer to Capital Asset Replacement Discretionary Reserve	769,812	848,612	829,368	824,440	892,654	831,366	820,429	855,336	781,209	817,526
Total AMP Capital Related Expenditures	769,812	848,612	929,012	1,011,012	1,095,012	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823

# Township of Puslinch Option 2 AMP Capital Levy Impact Table 4

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
AMP Capital Levy (Previous Year)	692,512	769,812	848,612	929,012	1,011,012	1,095,012	1,178,773	1,212,995	1,247,902	1,283,506
AMP Capital Levy Increase	77,300	78,800	80,400	82,000	84,000	83,761	34,222	34,907	35,604	36,317
Percent Tax Impact on Median Value SFD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AMP Capital Levy (Current Year)	769,812	848,612	929,012	1,011,012	1,095,012	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823
Total Non-Growth Debt Servicing	-	-	99,643	186,572	202,358	347,406	392,566	392,566	502,297	502,297
Transfer to Capital Asset Replacement Discretionary Reserve	769,812	848,612	829,368	824,440	892,654	831,366	820,429	855,336	781,209	817,526





#### Township of Puslinch Option 2 AMP Funding Target Levels

#### Table 5

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Value of Capital Assets	77,490,278	79,040,084	80,620,885	82,233,303	83,877,969	85,555,528	87,266,639	89,011,972	90,792,211	92,608,055
Target AMP Funding Level (2% of Capital Asset Values)	1,549,806	1,580,802	1,612,418	1,644,666	1,677,559	1,711,111	1,745,333	1,780,239	1,815,844	1,852,161
AMP Capital Levy	769,812	848,612	929,012	1,011,012	1,095,012	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823
Other Sources of AMP Capital Financing	709,528	681,030	522,222	522,222	532,338	532,338	532,338	532,338	532,338	532,338
Total Available AMP Funding	1,479,340	1,529,642	1,451,234	1,533,234	1,627,350	1,711,111	1,745,333	1,780,240	1,815,844	1,852,161
Above or (below) target level of AMP Funding	(70,466)	(51,160)	(161,184)	(111,432)	(50,210)	0	(0)	0	(0)	(0)

#### Township of Puslinch Option 2 AMP Debt

Table 6a

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Debt Balance	-	-	828,694	1,481,003	1,477,554	2,533,223	2,650,054	2,350,240	2,952,521	2,553,562
Total Debt Servicing	-	-	99,643	186,572	202,358	347,406	392,566	392,566	502,297	502,297
Interest on Debt	-	-	29,004	51,835	51,714	88,663	92,752	82,258	103,338	89,375
Principal Repayment	-	-	70,639	134,736	150,643	258,744	299,814	310,308	398,959	412,922
New Debt Issue	-	828,694	722,948	131,287	1,206,313	375,574	-	912,589	-	1,049,416
Closing Balance	-	828,694	1,481,003	1,477,554	2,533,223	2,650,054	2,350,240	2,952,521	2,553,562	3,190,056

#### Township of Puslinch Option 2

#### AMP Annual Repayment Limit - 10%

#### Table 6b

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Net Township Revenues	5,565,118	5,843,374	6,135,543	6,442,320	6,764,436	7,102,657	7,457,790	7,830,680	8,222,214	8,633,325
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Debt Limit Remaining \$	556,512	584,337	513,911	457,660	474,086	362,859	353,213	390,502	319,924	361,036
Percent of Limit Remaining	100%	100%	84%	71%	70%	51%	47%	50%	39%	42%





# 20.3 Financial Strategy Option 3 (3 Percent Impact)

Township of Puslinch Option 3 2019 - 2028 AMP Forecast Inflated \$ Table 1

Description			Table	-	Fore	cast				
Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<u>Capital Expenditures</u>										
Bridges	-	-	426,564	-	-	-	-	574,343	-	-
Culverts	-	-	561,816	-	-	-	-	643,264	-	-
Buildings and Facilities	15,750	22,440	114,444	63,672	32,473	200,115	11,262	17,230	35,150	528,335
Fire Equipment	21,000	314,823	6,242	-	12,989	9,937	69,259	27,568	43,351	14,341
Parks and Recreation	-	35,361	22,889	-	335,554	1,987	-	160,618	-	9,250
Asphalt Road 1 Lift	1,509,346	626,983	167,647	751,961	1,534,372	750,696	492,165	653,942	257,736	1,055,247
Asphalt Road 2 Lift	-	281,926	275,544	-	402,012	497,275	52,434	146,515	233,286	144,747
Asphalt Road Surface Treated	-	-	-	-	-	143,853	16,723	-	-	-
Gravel Road	140,000	66,300	67,626	68,979	70,358	71,765	73,201	74,665	76,158	77,681
Storm Water Management Ponds	-	153,000	171,666	175,099	-	-	-	-	-	-
Fire licensed vehicles	-	530,400	-	-	-	25,394	527,044	-	-	597,546
Fire vehicle tires	17,146	1,683	-	4,368	-	1,822	-	-	3,866	8,590
Sidewalk	25,000	112,200	-	-	-	-	-	-	-	-
Works licensed vehicles	-	652,800	260,100	-	243,547	-	103,607	-	292,915	298,773
Works Unlicensed vehicles	26,000	127,500	-	413,871	-	-	-	-	-	-
Building Department licensed vehicles	-	-	-	-	-	36,435	-	-	-	-
Parks and Recreation Unlicensed vehicles	-	-	-	-	-	-	-	9,189	-	35,853
Total Capital Expenditures - Capital Program	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364
Capital Financing										
Provincial/Federal Grants (OCIF)	169,421	168,923	-	-	-	-	-	-	-	-
Gas Tax Funding	222,547	222,547	232,662	232,662	242,778	242,778	242,778	242,778	242,778	242,778
Other (County Accessibility Grant Funding)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Aggregate Revenue	228,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Public Works Development Charges	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560	79,560
Non-Growth Related Debenture Requirements	-	738,884	618,989	-	1,113,574	325,338	-	800,036	-	909,794
Capital Asset Replacement Discretionary Reserve	1,044,714	1,505,502	933,327	955,728	985,393	881,602	813,356	974,962	410,124	1,328,232
Total Capital Financing	1,754,242	2,925,416	2,074,538	1,477,950	2,631,305	1,739,278	1,345,694	2,307,336	942,462	2,770,364





# Township of Puslinch Option 3 Capital Asset Replacement Discretionary Reserve

#### Table 2

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
Opening Balance	2,838,841	2,602,589	1,996,859	1,996,859	2,000,302	1,996,858	1,996,859	2,060,208	1,996,859	2,437,754			
Transfer from Operating (AMP Capital Levy)	808,462	899,772	933,327	959,171	981,949	881,603	876,705	911,612	851,019	887,336			
Transfer to Capital	1,044,714	1,505,502	933,327	955,728	985,393	881,602	813,356	974,962	410,124	1,328,232			
Closing Balance	2,602,589	1,996,859	1,996,859	2,000,302	1,996,858	1,996,859	2,060,208	1,996,859	2,437,754	1,996,858			
			Reserve Targ	et Balances									
Minimum Balance at 10% of 10 year Capital Plan	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859	\$ 1,996,859			
Closing Reserve Balance	\$ 2,602,589	\$ 1,996,859	\$ 1,996,859	\$ 2,000,302	\$ 1,996,858	\$ 1,996,859	\$ 2,060,208	\$ 1,996,859	\$ 2,437,754	\$ 1,996,858			
Target Balance at 20% of 10 year Capital Plan	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717	\$ 3,993,717			

#### Township of Puslinch Option 3 Operating Budget Forecast - AMP Car

## Operating Budget Forecast - AMP Capital Related

#### Table 3

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<u>Capital-Related</u>										
New Non-Growth Related Debt (Principal)	-	-	62,983	117,951	122,080	221,275	256,752	265,738	343,235	355,248
New Non-Growth Related Debt (Interest)	-	-	25,861	45,321	41,193	75,895	79,537	70,551	89,251	77,238
Transfer to Capital Asset Replacement Discretionary Reserve	808,462	899,772	933,327	959,171	981,949	881,603	876,705	911,612	851,019	887,336
Total AMP Capital Related Expenditures	808,462	899,772	1,022,172	1,122,444	1,145,222	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823

# Township of Puslinch Option 3 AMP Capital Levy Impact Table 4

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
AMP Capital Levy (Previous Year)	692,512	808,462	899,772	1,022,172	1,122,444	1,145,222	1,178,773	1,212,995	1,247,902	1,283,506
AMP Capital Levy Increase	115,950	91,310	122,400	100,272	22,778	33,551	34,222	34,907	35,604	36,317
Percent Tax Impact on Median Value SFD	3.00%	2.29%	3.00%	2.40%	0.54%	0.79%	0.80%	0.81%	0.82%	0.83%
AMP Capital Levy (Current Year)	808,462	899,772	1,022,172	1,122,444	1,145,222	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823
Total Non-Growth Debt Servicing	-	-	88,844	163,273	163,273	297,170	336,289	336,289	432,487	432,487
Transfer to Capital Asset Replacement Discretionary Reserve	808,462	899,772	933,327	959,171	981,949	881,603	876,705	911,612	851,019	887,336





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

#### Table 5

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Value of Capital Assets	77,490,278	79,040,084	80,620,885	82,233,303	83,877,969	85,555,528	87,266,639	89,011,972	90,792,211	92,608,055
Target AMP Funding Level (2% of Capital Asset Values)	1,549,806	1,580,802	1,612,418	1,644,666	1,677,559	1,711,111	1,745,333	1,780,239	1,815,844	1,852,161
AMP Capital Levy	808,462	899,772	1,022,172	1,122,444	1,145,222	1,178,773	1,212,995	1,247,902	1,283,506	1,319,823
Other Sources of AMP Capital Financing	709,528	681,030	522,222	522,222	532,338	532,338	532,338	532,338	532,338	532,338
Total Available AMP Funding	1,517,990	1,580,802	1,544,394	1,644,666	1,677,560	1,711,111	1,745,333	1,780,240	1,815,844	1,852,161
Above or (below) target level of AMP Funding	(31,816)	0	(68,024)	(0)	0	0	(0)	0	(0)	(0)

# Township of Puslinch Option 3 AMP Debt Table 6a

Description 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 1,294,890 Opening Debt Balance 738,884 1,176,938 2,168,432 2,272,495 2,015,744 2,550,041 2,206,806 Total Debt Servicing 88,844 163,273 163,273 297,170 336,289 336,289 432,487 432,487 --Interest on Debt 25,861 45,321 41,193 75,895 79,537 70,551 89,251 77,238 62,983 117,951 122,080 343,235 355,248 Principal Repayment --221,275 256,752 265,738 New Debt Issue 738,884 618,989 1,113,574 325,338 800,036 909,794 Closing Balance 738,884 1,294,890 1,176,938 2,168,432 2,272,495 2,015,744 2,550,041 2,206,806 2,761,352

# Township of Puslinch Option 3 AMP Annual Repayment Limit - 10% Table 6b

			Table	UD						
Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Net Township Revenues	5,565,118	5,843,374	6,135,543	6,442,320	6,764,436	7,102,657	7,457,790	7,830,680	8,222,214	8,633,325
10% of Net Revenues	556,512	584,337	613,554	644,232	676,444	710,266	745,779	783,068	822,221	863,332
Debt Limit Remaining \$	556,512	584,337	524,710	480,959	513,171	413,096	409,490	446,779	389,735	430,846
Percent of Limit Remaining	100%	100%	86%	75%	76%	58%	55%	57%	47%	50%



### 20.4 The Township of Puslinch Asset Management Policy

#### **Purpose**

An Asset Management Policy formalizes the Township of Puslinch's commitment to asset management, aligns its asset management actions with strategic goals and objectives, and provides direction to guide Council and staff in carrying out its business. Such a policy will support the Township in focusing its infrastructure efforts on managing risks, addressing priorities, and meeting short and long-term needs within the bounds of possible funding.

#### Vision

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

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

#### **Objectives**

The objectives of this policy are to:

- Provide a consistent framework for implementing asset management throughout the Township in compliance with Regulation 588/17.
- Demonstrate transparent, accountable, and informed decision-making that considers the Township's strategic plans, budget, service levels and risks.

#### **Strategic Alignment**

The Township adopted in principle a Community Based Strategic Plan, a Master Fire Plan, a Parks and Recreation Master Plan, a Community Improvement Plan and an Asset Management Plan. These plans were designed to meet the legislative requirements and work together to achieve the Township's mission of providing innovation and excellence in service delivery. Spending requirements defined in the budgeting process and in long-term financial planning will reflect the objectives of these plans.

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

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



#### **Stakeholder Engagement**

The Township recognizes the importance of stakeholder engagement as an integral component of a comprehensive Asset Management Plan. The Township fosters informed dialogue with all stakeholders by:

- Providing residents and other stakeholders served by the Township opportunities to provide input; and
- Coordinating Asset Management Planning with other infrastructure owning government agencies and bodies.

#### **Guiding Principles**

The Infrastructure for Jobs and Prosperity Act, 2015 establishes principles to guide Asset Management Planning. The Township will strive, where possible, to incorporate the following principles into decisions respecting infrastructure planning and investment:

- Forward looking: Take a long-term view while considering demographic and economic trends in the County.
- > Budgeting and planning: Take into account any applicable budgets or fiscal plans.
- ➤ **Prioritizing:** Clearly identify infrastructure priorities which will drive investment decisions.
- **Economic development:** Promote economic competitiveness, productivity, job creation, and training opportunities.
- > **Transparency:** Promote an open and transparent decision-making process through the sharing, posting or access to information subject to any restrictions or prohibitions on the collection, use or disclosure of information.
- **Consistency:** Ensure the delivery of core public services such as Roads, Infrastructure and Fire.
- **Environmentally conscious:** Consider the impact of infrastructure on the environment and climate change. Endeavour to make use of acceptable recycled aggregates.
- ➤ Health and safety: ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.
- ➤ **Community focused:** Consider the community benefits arising from an infrastructure project such as improvements to public space within the Township and promoting accessibility. The Township shall coordinate planning for asset management when municipal infrastructure assets connect or are interrelated with the County and neighboring Municipalities.



#### Schedule A to Report FIN-2019-022

#### THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN



- Innovation: foster innovation by creating opportunities to make use of innovative technologies, services, and practices, particularly where doing so would utilize technology, techniques, and practices developed in Ontario.
- ➤ Integration: where relevant and appropriate, be mindful and consider the principles and content of non-binding provincial or municipal plans and strategies established under an Act or otherwise, in planning and making decisions surrounding the infrastructure that supports them.

#### **Community Planning**

Asset Management Planning will align with the County of Wellington Official Plan. The Township will achieve this by consulting with those responsible for managing the services to analyze the future costs and viability of projected changes.

#### **Climate Change**

The Township where applicable and appropriate will consider designing infrastructure to be resilient to the effects of climate change and support disaster planning to facilitate business continuity.

#### **Scope and Capitalization Thresholds**

The Township will use a service-based (qualitative) perspective when applying this policy to municipal assets, rather than a monetary value (quantitative). The capitalization threshold developed for financial reporting will not be the guide in selecting assets covered by the Asset Management Planning process.

#### **Financial Planning and Budgeting**

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

- Identify all potential revenues and costs (including operating, maintenance, replacement and decommissioning) associated with forthcoming infrastructure asset decisions;
- Evaluate the validity and need of each significant new capital asset, including
  considering the impact on future operating costs; and Incorporate new revenue tools
  and alternative funding strategies where possible.

The department level budget submission will be reviewed and evaluated by the CAO and Director of Finance in the preparation of the Township's annual budget. Service area personnel will reference the Asset Management Plan for their area in order to look up forecasted spending needs identified in the plan, verify progress made on the Plan to identify potential gaps, prioritize spending needs and recent developments. Finance staff will be involved in the



# Schedule A to Report FIN-2019-022

#### THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN



Asset Management Planning process to coordinate the information from service personnel in the preparation of the budget submission.

#### **Governance and Continuous Improvement**

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

#### Council:

- Approve by resolution the Asset Management Plan and its updates every five years;
- ➤ Conduct an annual review of the Asset Management Plan on or before July 1<sup>st</sup> of every year, that includes:
  - Progress on ongoing efforts to implement the Asset Management Plan;
  - Consideration of the Asset Management Policy;
  - Any factors affecting the ability of the Township to implement its Asset Management Plan;
  - Consultation with staff;
  - o Support efforts to improve and implement the Asset Management Plan.

#### **Director of Finance/Treasurer:**

Maintain compliance with the Asset Management Policy and Provincial Asset management regulations.

#### **Senior Management:**

> Oversee Asset Management Planning activities that fall within their service area.



# PUSLINCH

# 20.5 Puslinch Asset Registry (No Regulatory/Warning Signs) - Reduced Fields

Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
1001	Bridges	Cook's Mill Bridge	1992	\$593,190	50	70	4	High
1003	Bridges	Little's Bridge	1910	\$219,765	50	22	2	Very High
1005	Bridges	Leslie Road West Between Lots 35/36	1965	\$445,900	50	74	4	High
1006	Bridges	Concession 1, Lots 9/10, West Of SR 10S	1970	\$783,510	50	61	3	High
1007	Bridges	French's Bridge	1984	\$309,140	50	67	3	High
1008	Bridges	Galt Creek Bridge Gore Road Lot 2	1948	\$745,875	50	60	2	Very High
1009	Bridges	Moyer's Bridge	1931	\$495,040	50	63	2	Very High
2002	Culverts	Culvert Of Cook's Mill Race	2013	\$97,200	50	52	2	Very High
2004	Culverts	McFarlane's Culvert	2002	\$126,585	50	75	4	High
2006	Culverts	Victoria Road Culvert Over Galt Creek	1960	\$225,630	50	72	2	Very High
2007	Culverts	Irish Creek Culvert On Townline Road	1936	\$239,400	50	57	2	Very High
2008	Culverts	7th Concession Culvert	2012	\$55,688	50	75	4	High
2009	Culverts	Gilmour Rd Culvert Over Aberfoyle Creek	1930	\$138,600	50	50	2	Very High
2010	Culverts	Ellis Road Culvert Over Puslinch Lake Irish Creek	1920	\$283,500	50	43	2	Very High
2011	Culverts	Ellis Road Culvert At Lot 10 Conc 2	2010	\$131,670	50	75	3	High
2012	Culverts	Concession 2 Bridge/Culvert Over Mill Creek	1994	\$560,700	50	75	3	High
2013	Culverts	Victoria Road Culvert North Of Leslie	1950	\$177,165	50	70	3	High
2014	Culverts	Leslie Road Culvert West Of Victoria	1945	\$171,450	50	55	2	Very High
2015	Culverts	Culvert Of Flamborough T/L West Of Victoria	2010	\$264,735	50	75	4	High
2016	Culverts	Flamborough T/L Bridge/Culvert East Of Macpherson Ln	2010	\$219,240	50	75	4	High
2017	Culverts	Gore Road Culvert	1960	\$84,546	50	100	4	High
2018	Culverts	Gore Road Dual Culvert	1950	\$63,135	50	100	4	High





Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
2019	Culverts	7th Concession Culvert	1960	\$194,400	50	74	4	High
13OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink: Walls & Windows	2010	\$122,300	40	4	4	Medium
14BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC: Interior Finishes		\$1,794	40	3	3	Medium
15002	Buildings and Facilities	Municipal Complex: Parking Lot Municipal Complex	1984	\$162,750	25	2	2	Medium
15RSB	Buildings and Facilities	Roads Storage Building: Mechanical		\$39,241	40	4	4	Medium
17OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink:Mechanical	2010	\$76,315	40	4	4	Medium
18OCC	Buildings and Facilities	Optimist Community Centre: Fire, Life-Safety	2010	\$26,455	40	4	4	Medium
1MC	Buildings and Facilities	Municipal Complex: Fire, Life-Safety	1984	\$35,987	40	5	5	Low
210MC	Buildings and Facilities	Municipal Complex: Generator				5	5	Low
210PCC	Buildings and Facilities	Puslinch Community Centre: Generator				5	5	Low
21MC	Buildings and Facilities	Municipal Complex: Electrical	1984	\$56,979	40	5	5	Low
220CC	Buildings and Facilities	Optimist Community Centre: Electrical	2010	\$75,076	40	5	5	Low
24RSB	Buildings and Facilities	Roads Storage Building: Interior Finishes		\$3,019	20	4	4	Medium
26PCC	Buildings and Facilities	Puslinch Community Centre: Electrical	1983	\$61,000	40	5	5	Low
3009MM	Buildings and Facilities	Old Morriston: Booth/Washroom Building	1988	\$20,000	40	3	3	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
3011	Buildings and	Community Centre Complex:	1992	\$20,000	40	3	3	Medium
	Facilities	Concession Booth At Community						
		Centre Ball Diamond, C Road 46						
3035	Buildings and	Community Centre Complex: Storage		\$20,000	30	3	3	Medium
	Facilities	Building at Horse Paddock						
3066	Buildings and	Old Morriston: Equipment Storage		\$400	40	3	3	Medium
	Facilities	Room						
3067	Buildings and	Badenoch Soccer Field: Storage Shed		\$20,000	40	4	4	Medium
2204	Facilities	Old Manistan, Faviance of Change		¢10.000	20	2		NA adiama
3281	Buildings and	Old Morriston: Equipment Storage		\$10,000	20	3	3	Medium
22066	Facilities	Room, Panel	2040	6475.000	40	_		1 -
33OCC	Buildings and	Optimist Community	2010	\$175,892	40	5	5	Low
	Facilities	Centre:Structure		4.0-00-		_	_	
39OCCIR	Buildings and	Optimist Community Centre Ice Rink:	2010	\$125,235	40	4	4	Medium
	Facilities	Structure						
4001	Buildings and Facilities	Server	2019	\$42,000	5	5	5	Low
4002	Buildings and	Computer Assets		\$10,000	5	5	5	Low
	Facilities							
4004	Buildings and Facilities	Microsoft Office Licenses		\$15,000	5	5	5	Low
40PCC	Buildings and	Puslinch Community Centre: Fire,	1983	\$5,750	40	5	5	Low
	Facilities	Life-Safety						
41MC	Buildings and	Municipal Complex: Septic Tank	1983	\$15,000	30	3	3	Medium
	Facilities			. ,				
41MM	Buildings and	Morriston Meadows: Septic Tank		\$15,000	30	5	5	Low
	Facilities	·						
410CC	Buildings and	Optimist Community Centre Ice Rink:	2010	\$15,000	30	3	3	Medium
	Facilities	Septic Tank						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
410MM	Buildings and Facilities	Old Morriston: Septic Tank		\$15,000	30	5	5	Low
41PCC	Buildings and Facilities	Puslinch Community Centre: Septic Tank	1983	\$15,000	30	3	3	Medium
420MM	Buildings and Facilities	Old Morriston Park: Concession Booth		\$20,000		3	3	Medium
44BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC: Fire, Life-Safety		\$20,038	40	3	3	Medium
44OCC	Buildings and Facilities	Optimist Community Centre: Interior Finishes	2010	\$143,002	20	5	5	Low
46MC	Buildings and Facilities	Municipal Complex: Walls & Windows	1984	\$147,695	20	4	4	Medium
46PCC	Buildings and Facilities	Puslinch Community Centre: Interior Finishes	1983	\$125,757	40	5	5	Low
510CC	Buildings and Facilities	Optimist Community Centre: Walls & Windows	2010	\$76,506	40	5	5	Low
51OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink: Electrical	2010	\$66,042	40	1	1	High
53PCC	Buildings and Facilities	Puslinch Community Centre: Structure	1983	\$3,000	40	4	4	Medium
56MC	Buildings and Facilities	Municipal Complex: Roof	1984	\$42,734	40	5	5	Low
58OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink: Interior Finishes	2010	\$5,870	20	4	4	Medium
59MC	Buildings and Facilities	Municipal Complex:Mechanical	1984	\$222,667	40	5	5	Low
64BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC: Structure		\$38,282	40	3	3	Medium
66BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC: Walls & Windows		\$37,384	20	3	3	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
66OCC	Buildings and Facilities	Optimist Community Centre: Roof	2010	\$28,600	40	5	5	Low
67PCC	Buildings and Facilities	Puslinch Community Centre: Roof	1983	\$100,000	40	5	5	Low
70BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Mechanical		\$23,328	40	3	3	Medium
71BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC:Roof		\$30,000	40	3	3	Medium
77MC	Buildings and Facilities	Municipal Complex: Interior Finishes	1984	\$103,461	40	5	5	Low
7RSB	Buildings and Facilities	Roads Storage Building: Walls & Windows		\$62,886	40	4	4	Medium
81RSB	Buildings and Facilities	Roads Storage Building: Electrical		\$33,958	40	4	4	Medium
86RSB	Buildings and Facilities	Roads Storage Building: Fire, Life- Safety		\$33,707	40	4	4	Medium
88OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink: Fire, Life-Safety	2010	\$65,553	40	4	4	Medium
89BSBBPCC	Buildings and Facilities	Blue Storage Building Behind PCC: Electrical		\$20,188	40	3	3	Medium
92RSB	Buildings and Facilities	Roads Storage Building: Structure		\$64,395	40	4	4	Medium
93PCC	Buildings and Facilities	Puslinch Community Centre: Mechanical	1983	\$45,000	40	5	5	Low
95MC	Buildings and Facilities	Municipal Complex: Structure	1984	\$144,921	40	4	4	Medium
95OCCIR	Buildings and Facilities	Optimist Community Centre Ice Rink: Roof	2010	\$27,884	40	4	4	Medium
95RSB	Buildings and Facilities	Roads Storage Building: Roof		\$14,338	40	4	4	Medium





# PUSLINCH

Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
97OCC	Buildings and Facilities	Optimist Community Centre: Mechanical	2010	\$148,007	40	5	5	Low
9PCC	Buildings and Facilities	Puslinch Community Centre: Walls & Windows	1983	\$140,000	20	4	4	Medium
1	Asphalt Road 1 Lift	Gore Road	2015	\$1,318,519	25	64	1	Very High
10	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	2002	\$423,819	25	79	3	High
100	Gravel Road	Sideroad 12 North	2002	\$59,580	50	90	4	High
101	Gravel Road	Sideroad 12 N	2001	\$184,577	50	90	4	High
103	Gravel Road	Pioneer Trail	2000	\$301,750	50	90	4	High
104	Gravel Road	Sideroad 20 South	2000	\$335,435	50	90	4	High
105	Gravel Road	Sideroad 20 South	2000	\$371,540	50	90	4	High
106	Gravel Road	Sideroad 20 North	2000	\$185,238	50	90	4	High
108	Asphalt Road 1 Lift	Sideroad 20 North	2004	\$651,901	25	69	2	Very High
110	Gravel Road	Sideroad 25 South	2000	\$336,664	50	90	4	High
111	Gravel Road	Sideroad 25 South	2000	\$371,176	50	90	4	High
112	Gravel Road	Sideroad 25 North	2000	\$100,564	50	90	4	High
113	Gravel Road	Concession 7	1990	\$340,978	50	90	4	High
114	Gravel Road	Concession 7	1990	\$470,198	50	90	4	High
115	Asphalt Road 2 Lift	Concession 7	2013	\$197,428	25	76	3	High
116	Asphalt Road 2 Lift	Concession 7	2000	\$143,334	25	76	3	High
118	Gravel Road	Concession 7	1990	\$364,220	50	90	4	High
12	Asphalt Road 1 Lift	Concession 1	2013	\$182,643	25	91	4	High
120	Asphalt Road Surface Treated	Maddaugh Road	1997	\$24,785	7	67	2	Very High







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
121A	Asphalt Road 1 Lift	Maddaugh Road	2004	\$155,390	25	67	2	Very High
121B	Asphalt Road 1 Lift	Maddaugh Road	2003	\$161,851	25	67	2	Very High
122	Asphalt Road 1 Lift	Victoria Road South	2014	\$225,460	25	89	4	High
123	Asphalt Road 1 Lift	Victoria Road South	2014	\$711,618	25	89	4	High
124	Asphalt Road 1 Lift	Victoria Road South	2012	\$925,640	25	62	1	Very High
125A	Asphalt Road 1 Lift	Victoria Road South	2000	\$193,535	25	62	1	Very High
125B	Asphalt Road 1 Lift	Victoria Road South	2016	\$164,074	25	95	5	Medium
126	Asphalt Road 1 Lift	Victoria Road South	2013	\$660,891	25	85	3	High
129	Gravel Road	Carter Road	2003	\$328,113	50	90	4	High
132	Asphalt Road 1 Lift	McRae Station Road	1996	\$214,909	25	74	2	Very High
133	Asphalt Road 1 Lift	Watson Road South	1997	\$315,092	25	65	2	Very High
134	Asphalt Road 1 Lift	Watson Road South	1996	\$197,037	25	66	2	Very High
135	Asphalt Road 1 Lift	Watson Road South	1990	\$182,905	25	66	2	Very High
136	Asphalt Road 1 Lift	Watson Road South	1998	\$271,867	25	66	2	Very High
137	Asphalt Road 1 Lift	Watson Road South	1996	\$1,320,708	25	64	1	Very High



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
138	Asphalt Road 1 Lift	Watson Road South	2016	\$678,845	25	95	5	Medium
139	Asphalt Road 1 Lift	Watson Road South	2001	\$650,584	25	66	2	Very High
13A	Asphalt Road 1 Lift	Concession 1	2007	\$1,013,067	25	79	3	High
13B	Asphalt Road 1 Lift	Concession 1	1999	\$115,752	25	91	4	High
14	Asphalt Road 1 Lift	Concession 1	2013	\$659,171	25	75	3	High
140	Asphalt Road 1 Lift	Watson Road South	2001	\$524,575	25	66	2	Very High
142	Gravel Road	Concession 11	2002	\$366,533	50	90	4	High
143	Gravel Road	Concession 11	2000	\$234,387	50	90	4	High
144	Gravel Road	Concession 11	2000	\$346,743	50	90	4	High
145	Gravel Road	Concession 11	2000	\$364,394	50	90	4	High
146	Gravel Road	Concession 11	2002	\$364,390	50	90	4	High
148	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	2003	\$96,036	25	69	2	Very High
149	Gravel Road	Darkwood	1997	\$25,028	50	90	4	High
15	Asphalt Road 1 Lift	Concession 1	1996	\$660,788	25	67	2	Very High
150	Gravel Road	Nassagaweya-Puslinch Townline	2001	\$366,034	50	90	4	High
152	Gravel Road	Midway Lane	2001	\$146,615	50	90	4	High
153	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	2017	\$54,921	7	98	5	Medium
154	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	2017	\$28,974	7	98	5	Medium
155	Asphalt Road Surface Treated	Nassagaweya-Puslinch Townline	2017	\$21,613	7	98	5	Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
157	Gravel Road	Jones Baseline	2003	\$76,148	50	90	4	High
158	Asphalt Road 1 Lift	McLean Road East	1996	\$207,799	25	67	2	Very High
159	Gravel Road	McLean Road East	2004	\$64,192	50	90	4	High
16	Asphalt Road 1 Lift	Concession 1	1999	\$657,152	25	73	2	Very High
160	Asphalt Road 1 Lift	Concession 4	2004	\$142,387	25	75	2	Very High
161	Asphalt Road 1 Lift	Concession 4	2004	\$107,682	25	75	2	Very High
162_SURFA CE	Asphalt Road 2 Lift	Nicholas Beaver Road	2007	\$441,761	25	82	3	High
164_SURFA CE	Asphalt Road 2 Lift	McLean Road/Concession 7	2004	\$492,285	25	72	2	Very High
165_SURFA CE	Asphalt Road 2 Lift	McLean Road/Concession 7	2004	\$382,470	25	72	2	Very High
166	Asphalt Road 1 Lift	Sideroad 20 North	2003	\$354,891	25	72	2	Very High
17	Asphalt Road 1 Lift	Concession 1	1997	\$658,028	25	69	2	Very High
175	Gravel Road	Rhodes Road		\$151,585	50	90	4	High
176	Gravel Road	Eagle Lane		\$133,303	50	90	4	High
177_SURFA CE	Asphalt Road 2 Lift	Old Ruby Lane						
178_SURFA CE	Asphalt Road 2 Lift	Elizabeth Place						
179_SURFA CE	Asphalt Road 2 Lift	Catherine Court						
18	Asphalt Road 1 Lift	Concession 1/Leslie Rd W	1999	\$776,119	25	72	2	Very High







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
180	Asphalt Road 1 Lift	Currie Drive	2015	\$196,555	25	93	4	High
181	Asphalt Road 1 Lift	Ochs Drive	2015	\$183,332	25	93	4	High
182_SURFA CE	Asphalt Road 2 Lift	Ikonkar Place - Morriston Estates						
185_SURFA CE	Asphalt Road 2 Lift	Bridle Path	1990	\$205,657	25	70	2	Very High
188_SURFA CE	Asphalt Road 2 Lift	Whitcombe Way						
19	Asphalt Road 1 Lift	Concession 1	2001	\$147,053	25	72	2	Very High
190	Asphalt Road 2 Lift	Telfer Glen	1996	\$321,772	25	80	3	High
191	Asphalt Road 2 Lift	Settler's Road	1995	\$147,056	25	85	4	High
195	Asphalt Road 2 Lift	Deer View Ridge	2004	\$306,895	25	76	3	High
196	Asphalt Road 2 Lift	Fox Run Drive	2004	\$190,078	25	77	3	High
198	Asphalt Road 2 Lift	Kerr Crescent	1995	\$384,857	25	86	4	High
2	Asphalt Road 1 Lift	Gore Road	2015	\$487,415	25	93	4	High
20	Asphalt Road 1 Lift	Leslie Road W	2016	\$600,992	25	95	5	Medium
200	Gravel Road	Boyce Drive	2003	\$44,973	50	90	4	High
201_SURFA CE	Asphalt Road 2 Lift	Carriage Lane	2000	\$340,271	25	86	4	High







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
202_SURFA CE	Asphalt Road 2 Lift	Cassin Court	2007	\$130,866	25	86	4	High
203_SURFA CE	Asphalt Road 2 Lift	Daymond Drive	2007	\$150,295	25	87	4	High
204_SURFA CE	Asphalt Road 2 Lift	Bridle Path	1990	\$514,571	25	70	2	Very High
205	Asphalt Road 2 Lift	Fox Run Drive	2000	\$108,410	25	77	3	High
206	Asphalt Road 2 Lift	Fox Run Drive	2000	\$57,511	25	77	3	High
207	Asphalt Road 2 Lift	Fox Run Drive	2000	\$301,634	25	77	3	High
208_SURFA CE	Asphalt Road 2 Lift	Boreham Drive	1999	\$140,930	25	81	3	High
209	Asphalt Road 2 Lift	Winer Court	2015	\$41,238	25	93	4	High
21	Asphalt Road 1 Lift	Leslie Road West	2003	\$642,266	25	76	3	High
210	Asphalt Road 1 Lift	Lang Court	2015	\$34,267	25	93	4	High
211	Gravel Road	Anne Street	2003	\$11,201	50	90	4	High
212A	Asphalt Road 1 Lift	Winer Road	2000	\$189,390	25	70	2	Very High
212B_SURF ACE	Asphalt Road 2 Lift	Winer Road	2007	\$165,696	25	70	2	Very High
213_SURFA CE	Asphalt Road 2 Lift	Tawse Place	1990	\$71,054	25	88	4	High
214	Asphalt Road 2 Lift	Beiber Road	2004	\$78,269	25	79	3	High





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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
22	Asphalt Road 1 Lift	Leslie Road West	2003	\$171,807	25	69	2	Very High
23	Asphalt Road 1 Lift	Leslie Road West	2003	\$389,820	25	69	2	Very High
25	Asphalt Road 1 Lift	Leslie Road West	2004	\$323,909	25	69	2	Very High
26	Gravel Road	Small Road	2001	\$76,786	50	90	4	High
27	Gravel Road	Calfass Road	2000	\$368,608	50	90	4	High
27B	Asphalt Road 2 Lift	Calfass Road	2016	\$44,716	25	95	5	Medium
28_SURFAC E	Asphalt Road 2 Lift	Victoria Street And Church Street	2000	\$130,336	25	71	2	Very High
29	Asphalt Road 1 Lift	Main Street	2001	\$155,895	25	80	3	High
3	Asphalt Road 1 Lift	Gore Road	2013	\$658,618	25	91	4	High
30	Asphalt Road 1 Lift	Main St And Back	2011	\$110,087	25	80	3	High
31	Gravel Road	Little Road	2001	\$69,183	50	90	4	High
32	Asphalt Road 1 Lift	Concession 2	2014	\$669,541	25	74	2	Very High
33	Asphalt Road 1 Lift	Concession 2	2014	\$657,503	25	91	4	High
34	Asphalt Road 1 Lift	Concession 2	2010	\$667,781	25	77	3	High
35	Asphalt Road 2 Lift	Concession 2	2013	\$945,359	25	77	3	High
36	Asphalt Road 2 Lift	Concession 2/2A	1999	\$411,923	25	77	3	High
37	Gravel Road	Concession 2	2000	\$42,245	50	90	4	High







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
38	Asphalt Road 1 Lift	Mason Road	2000	\$70,941	25	74	2	Very High
4	Asphalt Road 1 Lift	Gore Road	2004	\$830,576	25	71	2	Very High
40_SURFAC E	Asphalt Road 2 Lift	McLean Road West	1995	\$912,914	25	68	2	Very High
43	Gravel Road	Sideroad 17	2000	\$66,804	50	90	4	High
44	Asphalt Road 1 Lift	Ellis Road	2017	\$696,391	25	98	5	Medium
45A	Asphalt Road 1 Lift	Ellis Road	2010	\$162,927	25	82	3	High
45B	Asphalt Road 1 Lift	Ellis Road	1995	\$574,749	25	82	3	High
46_SURFAC E	Asphalt Road 2 Lift	Gilmour Road	2007	\$79,051	25	75	2	Very High
47	Gravel Road	Gilmour Road	2002	\$306,805	50	90	4	High
48	Asphalt Road 1 Lift	Smith Road	1990	\$105,774	25	76	3	High
5	Asphalt Road 1 Lift	Gore Road	1990	\$486,434	25	70	2	Very High
50_SURFAC E	Asphalt Road 2 Lift	Cockburn Street	2000	\$56,932	25	84	3	High
51_SURFAC E	Asphalt Road 2 Lift	Old Brock Road	2000	\$153,783	25	73	2	Very High
52	Asphalt Road 1	Maple Leaf Lane	2000	\$226,827	25	65	2	Very High
53	Gravel Road	Hammersley Road	2002	\$177,891	50	90	4	High
54A	Asphalt Road 1 Lift	Roszell Road 2013	2012	\$420,896	25	68	2	Very High





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Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
55	Asphalt Road 1 Lift	Concession 4	2010	\$394,785	25	83	3	High
56	Asphalt Road 1 Lift	Concession 4	2012	\$660,207	25	64	1	Very High
57	Asphalt Road 1 Lift	Concession 4	2004	\$262,338	25	65	2	Very High
58	Asphalt Road 1 Lift	Concession 4	2003	\$393,745	25	64	1	Very High
59	Asphalt Road 1 Lift	Concession 4	2003	\$659,044	25	67	2	Very High
6	Asphalt Road 1 Lift	Gore Road	2002	\$305,620	25	64	1	Very High
63A	Asphalt Road 1 Lift	Maltby Road East	2011	\$324,700	25	70	2	Very High
63B	Asphalt Road 1 Lift	Maltby Road East	2012	\$321,929	25	70	2	Very High
64	Gravel Road	Maltby Road East	2001	\$367,343	50	90	4	High
65	Gravel Road	Maltby Road East	1990	\$54,652	50	90	4	High
66	Asphalt Road 1 Lift	Forestell Road	2018	\$388,958	25	99	5	Medium
67	Asphalt Road 1 Lift	Forestell Road	2017	\$662,722	25	98	5	Medium
68	Asphalt Road 1 Lift	Forestell Road	2018	\$261,686	25	98	5	Medium
69	Asphalt Road 1 Lift	Forestell Road	2018	\$395,009	25	98	5	Medium
7	Asphalt Road Surface Treated	Gore Road	1999	\$64,965	7	64	1	Very High
71	Asphalt Road 1 Lift	Laird Road West	2007	\$71,000	25	70	2	Very High







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
72_SURFAC E	Asphalt Road 2 Lift	Laird Road West	2017	\$951,590	25	96	5	Medium
73_SURFAC	Asphalt Road 2	Laird Road West	2017	\$381,987	25	96	5	Medium
74_SURFAC E	Asphalt Road 2 Lift	Laird Road West	2017	\$571,335	25	96	5	Medium
77	Asphalt Road 1 Lift	Hume Road	2010	\$747,037	25	81	3	High
78	Asphalt Road 1 Lift	Niska Road	2012	\$193,510	25	85	3	High
79	Gravel Road	Farnham Road	2003	\$170,773	50	90	4	High
8	Gravel Road	MacPherson's Lane	2000	\$155,895	50	90	4	High
81	Gravel Road	Cooks Mill Road	2003	\$107,488	50	90	4	High
82	Asphalt Road 1 Lift	Cooks Mill Road	2013	\$136,438	25	83	3	High
88	Asphalt Road 1 Lift	Townline Road	1990	\$464,824	25	68	2	Very High
9	Asphalt Road 1 Lift	Puslinch-Flamborough Townline	2003	\$344,544	25	79	3	High
90	Asphalt Road 1 Lift	Roszell Road	1990	\$316,669	25	68	2	Very High
91	Gravel Road	Sideroad 10 South	2000	\$333,431	50	90	4	High
92	Gravel Road	Sideroad 10 South	2001	\$370,103	50	90	4	High
93	Gravel Road	Sideroad 10 South	2000	\$131,053	50	90	4	High
94	Asphalt Road 1 Lift	Sideroad 10 North	2000	\$637,500	25	82	4	High
95A	Gravel Road	Sideroad 10 North	2000	\$337,250	25	90	4	High
95b	Asphalt Road 1 Lift	Side Road 10 North	2010	\$13,668	25	82	5	Medium







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
96	Asphalt Road 1 Lift	Sideroad 10 North	2007	\$153,832	25	78	3	High
97	Asphalt Road 1 Lift	Sideroad 10 North	1998	\$330,654	25	69	2	Very High
98	Gravel Road	Sideroad 10 North	2007	\$84,074	50	90	4	High
99A	Asphalt Road 1 Lift	SR 10	2011	\$95,748	25	92	4	High
99B	Gravel Road	Sideroad 10 North	2000	\$70,389	50	90	4	High
GRM	Gravel Road	All Gravel Road Maintenance					5	Medium
FR_1	Fire Reservoir	Tank: (Arkell) #30 Boreham Dr	1999	\$50,000	50	3	3	High
FR_10	Fire Reservoir	Tank: (Hammersley) #7480 Hammersley Dr	1999	\$50,000	50	3	3	High
FR_11	Fire Reservoir	Tank: (Puslinch Fire) 7404 Well Rd 34	2002	\$50,000	50	3	3	High
FR_12	Fire Reservoir	Tank: (Puslinch Fire) 6495 Roszell Rd		\$50,000	50	3	3	High
FR_13	Fire Reservoir	Tank: (Estate Homes) #37 Fox Run Dr	1989	\$50,000	50	3	3	High
FR_14	Fire Reservoir	Tank: (1719303 Ontario Inc.) Morriston Estates Subdivision		\$50,000	50	3	3	High
FR_15	Fire Reservoir	Tank: DRS Developments		\$50,000	50	3	3	High
FR_2	Fire Reservoir	Tank: (Arkell) #38 Boreham Dr	1999	\$50,000	50	3	3	High
FR_3	Fire Reservoir	Tank: (Audrey Meadows) Catherine Ct	2011	\$50,000	50	3	3	High
FR_4	Fire Reservoir	Tank: (Audrey Meadows) Old Ruby	2011	\$50,000	50	3	3	High
FR_5	Fire Reservoir	Tank: (Audrey Meadows) Old Ruby	2011	\$50,000	50	3	3	High
FR_6	Fire Reservoir	Tank: (Community Center) #23 Brock Rd	2010	\$50,000	50	3	3	High
FR_7	Fire Reservoir	Tank: (Estate Homes) #33 Carriage Ln	2000	\$50,000	50	3	3	High
FR_8	Fire Reservoir	Tank: (Estate Homes) 65 Carriage Ln	2000	\$50,000	50	3	3	High
FR_9	Fire Reservoir	Tank: (Estate Subdivision) #32 Daymond Dr	2009	\$50,000	50	3	3	High





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
14003	Parks and Recreation	Community Centre Complex: Tennis Court Fencing	1988	\$21,615	40	5	5	Medium
14004	Parks and Recreation	Community Centre Complex: Horse Run Fencing	2010	\$5,030	40	2	2	High
14005	Parks and Recreation	Community Centre Complex: Paving Tennis Court	2009	\$44,625	40	3	3	Medium
14006	Parks and Recreation	Community Centre Complex: Light Poles at Horse Paddock	2009	\$15,510	40	4	4	Medium
230100000 512100000 0	Parks and Recreation	Morriston Historic Corner Block Park Area	2010		50			Insignific ant
230100000 605431000 0	Parks and Recreation	Fox Run Park	2010		50			Insignific ant
3010	Parks and Recreation	Morriston Meadows: Picnic Pavilion, Morriston Meadows Park	1993	\$30,000	40	5	5	Medium
3013	Parks and Recreation	Community Centre Complex: Light Poles		\$161,385	40	5	5	Medium
3013-1	Parks and Recreation	Community Centre Complex: Light Fixtures		\$28,000	25	5	5	Medium
3014	Parks and Recreation	Community Centre Complex: Wooden Bleacher		\$5,000	20	3	3	Medium
3015	Parks and Recreation	Community Centre Complex: Metal Bleacher		\$13,725	30	5	5	Medium
3016	Parks and Recreation	Community Centre Complex: Fencing Outfield		\$28,689	20	4	4	Medium
3017	Parks and Recreation	Community Centre Complex: Fencing Backstop		\$1,572	20	4	4	Medium
3019	Parks and Recreation	Community Centre Complex: Netting Backstop		\$250	20	4	4	Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
3020	Parks and Recreation	Community Centre Complex: Fencing Infield		\$6,550	20	4	4	Medium
3024	Parks and Recreation	Community Centre Complex: Batting Cages		\$9,000	20	3	3	Medium
3025	Parks and Recreation	Community Centre Complex: Wooden Fences Beside Batting Cages		\$1,800	15	2	2	High
3026	Parks and Recreation	Community Centre Complex: Concrete Hydropole		\$4,000	20	5	5	Medium
3028	Parks and Recreation	Community Centre Complex: Light Poles		\$5,200	20	2	2	High
3029	Parks and Recreation	Community Centre Complex: Fencing		\$9,694	20	2	2	High
3031	Parks and Recreation	Community Centre Complex: Aberfoyle Playground		\$25,000	25	4	4	Medium
3032	Parks and Recreation	Community Centre Complex: Fencing Outside Aberfoyle Playground		\$3,930	20	3	3	Medium
3033	Parks and Recreation	Community Centre Complex: Aerial Transformers				4	4	Medium
3036	Parks and Recreation	Community Centre Complex: Horse Paddock Bleachers		\$30,000	20	1	1	High
3037	Parks and Recreation	Community Centre Complex: Light Poles at Back Field		\$15,600	20	5	5	Medium
3039	Parks and Recreation	Community Centre Complex: Gravel Parking Lot & Road		\$86,000	50	5	5	Medium
3041	Parks and Recreation	Morriston Meadows: Morriston Playground		\$25,000	25	4	4	Medium
3042	Parks and Recreation	Morriston Meadows: Gravel Parking Lot		\$47,300	25	4	4	Medium
3043	Parks and Recreation	Morriston Meadows: Picnic Tables		\$3,500	20	5	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
3044	Parks and Recreation	Morriston Meadows: Basketball Court		\$22,425	20	4	4	Medium
3046	Parks and Recreation	Morriston Meadows: Bleachers		\$10,000	25	1	1	High
3047	Parks and Recreation	Morriston Meadows: Benches		\$1,000	20	1	1	High
3048	Parks and Recreation	Morriston Meadows: Fencing Backstop		\$1,638	20	4	4	Medium
3049	Parks and Recreation	Morriston Meadows: Fencing Outfield		\$29,344	20	4	4	Medium
3050	Parks and Recreation	Morriston Meadows: Fencing Backstop		\$1,965	20	4	4	Medium
3051	Parks and Recreation	Morriston Meadows: Fencing Infield		\$3,930	20	4	4	Medium
3052	Parks and Recreation	Morriston Meadows: 6 Seat HighBleachers		\$5,000	25	1	1	High
3053	Parks and Recreation	Morriston Meadows: 6 Seat High Bleachers		\$5,000	25	1	1	High
3054	Parks and Recreation	Morriston Meadows: Fencing Around Park		\$26,200	20	5	5	Medium
3055	Parks and Recreation	Morriston Meadows: Fencing Behind Large Baseball Diamond		\$13,100	20	5	5	Medium
3056	Parks and Recreation	Old Morriston: Gravel Road		\$7,740	25	2	2	High
3057	Parks and Recreation	Old Morriston: Fencing Outfield		\$28,820	20	3	3	Medium
3058	Parks and Recreation	Old Morriston: Fencing Infield		\$1,834	20	4	4	Medium
3059	Parks and Recreation	Old Morriston: Fencing Backstop		\$3,668	20	1	1	High





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
3060	Parks and Recreation	Old Morriston: 6 seat Concrete Bleachers		\$10,000	50	1	1	High
3061	Parks and Recreation	Old Morriston: Ball Park Benches		\$500	20	3	3	Medium
3063	Parks and Recreation	Old Morriston: Light Towers		\$161,385	40	1	1	High
3064	Parks and Recreation	Old Morriston: Light Fixtures		\$24,500	20	3	3	Medium
3065	Parks and Recreation	Old Morriston: Batting Cages		\$13,100	20	3	3	Medium
3068	Parks and Recreation	Badenoch Soccer Field: 3 Seat Bleacher		\$2,000	25	1	1	High
3070	Parks and Recreation	Badenoch Soccer Field: Fencing (East Side)		\$14,934	20	2	2	High
3071	Parks and Recreation	Badenoch Soccer Field: Fencing (North and West Side)		\$27,641	20	5	5	Medium
3072	Parks and Recreation	Badenoch Soccer Field: Septic Tank		\$15,000	30	3	3	Medium
3074	Parks and Recreation	Boreham Drive Park: Basketball Court		\$22,425	25	5	5	Medium
3075	Parks and Recreation	Boreham Drive Park: Arkell Playground		\$25,000	25	5	5	Medium
3076	Parks and Recreation	Boreham Drive Park: Sign		\$1,500	20	5	5	Medium
3077	Parks and Recreation	Telfer Glen Park Trail			50	5	5	Medium
3078	Parks and Recreation	Community Centre Complex: Puslinch Community Centre Sidewalks		\$1,500	20	4	4	Medium
3079	Parks and Recreation	Community Centre Complex: Swing Gates		\$9,000	30	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
307989	Parks and	Wayne Stokley Trail	2016		50	5	5	Medium
	Recreation							
3080	Parks and	Community Centre Complex: Soccer		\$575,000	25	5	5	Medium
	Recreation	Field						
3081	Parks and	Community Centre Complex: Light		\$3,500	20	5	5	Medium
	Recreation	Fixtures						
3082	Parks and	Community Centre Complex: Parking		\$91,875	25	2	2	High
	Recreation	Lot Community Centre Complex						
3087	Parks and	Community Centre Complex: Fencing		\$65,500	20	5	5	Medium
	Recreation	Around Community Centre						
3260	Parks and	Boreham Drive Park: Basketball Court		\$1,000	20	4	4	Medium
	Recreation	Post and Hoops						
3279	Parks and	Morriston Meadows: Basketball		\$1,000	20	4	4	Medium
	Recreation	Court Post and Hoops						
3822	Parks and	Community Centre Complex: Puslinch		\$2,520	20	5	5	Medium
	Recreation	Community Gardens Cobblestone						
		Walkways						
3823	Parks and	Community Centre Complex: Puslinch		\$500	20	5	5	Medium
	Recreation	Community Gardens Benches						
1_66FVT	Fire vehicle tires	P-31	2004	\$648	10		1	High
10_14FVT	Fire vehicle tires	P-32	2012	\$686	10		3	Medium
11_90FVT	Fire vehicle tires	P-32	2012	\$686	10		3	Medium
12_46FVT	Fire vehicle tires	P-32	2012	\$686	10		3	Medium
13_63FVT	Fire vehicle tires	A-33	2012	\$825	8		3	Medium
14_38FVT	Fire vehicle tires	A-33	2012	\$825	8		3	Medium
15_73FVT	Fire vehicle tires	A-33	2011	\$825	8		3	Medium
16_16FVT	Fire vehicle tires	A-33	2011	\$825	8		3	Medium
17_74FVT	Fire vehicle tires	A-33	2011	\$825	8		3	Medium
18_76FVT	Fire vehicle tires	A-33	2011	\$825	8		3	Medium
19 36FVT	Fire vehicle tires	R-35	2016	\$648	10		4	Medium







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
2_11FVT	Fire vehicle tires	P-31	2004	\$648	10		1	High
20_20FVT	Fire vehicle tires	R-35	2016	\$648	10		4	Medium
2002PW	Works Unlicensed	2002 Water Pump and Hose			10			
	vehicles							
21_91FVT	Fire vehicle tires	R-35	2017	\$370	10		4	Medium
22_65FVT	Fire vehicle tires	R-35	2017	\$370	10		4	Medium
23_30FVT	Fire vehicle tires	R-35	2017	\$370	10		4	Medium
24_66FVT	Fire vehicle tires	R-35	2017	\$370	10		4	Medium
25_57FVT	Fire vehicle tires	T-37	2014	\$825	10		4	Medium
26_100FVT	Fire vehicle tires	T-37	2014	\$825	10		4	Medium
27_69FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
28_4FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
29_40FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
3_3FVT	Fire vehicle tires	P-31	2003	\$825	10		1	High
30_35FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
31_1FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
32_77FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
33_70FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
34_59FVT	Fire vehicle tires	T-37	2009	\$825	10		1	High
35_18FVT	Fire vehicle tires	T-38	2018	\$825	10		1	High
36_27FVT	Fire vehicle tires	T-38	2018	\$825	10		1	High
37_60FVT	Fire vehicle tires	T-38	2018	\$648	10		1	High
38_76FVT	Fire vehicle tires	T-38	2018	\$648	10		1	High
39_53FVT	Fire vehicle tires	T-38	2018	\$648	10		1	High
4_96FVT	Fire vehicle tires	P-31	2003	\$825	10		1	High
40_1FVT	Fire vehicle tires	T-38-FT	2006	\$825	10		1	High
4060	Parks and Recreation	Floor Scrubber	2016	\$8,000	10		4	Medium





Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
	Unlicensed							
	vehicles							
41_1FVT	Fire vehicle tires	T-38-FT	2009	\$825	10		1	High
42_14FVT	Fire vehicle tires	T-38	2018	\$648	10		1	High
43_24FVT	Fire vehicle tires	T-38	2018	\$648	10		1	High
44_8FVT	Fire vehicle tires	T-38	2018	\$648	10		1	High
45_1FVT	Fire vehicle tires	C-1	2014	\$250	10		1	High
46_31FVT	Fire vehicle tires	C-1	2014	\$250	10		1	High
47_71FVT	Fire vehicle tires	C-1	2014	\$250	10		1	High
48_70FVT	Fire vehicle tires	C-1	2014	\$250	10		1	High
49_56FVT	Fire vehicle tires	C-1 Winter	2017	\$250	10		1	High
5_81FVT	Fire vehicle tires	P-31	2003	\$825	10		1	High
50_57FVT	Fire vehicle tires	C-1 Winter	2017	\$250	10		1	High
5030	Fire licensed	Antique Fire Truck						
	vehicles							
5031	Fire licensed	Fire Pumper 31	2005	\$468,000	20		3	Medium
	vehicles							
5033	Fire licensed	Aerial 33	2003	\$500,000	25	55667	3	Medium
	vehicles							
5035	Fire licensed	Rescue Truck 35	2000	\$520,000	20		3	Medium
	vehicles							
5038	Fire licensed	Freightliner Pumper Tanker 38	2012	\$450,000	20		4	Medium
	vehicles							
5040	Fire licensed	Pumper 32	2010	\$300,000	20		4	Medium
	vehicles							
51_94FVT	Fire vehicle tires	C-1 Winter	2017	\$250	10		1	High
52_10FVT	Fire vehicle tires	C-1 Winter	2017	\$250	10		1	High
53_10FVT	Fire vehicle tires	P-30	2002	\$370	10		1	High
54_43FVT	Fire vehicle tires	P-30	2002	\$370	10		1	High
55_80FVT	Fire vehicle tires	P-30	2002	\$370	10		1	High







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
56_8FVT	Fire vehicle tires	P-30	2002	\$370	10		1	High
57_20FVT	Fire vehicle tires	P-30	2002	\$370	10		1	High
58_81FVT	Fire vehicle tires	P-30	2002	\$370	10		1	High
6_77FVT	Fire vehicle tires	P-31	2003	\$825	10		1	High
7_64FVT	Fire vehicle tires	P-32	2012	\$686	10		3	Medium
7003	Works licensed vehicles	2008 1 Ton Dump/Plow 305	2008	\$100,000	12	103534	2	Medium
7005A	Fire licensed vehicles	2013 Vehicle For Fire & Rescue	2016	\$23,000	7		4	Medium
7005B	Building Department licensed vehicles	2016 Mid-Size Pickup	2016	\$33,000	7		3	Medium
7006	Fire licensed vehicles	Tanker 37	2010	\$410,000	20		4	Medium
7007	Parks and Recreation Unlicensed vehicles	Lawn Tractor	2018	\$30,000	10		4	Medium
7008	Works licensed vehicles	2011 Chevy Silverado Pickup 4	2011	\$40,000	10	125958	1	High
7009	Works licensed vehicles	2017 Pickup Truck - Staff - 3/4 Ton	2017	\$52,000	8	4198	3	Medium
8_19FVT	Fire vehicle tires	P-32	2012	\$686	10		3	Medium
8001	Works Unlicensed vehicles	2008 JCB Backhoe 6	2008	\$125,000	12	2	2	Medium
8002	Works Unlicensed vehicles	Road Grader G740 501	2000	\$350,000	25		2	Medium
8003	Works Unlicensed vehicles	Road Grader G740 501	2000	\$350,000	25		5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
8012	Parks and Recreation Unlicensed vehicles	Trailers (1) - Parks Department	2014	\$5,000	20		4	Medium
8013	Works licensed vehicles	2011 Single Axle Truck 304	2011	\$250,000	8	77523	1	High
8014	Works licensed vehicles	2012 Dump/Plow 302	2012	\$250,000	8	96095	2	Medium
8015	Works Unlicensed vehicles	Anti-Ice Equipment			20		5	Medium
8015-1	Works Unlicensed vehicles	Slide in Spray Unit		\$5,000	20	5	5	Medium
8015-2	Works Unlicensed vehicles	Storage Tank		\$14,000	20	5	5	Medium
8015-3	Works Unlicensed vehicles	Pumps		\$5,000	20	5	5	Medium
8016	Works licensed vehicles	2013 International Plow Truck 301	2013	\$250,000	8	74804	2	Medium
8017	Works licensed vehicles	2015 International Plow Truck - 303	2015	\$225,000	8	31032	2	Medium
8018	Works Unlicensed vehicles	2015 Brush Chipper	2015	\$40,000	10	81	5	Medium
8019	Works licensed vehicles	2015 GMC Sierra 1500	2015	\$40,000	10	42610	3	Medium
8020	Parks and Recreation Unlicensed vehicles	Olympia Ice Resurfacer	2017	\$80,000	25	4	5	Medium
9_22FVT	Fire vehicle tires	P-32	2012	\$686	10		3	Medium
1_26FE	Fire Equipment	Air Cylinder Compressor	2014	\$29,490	20	5	5	Medium







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
10_2FE	Fire Equipment	Gear Dryer	2017	\$6,000	10	4	4	Medium
100_87FE	Fire Equipment	Bunker Gear #323 5310555 5310559	2017	\$3,000	10	5	5	Medium
101_49FE	Fire Equipment	Bunker Gear #385 5310557 5310562	2017	\$3,000	10	5	5	Medium
102_20FE	Fire Equipment	Bunker Gear #322 5310556 5310561	2017	\$3,000	10	5	5	Medium
103_101FE	Fire Equipment	Bunker Gear #350 5483616 5483622	2018	\$3,000	10	5	5	Medium
104_60FE	Fire Equipment	Bunker Gear #335 5483615 5483621	2018	\$3,000	10	5	5	Medium
105_24FE	Fire Equipment	Bunker Gear #302 5483614 5483619	2018	\$3,000	10	5	5	Medium
106_92FE	Fire Equipment	Bunker Gear #305 5483613 5483618	2018	\$3,000	10	5	5	Medium
11_103FE	Fire Equipment	Rapid Deployment Water Craft	2010	\$6,000	10	4	4	Medium
12_41FE	Fire Equipment	Defibrillators Fire & Rescue Service Trucks	2017	\$15,000	8	3	3	High
1212 41FE	Fire Equipment	Defibrillators - Municipal Buildings	2017	\$4,500	8	5	5	Medium
13 89FE	Fire Equipment	Portable Pumps	2006	\$15,000	20	4	4	Medium
14_25FE	Fire Equipment	Air Cylinder:84	2005	\$1,500	15	3	3	High
15_87FE	Fire Equipment	Air Cylinder:85	2006	\$1,500	15	3	3	High
16_87FE	Fire Equipment	Air Cylinder:87	2007	\$1,500	15	3	3	High
17_76FE	Fire Equipment	Air Cylinder:88	2008	\$1,500	15	3	3	High
18_90FE	Fire Equipment	Air Cylinder:100	2004	\$1,500	15	3	3	High
19_90FE	Fire Equipment	Air Cylinder:101	2005	\$1,500	15	3	3	High
2_46FE	Fire Equipment	Portable Radios		\$45,000		4	4	Medium
20_85FE	Fire Equipment	Air Cylinder:102	2006	\$1,500	15	3	3	High
21_85FE	Fire Equipment	Air Cylinder:103	2007	\$1,500	15	3	3	High
22_9FE	Fire Equipment	Air Cylinder:104	2006	\$1,500	15	3	3	High
23_42FE	Fire Equipment	Air Cylinder:105	2005	\$1,500	15	3	3	High
24_94FE	Fire Equipment	Air Cylinder:106	2006	\$1,500	15	3	3	High
25_35FE	Fire Equipment	Air Cylinder:107	2005	\$1,500	15	3	3	High
26_23FE	Fire Equipment	Air Cylinder:108	2005	\$1,500	15	3	3	High
27_67FE	Fire Equipment	Air Cylinder:109	2005	\$1,500	15	3	3	High
28_48FE	Fire Equipment	Air Cylinder:310	2008	\$1,500	15	3	3	High







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
29_64FE	Fire Equipment	Air Cylinder:311	2008	\$1,500	15	3	3	High
3_18FE	Fire Equipment	Mobile/Truck Radios		\$40,000		4	4	Medium
30_89FE	Fire Equipment	Air Cylinder:312	2005	\$1,500	15	3	3	High
31_89FE	Fire Equipment	Air Cylinder:313	2005	\$1,500	15	3	3	High
32_104FE	Fire Equipment	Air Cylinder:314	2008	\$1,500	15	3	3	High
33_34FE	Fire Equipment	Air Cylinder:315	2008	\$1,500	15	3	3	High
34_30FE	Fire Equipment	Air Cylinder:316	2010	\$1,500	15	3	3	High
35_104FE	Fire Equipment	Air Cylinder:317	2011	\$1,500	15	3	3	High
36_48FE	Fire Equipment	Air Cylinder:318	2012	\$1,500	15	3	3	High
37_107FE	Fire Equipment	Air Cylinder:319	2013	\$1,500	15	3	3	High
38_15FE	Fire Equipment	Air Cylinder:320	2007	\$1,500	15	3	3	High
39_99FE	Fire Equipment	Air Cylinder:323	2007	\$1,500	15	3	3	High
4_35FE	Fire Equipment	Pagers		\$22,000		3	3	High
40_31FE	Fire Equipment	Air Cylinder:334	2007	\$1,500	15	3	3	High
41_37FE	Fire Equipment	Air Cylinder:335	2005	\$1,500	15	3	3	High
42_79FE	Fire Equipment	Air Cylinder:336	2007	\$1,500	15	3	3	High
43_107FE	Fire Equipment	Air Cylinder:337	2006	\$1,500	15	3	3	High
44_55FE	Fire Equipment	Air Cylinder:339	2006	\$1,500	15	3	3	High
45_27FE	Fire Equipment	Air Cylinder:340	2007	\$1,500	15	3	3	High
46_91FE	Fire Equipment	Air Cylinder:341	2008	\$1,500	15	3	3	High
47_55FE	Fire Equipment	Air Cylinder:342	2009	\$1,500	15	3	3	High
48_109FE	Fire Equipment	Air Cylinder:343	2010	\$1,500	15	3	3	High
49_104FE	Fire Equipment	Air Cylinder:344	2011	\$1,500	15	3	3	High
5_44FE	Fire Equipment	Vehicle Extrication Equipment		\$25,000		4	4	Medium
50_57FE	Fire Equipment	Air Cylinder:345	2012	\$1,500	15	3	3	High
51_94FE	Fire Equipment	Air Cylinder:346	2013	\$1,500	15	3	3	High
52_95FE	Fire Equipment	Air Cylinder:347	2014	\$1,500	15	3	3	High
53_40FE	Fire Equipment	Air Cylinder:348	2015	\$1,500	15	3	3	High
54_31FE	Fire Equipment	Air Cylinder:349	2011	\$1,500	15	3	3	High







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
55_41FE	Fire Equipment	Air Cylinder:350	2011	\$1,500	15	3	3	High
56_58FE	Fire Equipment	Air Cylinder:351	2010	\$1,500	15	3	3	High
57_105FE	Fire Equipment	Air Cylinder:352	2011	\$1,500	15	3	3	High
58_88FE	Fire Equipment	Air Cylinder:353	2012	\$1,500	15	3	3	High
59_35FE	Fire Equipment	Air Cylinder:354	2012	\$1,500	15	3	3	High
59_56FVT	Fire Equipment	Fire Hawk 2002	2006	\$7,450	15	4	4	Medium
6_70FE	Fire Equipment	Power Hydraulic Tool set	2000	\$52,500	20	1	1	Very High
60_51FVT	Fire Equipment	Fire Hawk 2002	2007	\$7,450	15	4	4	Medium
60_57FE	Fire Equipment	Air Cylinder:355	2013	\$1,500	15	3	3	High
61_17FE	Fire Equipment	Air Cylinder:356	2014	\$1,500	15	3	3	High
61_92FVT	Fire Equipment	Fire Hawk 2002	2007	\$7,450	15	4	4	Medium
62_23FVT	Fire Equipment	Fire Hawk 2002	2006	\$7,450	15	4	4	Medium
62_96FE	Fire Equipment	Air Cylinder:357	2015	\$1,500	15	3	3	High
63_48FE	Fire Equipment	Air Cylinder:358	2016	\$1,500	15	3	3	High
63_86FVT	Fire Equipment	Fire Hawk M7	2013	\$7,450	15	4	4	Medium
64_106FE	Fire Equipment	Air Cylinder:359	2017	\$1,500	15	3	3	High
64_69FVT	Fire Equipment	Fire Hawk M7	2013	\$7,450	15	4	4	Medium
65_29FVT	Fire Equipment	Fire Hawk M7	2013	\$7,450	15	4	4	Medium
65_4FE	Fire Equipment	Air Cylinder:360	2018	\$1,500	15	3	3	High
66_17FVT	Fire Equipment	Fire Hawk M7	2013	\$7,450	15	4	4	Medium
66_21FE	Fire Equipment	Bunker Gear #317 907001148 907001150	2009	\$3,000	10	1	1	Very High
67_17FVT	Fire Equipment	SCBA Masks	2005	\$8,250	15	4	4	Medium
67_60FE	Fire Equipment	Bunker Gear #395 1307006351 1104007407	2009	\$3,000	10	1	1	Very High
67_99FVT	Fire Equipment	Fire Hawk 2002	2006	\$7,450	15	4	4	Medium
68_20FVT	Fire Equipment	Ultralight MMR 2000	2007	\$7,450	15	4	4	Medium
68_80FE	Fire Equipment	Bunker Gear #376 1104007399 3707960	2009	\$3,000	10	1	1	Very High





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
69_41FVT	Fire Equipment	Ultralight MMR 2000	2005	\$7,450	15	4	4	Medium
69_51FE	Fire Equipment	Bunker Gear #386 1104007401 907001149	2009	\$3,000	10	1	1	Very High
7_82FE	Fire Equipment	Edraulic Combination Tool		\$15,000	20	4	4	Medium
70_84FVT	Fire Equipment	Fire Hawk 2002	2007	\$7,450	15	4	4	Medium
71_102FE	Fire Equipment	Bunker Gear #308	2011	\$3,000	10	3	3	High
71_45FVT	Fire Equipment	Fire Hawk 2002	2007	\$7,450	15	4	4	Medium
72_58FE	Fire Equipment	Bunker Gear #378 1104007403 1104007408	2011	\$3,000	10	3	3	High
72_79FVT	Fire Equipment	Fire Hawk 2002	2007	\$7,450	15	4	4	Medium
73_30FVT	Fire Equipment	Fire Hawk 2002	2007	\$7,450	15	4	4	Medium
73_67FE	Fire Equipment	Bunker Gear #301 1301002761 1301002766	2013	\$3,000	10	3	3	High
74_22FE	Fire Equipment	Bunker Gear #336 1301002757 1301002762	2013	\$3,000	10	3	3	High
74_27FVT	Fire Equipment	Fire Hawk 2002	2005	\$7,450	15	4	4	Medium
75_43FVT	Fire Equipment	Ultralight MMR 2000	2005	\$7,450	15	4	4	Medium
75_67FE	Fire Equipment	Bunker Gear #392 1301002758 1301002763	2013	\$3,000	10	4	4	Medium
76_55FE	Fire Equipment	Bunker Gear #337 1301002760 1301002765	2013	\$3,000	10	4	4	Medium
76_67FVT	Fire Equipment	Ultralight MMR 2000	2005	\$7,450	15	4	4	Medium
77_100FE	Fire Equipment	Bunker Gear #388 4748801 4749620	2014	\$3,000	10	4	4	Medium
77_9FVT	Fire Equipment	Ultralight MMR 2000	2004	\$7,450	15	3	3	High
78_16FVT	Fire Equipment	Ultralight MMR 2000	2004	\$7,450	15	3	3	High
78_9FE	Fire Equipment	Bunker Gear #318	2014	\$3,000	10	4	4	Medium
79_57FVT	Fire Equipment	Ultralight MMR 2000	2004	\$7,450	15	3	3	High
79_75FE	Fire Equipment	Bunker Gear #310 4748800 4749619	2014	\$3,000	10	4	4	Medium
8_93FE	Fire Equipment	Thermal Imaging Camera	2009	\$6,000	10	1	1	Very High
8_94FE	Fire Equipment	Thermal Imaging Camera	2017	\$6,000	10		3	High







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
80_30FVT	Fire Equipment	Ultralight MMR 2000	2004	\$7,450	15	3	3	High
80_57FE	Fire Equipment	Bunker Gear #333 4924090 4924085	2015	\$3,000	10	4	4	Medium
81_37FE	Fire Equipment	Bunker Gear #387 4924092 4924080	2015	\$3,000	10	4	4	Medium
83_94FE	Fire Equipment	Bunker Gear #326 4924091 4924082	2015	\$3,000	10	4	4	Medium
84_89FE	Fire Equipment	Bunker Gear #321 4992302 4924081	2015	\$3,000	10	4	4	Medium
85_11FE	Fire Equipment	Bunker Gear #370 4924095 4924083	2015	\$3,000	10	4	4	Medium
86_72FE	Fire Equipment	Bunker Gear #381 4924093 4924086	2015	\$3,000	10	4	4	Medium
87_51FE	Fire Equipment	Bunker Gear #306 4992301 4992304	2015	\$3,000	10	4	4	Medium
88_35FE	Fire Equipment	Bunker Gear #309 4924096 4924084	2015	\$3,000	10	4	4	Medium
89_97FE	Fire Equipment	Bunker Gear #307 4924089 4924079	2015	\$3,000	10	4	4	Medium
9_104FE	Fire Equipment	Washer/Extractor	2017	\$10,000	10	4	4	Medium
90_29FE	Fire Equipment	Bunker Gear #380 4992303 4992306	2015	\$3,000	10	4	4	Medium
91_44FE	Fire Equipment	Bunker Gear #375 4924077 4992305	2015	\$3,000	10	4	4	Medium
92_20FE	Fire Equipment	Bunker Gear #303 5017234 5017235	2015	\$3,000	10	4	4	Medium
93_73FE	Fire Equipment	Bunker Gear #320 4924094 4924087	2015	\$3,000	10	4	4	Medium
94_89FE	Fire Equipment	Bunker Gear #355 4924088 4924078	2015	\$3,000	10	4	4	Medium
95_47FE	Fire Equipment	Bunker Gear #315 5085806 5085940	2016	\$3,000	10	5	5	Medium
96_14FE	Fire Equipment	Bunker Gear #319 5122954 5085938	2016	\$3,000	10	5	5	Medium
97_58FE	Fire Equipment	Bunker Gear #391 5085805 5085939	2016	\$3,000	10	5	5	Medium
98_23FE	Fire Equipment	Bunker Gear #379 5312492 5312493	2017	\$3,000	10	5	5	Medium
99_1FE	Fire Equipment	Bunker Gear #382 5310558 5310560	2017	\$3,000	10	5	5	Medium
FE_122_1	Fire Equipment	Bunker Gear #351	2009	\$3,000	10	1	1	Very High
FE_Ant_3	Fire Equipment	Antennae Roof		\$600		3	3	High
FE_Ant_4	Fire Equipment	Antennae Tower		\$11,400		3	3	High
FE_Ant_5	Fire Equipment	Antennae		\$2,000		3	3	High
FE_Bas_1	Fire Equipment	Base Radio		\$5,000		3	3	High
FE_Bas_2	Fire Equipment	Base Radio County		\$5,000		3	3	High
FE_Blu_8	Fire Equipment	Blue tooth Headset		\$2,200		3	3	High
FE_Pan_6	Fire Equipment	Panda Vox Recorder Radio		\$1,400		3	3	High





Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
FE_Pan_7	Fire Equipment	Panda Vox Recorder		\$5,700		3	3	High
300	Sidewalk	Watson Road Sidewalk	1990	\$64,350	20	5	5	Medium
301	Sidewalk	Arkell Road Sidewalk	1990	\$39,325	20	3	3	Medium
303	Sidewalk	Church Street	2000	\$12,012	20	5	5	Medium
304	Sidewalk	Brock Road Sidewalk	2001	\$131,131	20	4	4	Medium
305	Sidewalk	Badenoch Rd Sidewalk	2001	\$58,773	20	5	5	Medium
307	Sidewalk	Victoria Street	2000	\$25,311	20	5	5	Medium
308	Sidewalk	Calfass Road		\$11,440	20	5	5	Medium
309	Sidewalk	Queen Street		\$128,700	20	5	5	Medium
310	Sidewalk	Main Street		\$9,295	20	3	3	Medium
SL 1_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 1_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 10_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 10_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 100_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 100_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 101_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Overhead Wood						
SL 101_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 102_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 102_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 103_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 103_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 104_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 104_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 105_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 105_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 106_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 106_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 107_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 107_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 108_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 108_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 109_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium





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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 109_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 11_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 11_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 110_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 110_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 111_F	Street Light Fixture	Cobrahead HPS Lampheight: 35 Location: Overhead Wood		\$300	20	3	5	Medium
SL 111_P	Street Light Pole	Cobrahead HPS Lampheight: 35 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 112_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 112_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 113_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 113_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 114_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 114_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 115_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 115_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 116_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 116_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 117_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 117_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 118_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 118_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 119_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 119_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 12_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 12_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 120_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 120_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 121_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 121_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 122_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 122_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 123_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 123_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 124_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 124_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 125_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 125_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 126_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 126_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 127_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 127_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 128_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 128_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 129_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 129_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 13_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 13_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 130_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 130_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 131_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 131_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 132_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 132_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 133_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 133_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 134_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 134_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 135_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 135_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 136_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 136_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 137_F	Street Light Fixture	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium





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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 137_P	Street Light Pole	Decorative - Acorn Post Top Type 1 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 138_F	Street Light Fixture	Decorative - Acorn Post Top Type 2 HPS Lampheight: 12 Location: Underground Metal		\$300	20	4	5	Medium
SL 138_P	Street Light Pole	Decorative - Acorn Post Top Type 2 HPS Lampheight: 12 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 139_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 139_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 14_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 14_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 140_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 140_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 141_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 141_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 142_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 142_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 143_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 143_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 144_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 144_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 145_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 145_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 146_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 146_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 147_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 147_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 148_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 148_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 149_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 149_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 15_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 15_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 150_F	Street Light	Decorative - Top Hat Type 1 HPS		\$300	20	4	5	Medium
	Fixture	Lampheight: 20 Location:						
		Underground Concrete						
SL 150_P	Street Light Pole	Decorative - Top Hat Type 1 HPS		\$4,027	20	4	4	Medium
		Lampheight: 20 Location:						
		Underground Concrete						
SL 151_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						
SL 151_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
		Location: Underground Concrete						
SL 152_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						
SL 152_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
		Location: Underground Concrete						
SL 153_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 153_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 154_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						
SL 154_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
		Location: Underground Concrete						
SL 155_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 155_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 156_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 156_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 157_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 157_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 158_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 158_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 159_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 159_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 16_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 16_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 160_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 160_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 161_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 161_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 162_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 162_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 163_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 163_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 164_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 164_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 165_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 165_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 166_F	Street Light Fixture	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$300	20	4	5	Medium
SL 166_P	Street Light Pole	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 167_F	Street Light Fixture	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$300	20	4	5	Medium
SL 167_P	Street Light Pole	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$4,027	20	4	4	Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 168_F	Street Light Fixture	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$300	20	4	5	Medium
SL 168_P	Street Light Pole	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 169_F	Street Light Fixture	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$300	20	4	5	Medium
SL 169_P	Street Light Pole	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 17_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 17_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 170_F	Street Light Fixture	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$300	20	4	5	Medium
SL 170_P	Street Light Pole	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$4,027	20	4	4	Medium
SL 171_F	Street Light Fixture	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$300	20	4	5	Medium
SL 171_P	Street Light Pole	Decorative - Box Top Type 1 HPS Lampheight: 15 Location: Underground Metal		\$4,027	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 172_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 172_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 18_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 18_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 182_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 182_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 183_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 183_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 184_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 184_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 185_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 185_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 186_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 186_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 187_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 187_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 188_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 188_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 189_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 189_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 19_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 19_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 190_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 190_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 191_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 191_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 192_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 192_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium







Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
Chun at Limbt	Cohrahaad UDC Lawarhaisht. 25	Date		20	+		N A a altrona
•			\$300	20	4	5	Medium
			44.004				
Street Light Pole			\$1,304	20	4	4	Medium
	3				_	_	
			\$300	20	3	5	Medium
	-						
Street Light Pole			\$1,304	20	3	3	Medium
	Location: Underground Concrete						
Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
Fixture	Location: Underground Concrete						
Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
	Location: Underground Concrete						
Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
Fixture	Location: Underground Concrete						
Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
	Location: Underground Concrete						
Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
Fixture	Location: Underground Concrete						
Street Light Pole			\$1,304	20	5	5	Medium
			. ,				
Street Light	9		\$300	20	5	5	Medium
			\$1.304	20	5	5	Medium
	-		7 -/5 5 1				
Street Light	9		\$300	20	4	5	Medium
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			\$1 304	20	4	4	Medium
Street Light Fold			72,504	20			ivicalani
	Street Light Pole  Street Light Fixture  Street Light Pole  Street Light Pole	Fixture Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Cobrahead HPS Lampheight: 25 Fixture Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Cobrahead HPS Lampheight: 25 Fixture Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Fixture Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete Street 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Light Pole Cobrahead HPS Lampheight: 25 Fixture Location: Underground Concrete  Street Light Cobrahead HPS Lampheight: 25 Fixture Location: Underground Concrete  Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete  Street Light Cobrahead HPS Lampheight: 25 Location: Underground Concrete  Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete  Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete  Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete  Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete  Street Light Pole Cobrahead HPS Lampheight: 25 Location: Underground Concrete	Street Light   Cobrahead HPS Lampheight: 25   \$300   Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   Street Light   Cobrahead HPS Lampheight: 25   \$300   Fixture   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   Fixture   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   Fixture   Location: Underground Concrete   Street Light   Cobrahead HPS Lampheight: 25   \$300   Fixture   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   Location: Underground Concrete   Street Light   Cobrahead HPS Lampheight: 25   \$300   Fixture   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   Location: Underground Concrete   Street Light   Cobrahead HPS Lampheight: 25   \$1,304   Location: Underground Concrete   Street Light   Cobrahead HPS Lampheight: 25   \$300   Fixture   Location: Underground Concrete   Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   Street Light Pole	Street Light Cobrahead HPS Lampheight: 25	Street Light   Cobrahead HPS Lampheight: 25   \$300   20   4    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   4    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   3    Fixture   Location: Underground Concrete   \$1,304   20   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   5    Fixture   Location: Underground Concrete   \$1,304   20   5    Fixture   Location: Underground Concrete   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   3    Fixture   Location: Underground Concrete   \$1,304   20   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   5    Fixture   Location: Underground Concrete   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   4    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   4	Street Light   Cobrahead HPS Lampheight: 25   \$300   20   4   5    Fixture   Cobrahead HPS Lampheight: 25   \$1,304   20   4   4    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   3   5    Fixture   Cobrahead HPS Lampheight: 25   \$300   20   3   5    Fixture   Location: Underground Concrete   \$1,304   20   3   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   3   3    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Fixture   Location: Underground Concrete   \$300   20   5   5    Fixture   Location: Underground Concrete   \$300   20   5   5    Fixture   Cobrahead HPS Lampheight: 25   \$1,304   20   5   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   3   5    Fixture   Location: Underground Concrete   \$1,304   20   3   5    Fixture   Cobrahead HPS Lampheight: 25   \$300   20   3   5    Fixture   Location: Underground Concrete   \$1,304   20   3   3    Street Light Pole   Cobrahead HPS Lampheight: 25   \$1,304   20   3   3    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Fixture   Location: Underground Concrete   \$1,304   20   5   5    Street Light Pole   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Fixture   Location: Underground Concrete   \$1,304   20   5   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Fixture   Location: Underground Concrete   \$1,304   20   5   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Fixture   Location: Underground Concrete   \$1,304   20   5   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   5   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   4   5    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   4   5    Fixture   Location: Underground Concrete   \$1,304   20   4   4    Street Light   Cobrahead HPS Lampheight: 25   \$300   20   4   4





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 2_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 2_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 20_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 20_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 200_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 200_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 201_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						
SL 201_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
		Location: Underground Concrete						
SL 202_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Underground Concrete						
SL 202_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Underground Concrete						
SL 203_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 203_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
_		Location: Underground Concrete						
SL 204_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
_	Fixture	Location: Underground Concrete						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 204_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 205_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 205_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 206_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 206_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 207_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 207_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 208_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 208_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 209_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 209_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 21_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 21_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 210_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 210_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 211_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 211_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 212_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 212_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 213_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 213_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 214_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 214_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 215_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 215_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 216_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 216_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 217_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 217_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 218_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Underground Concrete						
SL 218_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 219_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 219_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 22_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 22_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 220_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 220_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 221_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 221_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 222_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	5	5	Medium
SL 222_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	5	5	Medium
SL 223_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 223_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 224_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 224_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 225_F	Street Light	Cobrahead HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground Wood						
SL 225_P	Street Light Pole	Cobrahead HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground Wood						
SL 226_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						
SL 226_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
		Location: Underground Concrete						
SL 227_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
_	Fixture	Location: Underground Concrete						
SL 227_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 228_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 228_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 229_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Overhead Wood						
SL 229_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
_		Location: Overhead Wood						
SL 23_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
_	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 23_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
_		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 230_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 230_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 231_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 231_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 232_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 232_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 233_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 233_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 234_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 234_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 235_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 235_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 236_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 236_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 237_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 237_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 238_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 238_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 239_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 239_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 24_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 24_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 240_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 240_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 241_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 241_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 242_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 242_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 243_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 243_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 244_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
_	Fixture	Location: Overhead Wood						
SL 244_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						
SL 245_F	Street Light	Cobrahead HPS Lampheight: 30		\$300	20	5	5	Medium
	Fixture	Location: Overhead Wood						
SL 245_P	Street Light Pole	Cobrahead HPS Lampheight: 30		\$1,304	20	5	5	Medium
		Location: Overhead Wood						
SL 246_F	Street Light	Cobrahead HPS Lampheight: 30		\$300	20	5	5	Medium
_	Fixture	Location: Overhead Wood						
SL 246_P	Street Light Pole	Cobrahead HPS Lampheight: 30		\$1,304	20	5	5	Medium
_		Location: Overhead Wood						
SL 247_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
_	Fixture	Location: Overhead Wood						
SL 247_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 248_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Overhead Wood						
SL 248_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						
SL 249_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 249_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 25_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 25_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 250_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 250_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 251_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 251_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 252_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 252_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 253_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 253_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 254_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 254_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 255_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 255_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 256_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 256_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 257_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 257_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 258_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 258_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 259_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 259_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 26_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 26_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 260_F	Street Light Fixture	Sentinel Type 1 HPS Lampheight: 25 Location: Overhead Concrete		\$300	20	4	5	Medium
SL 260_P	Street Light Pole	Sentinel Type 1 HPS Lampheight: 25 Location: Overhead Concrete		\$1,304	20	4	4	Medium
SL 261_F	Street Light Fixture	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete		\$300	20	4	5	Medium
SL 261_P	Street Light Pole	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete		\$4,027	20	4	4	Medium
SL 262_F	Street Light Fixture	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 262_P	Street Light Pole	Floodlight Type 1 HPS Lampheight: 25 Location: Overhead Concrete		\$4,027	20	4	4	Medium
SL 263_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 263_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 264_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 264_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 265_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 265_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 266_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 266_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 267_F	Street Light Fixture	Cobrahead HPS Lampheight: 20 Location: Overhead Wood		\$300	20	5	5	Medium
SL 267_P	Street Light Pole	Cobrahead HPS Lampheight: 20 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 268_F	Street Light Fixture	Cobrahead HPS Lampheight: 30 Location: Overhead Wood		\$300	20	5	5	Medium
SL 268_P	Street Light Pole	Cobrahead HPS Lampheight: 30 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 269_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 269_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 27_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 27_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 270_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 270_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 271_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 271_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
		Location: Overhead Wood						
SL 272_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Overhead Wood						
SL 272_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						
SL 273_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Overhead Wood						
SL 273_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						
SL 274_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 274_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
_		Location: Overhead Wood						
SL 275_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 275_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
_		Location: Overhead Wood						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 276_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 276_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 277_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 277_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 278_F	Street Light Fixture	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 278_P	Street Light Pole	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$1,304	20	4	4	Medium
SL 279_F	Street Light Fixture	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 279_P	Street Light Pole	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$1,304	20	4	4	Medium
SL 28_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 28_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 280_F	Street Light Fixture	Wallpack Type 2 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 280_P	Street Light Pole	Wallpack Type 2 HPS Lampheight: 20 Location: Underground		\$1,304	20	4	4	Medium
SL 281_F	Street Light Fixture	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 281_P	Street Light Pole	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$1,304	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 282_F	Street Light Fixture	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 282_P	Street Light Pole	Wallpack Type 1 HPS Lampheight: 20 Location: Underground		\$1,304	20	4	4	Medium
SL 283_F	Street Light Fixture	Wallpack Type 2 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 283_P	Street Light Pole	Wallpack Type 2 HPS Lampheight: 20 Location: Underground		\$1,304	20	4	4	Medium
SL 284_F	Street Light Fixture	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$300	20	4	5	Medium
SL 284_P	Street Light Pole	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$1,304	20	4	4	Medium
SL 285_F	Street Light Fixture	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$300	20	4	5	Medium
SL 285_P	Street Light Pole	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$1,304	20	4	4	Medium
SL 286_F	Street Light Fixture	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$300	20	4	5	Medium
SL 286_P	Street Light Pole	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$1,304	20	4	4	Medium
SL 287_F	Street Light Fixture	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$300	20	4	5	Medium
SL 287_P	Street Light Pole	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$1,304	20	4	4	Medium
SL 288_F	Street Light Fixture	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$300	20	4	5	Medium
SL 288_P	Street Light Pole	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$1,304	20	4	4	Medium
SL 289_F	Street Light Fixture	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 289_P	Street Light Pole	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$1,304	20	4	4	Medium
SL 29_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 29_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 290_F	Street Light Fixture	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$300	20	4	5	Medium
SL 290_P	Street Light Pole	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$1,304	20	4	4	Medium
SL 291_F	Street Light Fixture	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$300	20	4	5	Medium
SL 291_P	Street Light Pole	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$1,304	20	4	4	Medium
SL 292_F	Street Light Fixture	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$300	20	4	5	Medium
SL 292_P	Street Light Pole	Wallpack Type 4 HPS Lampheight: 6 Location: Underground		\$1,304	20	4	4	Medium
SL 293_F	Street Light Fixture	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$300	20	4	5	Medium
SL 293_P	Street Light Pole	Wallpack Type 3 HPS Lampheight: 10 Location: Underground		\$1,304	20	4	4	Medium
SL 294_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 294_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 295_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 295_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 296_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 296_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 297_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 297_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 298_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 298_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 299_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 299_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 3_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 3_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 30_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 30_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 300_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 300_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 301_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 301_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 302_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	3	5	Medium
SL 302_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	3	3	Medium
SL 303_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$300	20	5	5	Medium
SL 303_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
SL 304_F	Street Light Fixture	Cobrahead Type 2 HPS Lampheight: 25 Location: Overhead Wood		\$300	20	4	5	Medium
SL 304_P	Street Light Pole	Cobrahead Type 2 HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	4	4	Medium
SL 305_F	Street Light Fixture	Floodlight LED Lampheight: 15 Location: Underground		\$300	20	4	5	Medium
SL 305_P	Street Light Pole	Floodlight LED Lampheight: 15 Location: Underground		\$4,027	20	4	4	Medium
SL 306_F	Street Light Fixture	Floodlight LED Lampheight: 20 Location: Underground		\$300	20	4	5	Medium
SL 306_P	Street Light Pole	Floodlight LED Lampheight: 20 Location: Underground		\$4,027	20	4	4	Medium
SL 307_F	Street Light Fixture	Floodlight Type 2 HPS Lampheight: 20 Location: Underground		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
01 007 5	6	51 111 1 2 2 1 2 1 2 1 2 2	Date	Cost		Index		
SL 307_P	Street Light Pole	Floodlight Type 2 HPS Lampheight: 20		\$4,027	20	4	4	Medium
		Location: Underground						
SL 308_F	Street Light	Wallpack HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground						
SL 308_P	Street Light Pole	Wallpack HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground						
SL 309_F	Street Light	Wallpack HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground						
SL 309_P	Street Light Pole	Wallpack HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground						
SL 31_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 31_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 310_F	Street Light	Wallpack HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground						
SL 310_P	Street Light Pole	Wallpack HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground						
SL 311_F	Street Light	Wallpack Type 5 HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground						
SL 311_P	Street Light Pole	Wallpack Type 5 HPS Lampheight: 20		\$1,304	20	4	4	Medium
_		Location: Underground						
SL 312 F	Street Light	Wallpack Type 5 HPS Lampheight: 20		\$300	20	4	5	Medium
_	Fixture	Location: Underground						
SL 312_P	Street Light Pole	Wallpack Type 5 HPS Lampheight: 20		\$1,304	20	4	4	Medium
_		Location: Underground						
SL 313_F	Street Light	Wallpack Type 5 HPS Lampheight: 20		\$300	20	4	5	Medium
_	Fixture	Location: Underground						







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index	_	
SL 313_P	Street Light Pole	Wallpack Type 5 HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground						
SL 314_F	Street Light	Wallpack HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground						
SL 314_P	Street Light Pole	Wallpack HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground						
SL 315_F	Street Light	Wallpack HPS Lampheight: 20		\$300	20	4	5	Medium
	Fixture	Location: Underground						
SL 315_P	Street Light Pole	Wallpack HPS Lampheight: 20		\$1,304	20	4	4	Medium
		Location: Underground						
SL 316_F	Street Light	Cobrahead Type 2 HPS Lampheight:		\$300	20	4	5	Medium
	Fixture	25 Location: Overhead Wood						
SL 316_P	Street Light Pole	Cobrahead Type 2 HPS Lampheight:		\$1,304	20	4	4	Medium
		25 Location: Overhead Wood						
SL 317_F	Street Light	Sentinel Type 1 HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Overhead Wood						
SL 317_P	Street Light Pole	Sentinel Type 1 HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						
SL 318_F	Street Light	Wallpack HPS Lampheight: 20		\$300	20	4	5	Medium
_	Fixture	Location: Underground						
SL 318 P	Street Light Pole	Wallpack HPS Lampheight: 20		\$1,304	20	4	4	Medium
_		Location: Underground						
SL 32 F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
_	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 32_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
<del>-</del>		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 33_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	5	5	Medium
SL 33_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	5	5	Medium
SL 34_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 34_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 35_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 35_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 3 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 36_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 36_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 37_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 37_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 2 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 38_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 38_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 39_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 39_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 4_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 4_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 40_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 40_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 41_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 41_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 42_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 42_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 43_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 43_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 44_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 44_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 45_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 45_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 46_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 46_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 47_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 47_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 48_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 48_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 49_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 49_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 5_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 5_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 50_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 50_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 51_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 51_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 52_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 52_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 53_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 53_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 54_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 54_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 2 HPS Lampheight: 14						
		Location: Underground Metal						
SL 55_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 55_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 56_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 56_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 57_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 57_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 58_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 58_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 59_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 59_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 6_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	3	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 6_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	3	3	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 60_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 60_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
_		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 61_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	4	5	Medium
	Fixture	Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 61_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	4	4	Medium
		Top Type 3 HPS Lampheight: 14						
		Location: Underground Metal						
SL 62_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Overhead Wood						
SL 62_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Overhead Wood						
SL 63_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 63_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 64_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 64_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 65_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 65_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 66_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 66_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 67_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 67_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 68_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 68_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 69_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 69_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 7_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	4	5	Medium
SL 7_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	4	4	Medium
SL 70_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 70_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 71_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 71_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 72_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 72_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 73_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 73_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 74_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 74_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 75_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 75_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 76_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 76_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 77_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 77_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 78_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 78_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 79_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 79_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 8_F	Street Light	Decorative - Victorian Lantern Post		\$300	20	5	5	Medium
	Fixture	Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 8_P	Street Light Pole	Decorative - Victorian Lantern Post		\$4,027	30	5	5	Medium
		Top Type 1 HPS Lampheight: 14						
		Location: Underground Metal						
SL 80_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 80_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 81_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 81_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
_		Location: Underground Concrete						
SL 82_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 82_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
_		Location: Underground Concrete						
SL 83_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 83_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 84_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
_	Fixture	Location: Underground Concrete						
SL 84 P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
_		Location: Underground Concrete						
SL 85_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
<del>-</del>	Fixture	Location: Underground Concrete						
SL 85_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
_		Location: Underground Concrete		,				





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 86_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Underground Concrete						
SL 86_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 87_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 87_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 88_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 88_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium
SL 89_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 89_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 9_F	Street Light Fixture	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$300	20	3	5	Medium
SL 9_P	Street Light Pole	Decorative - Victorian Lantern Post Top Type 1 HPS Lampheight: 14 Location: Underground Metal		\$4,027	30	3	3	Medium
SL 90_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	3	5	Medium
SL 90_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	3	3	Medium
SL 91_F	Street Light Fixture	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$300	20	4	5	Medium
SL 91_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Underground Concrete		\$1,304	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 92_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Underground Concrete						
SL 92_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
CL 00 =		Location: Underground Concrete		4000				
SL 93_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 93_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 94_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
	Fixture	Location: Underground Concrete						
SL 94_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 95_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	4	5	Medium
_	Fixture	Location: Underground Concrete						
SL 95_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	4	4	Medium
		Location: Underground Concrete						
SL 96_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
	Fixture	Location: Underground Concrete						
SL 96_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	5	5	Medium
		Location: Underground Concrete						
SL 97_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
	Fixture	Location: Overhead Wood						
SL 97 P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
_	_	Location: Overhead Wood						
SL 98 F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	3	5	Medium
_	Fixture	Location: Underground Concrete						
SL 98_P	Street Light Pole	Cobrahead HPS Lampheight: 25		\$1,304	20	3	3	Medium
_	_	Location: Underground Concrete						
SL 99_F	Street Light	Cobrahead HPS Lampheight: 25		\$300	20	5	5	Medium
_	Fixture	Location: Overhead Wood						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SL 99_P	Street Light Pole	Cobrahead HPS Lampheight: 25 Location: Overhead Wood		\$1,304	20	5	5	Medium
12001	Storm Water Management Ponds	Boreham Drive SWM Pond	1999	\$13,860	50	4	4	Medium
12001 - 1	Storm Water Management Ponds	Boreham Drive SWM: Tail Wall	1999	\$2,000	50	4	4	Medium
12001 - 2	Storm Water Management Ponds	Boreham Drive SWM: Pond Enclosure	1999	\$7,860	50	4	4	Medium
12001 - 3	Storm Water Management Ponds	Boreham Drive SWM: Outlet Device (Hicken Bottom)	1999	\$2,000	20	4	4	Medium
12001 - 4	Storm Water Management Ponds	Boreham Drive SWM: Headwall	1999	\$2,000	50	4	4	Medium
12002	Storm Water Management Ponds	Daymond Drive SWM Pond	2005	\$165,756	50	4	4	Medium
12002 - 1	Storm Water Management Ponds	Daymond Drive SWM: Tail Wall	2005	\$2,000	50	4	4	Medium
12002 - 2	Storm Water Management Ponds	Daymond Drive SWM: Pond Enclosure	2005	\$159,756	50	4	4	Medium
12002 - 3	Storm Water Management Ponds	Daymond Drive SWM: Outlet Device (Hicken Bottom)	2005	\$2,000	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12002 - 4	Storm Water Management Ponds	Daymond Drive SWM: Headwall	2005	\$2,000	50	4	4	Medium
12003	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 6	2007	\$258,420	50	4	4	Medium
12003 - 1	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 6: Tail Wall	2007	\$2,000	50	4	4	Medium
12003 - 2	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 6: Pond Enclosure	2007	\$252,420	50	4	4	Medium
12003 - 3	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 6: Outlet Device (Hicken Bottom)	2007	\$2,000	20	4	4	Medium
12003 - 4	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 6: Headwall	2007	\$2,000	50	4	4	Medium
12004	Storm Water Management Ponds	Kerr Crescent SWM Pond	1988	\$150,000	50	1	1	High
12004 - 1	Storm Water Management Ponds	Kerr Crescent SWM: Tail Wall	1988	\$2,000	50	4	4	Medium
12004 - 2	Storm Water Management Ponds	Kerr Crescent SWM: Pond Enclosure	1988	\$144,000	50	4	4	Medium
12004 - 3	Storm Water Management Ponds	Kerr Crescent SWM: Outlet Device (Hicken Bottom)	1988	\$2,000	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12004 - 4	Storm Water Management Ponds	Kerr Crescent SWM: Headwall	1988	\$2,000	50	4	4	Medium
12005	Storm Water Management Ponds	Telfer Glen SWM Pond	1990	\$32,644	50	4	4	Medium
12005 - 1	Storm Water Management Ponds	Telfer Glen SWM Pond: Tail Wall	1990	\$2,000	50	4	4	Medium
12005 - 2	Storm Water Management Ponds	Telfer Glen SWM Pond: Pond Enclosure	1990	\$26,644	50	4	4	Medium
12005 - 3	Storm Water Management Ponds	Telfer Glen SWM Pond: Outlet Device (Hicken Bottom)	1990	\$2,000	20	4	4	Medium
12005 - 4	Storm Water Management Ponds	Telfer Glen SWM Pond: Headwall	1990	\$2,000	50	4	4	Medium
12006	Storm Water Management Ponds	Bridle Path SWM Ponds	1990	\$134,146	50	4	4	Medium
12006 - 1	Storm Water Management Ponds	Bridle Path SWM Ponds: Tail Wall	1990	\$2,000	50	4	4	Medium
12006 - 2	Storm Water Management Ponds	Bridle Path SWM Ponds: Pond Enclosure	1990	\$128,146	50	4	4	Medium
12006 - 3	Storm Water Management Ponds	Bridle Path SWM Ponds: Outlet Device (Hicken Bottom)	1990	\$2,000	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12006 - 4	Storm Water Management Ponds	Bridle Path SWM Ponds: Headwall	1990	\$2,000	50	4	4	Medium
12007	Storm Water Management Ponds	Carriage Lane SWM Pond	2000	\$85,488	50	1	1	High
12007 - 1	Storm Water Management Ponds	Carriage Lane SWM: Tail Wall	2000	\$2,000	50	4	4	Medium
12007 - 2	Storm Water Management Ponds	Carriage Lane SWM: Pond Enclosure	2000	\$79,488	50	4	4	Medium
12007 - 3	Storm Water Management Ponds	Carriage Lane SWM: Outlet Device (Hicken Bottom)	2000	\$2,000	20	4	4	Medium
12007 - 4	Storm Water Management Ponds	Carriage Lane SWM: Headwall	2000	\$2,000	50	4	4	Medium
12008	Storm Water Management Ponds	Aberfoyle Business Park SWM Pond Block 3	1995	\$73,227	50	5	5	Medium
12008 - 1	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 3: Tail Wall	1995	\$2,000	50	5	5	Medium
12008 - 2	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 3: Pond Enclosure	1995	\$67,227	50	5	5	Medium
12008 - 3	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 3: Outlet Device (Hicken Bottom)	1995	\$2,000	20	5	5	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12008 - 4	Storm Water Management Ponds	Aberfoyle Business Park SWM Block 3: Headwall	1995	\$2,000	50	5	5	Medium
12009	Storm Water Management Ponds	Carroll Pond Cell 1 Pond	2011	\$9,262	50	4	4	Medium
12009 - 1	Storm Water Management Ponds	Carroll Pond Cell 1: Tail Wall	2011	\$2,000	50	4	4	Medium
12009 - 2	Storm Water Management Ponds	Carroll Pond Cell 1:Pond Enclosure	2011	\$3,262	50	4	4	Medium
12009 - 3	Storm Water Management Ponds	Carroll Pond Cell 1: Outlet Device (Hicken Bottom)	2011	\$2,000	20	4	4	Medium
12009 - 4	Storm Water Management Ponds	Carroll Pond Cell 1: Headwall	2011	\$2,000	50	4	4	Medium
12010	Storm Water Management Ponds	Carroll Pond Cell 2 Pond	2010	\$8,870	50	4	4	Medium
12010 - 1	Storm Water Management Ponds	Carroll Pond Cell 2: Tail Wall	2010	\$2,000	50	4	4	Medium
12010 - 2	Storm Water Management Ponds	Carroll Pond Cell 2: Pond Enclosure	2010	\$2,870	50	4	4	Medium
12010 - 3	Storm Water Management Ponds	Carroll Pond Cell 2: Outlet Device (Hicken Bottom)	2010	\$2,000	20	4	4	Medium





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12010 - 4	Storm Water Management Ponds	Carroll Pond Cell 2: Headwall	2010	\$2,000	50	4	4	Medium
12011	Storm Water Management Ponds	Carroll Pond Cell 3 Pond	2010	\$4,435	50	4	4	Medium
12011 - 1	Storm Water Management Ponds	Carroll Pond Cell 3: Tail Wall	2010	\$2,000	50	4	4	Medium
12011 - 2	Storm Water Management Ponds	Carroll Pond Cell 3: Pond Enclosure	2010	-\$1,565	50	4	4	Medium
12011 - 3	Storm Water Management Ponds	Carroll Pond Cell 3: Outlet Device (Hicken Bottom)	2010	\$2,000	20	4	4	Medium
12011 - 4	Storm Water Management Ponds	Carroll Pond Cell 3: Headwall	2010	\$2,000	50	4	4	Medium
12012	Storm Water Management Ponds	Fox Run Drive SWM Pond 2		\$165,756	50	3	3	High
12012 - 1	Storm Water Management Ponds	Fox Run Drive SWM 2: Tail Wall		\$2,000	50	3	3	High
12012 - 2	Storm Water Management Ponds	Fox Run Drive SWM 2: Pond Enclosure		\$159,756	50	3	3	High
12012 - 3	Storm Water Management Ponds	Fox Run Drive SWM 2: Outlet Device (Hicken Bottom)		\$2,000	20	3	3	High





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12012 - 4	Storm Water Management Ponds	Fox Run Drive SWM 2: Headwall		\$2,000	50	3	3	High
12013	Storm Water Management Ponds	Fox Run Drive SWM Pond 1		\$165,000	50	1	1	High
12013 - 1	Storm Water Management Ponds	Fox Run Drive SWM 1: Tail Wall		\$2,000	50	1	1	High
12013 - 2	Storm Water Management Ponds	Fox Run Drive SWM 1: Pond Enclosure		\$159,000	50	1	1	High
12013 - 3	Storm Water Management Ponds	Fox Run Drive SWM 1: Outlet Device (Hicken Bottom)		\$2,000	20	1	1	High
12013 - 4	Storm Water Management Ponds	Fox Run Drive SWM 1: Headwall		\$2,000	50	1	1	High
12014	Storm Water Management Ponds	Morriston Pond		\$12,418	50	3	3	High
12014 - 1	Storm Water Management Ponds	Morriston Pond: Tail Wall		\$2,000	50	3	3	High
12014 - 2	Storm Water Management Ponds	Morriston Pond: Pond Enclosure		\$6,418	50	3	3	High
12014 - 3	Storm Water Management Ponds	Morriston Pond: Outlet Device (Hicken Bottom)		\$2,000	20	3	3	High





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12014 - 4	Storm Water Management Ponds	Morriston Pond: Headwall		\$2,000	50	3	3	High
12015	Storm Water Management Ponds	Morriston Park Estates Pond		\$165,756	50	3	3	High
12015 - 1	Storm Water Management Ponds	Morriston Estates Park Pond: Tail Wall		\$2,000	50	3	3	High
12015 - 2	Storm Water Management Ponds	Morriston Park Estates Pond: Pond Enclosure		\$159,756	50	3	3	High
12015 - 3	Storm Water Management Ponds	Morriston Park Estates Pond: Outlet Device (Hicken Bottom)		\$2,000	20	3	3	High
12015 - 4	Storm Water Management Ponds	Morriston Park Estates Pond: Headwall		\$2,000	50	3	3	High
12016	Storm Water Management Ponds	Audrey Meadows SWM Pond			50			
12016 - 1	Storm Water Management Ponds	Audrey Meadows SWM: Tail Wall			50			
12016 - 2	Storm Water Management Ponds	Audrey Meadows SWM: Pond Enclosure			50			
12016 - 3	Storm Water Management Ponds	Audrey Meadows SWM: Outlet Device (Hicken Bottom)			20			





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
12016 - 4	Storm Water Management Ponds	Audrey Meadows SWM: Headwall			50			
12017	Storm Water Management Ponds	Whitcombe Way (DRS) SWM Pond			50			
12017 - 1	Storm Water Management Ponds	Whitcombe Way (DRS) SWM: Tail Wall			50			
12017 - 2	Storm Water Management Ponds	Whitcombe Way (DRS) SWM: Enclosure			50			
12017 - 3	Storm Water Management Ponds	Whitcombe Way (DRS) SWM:Outlet Device (Hicken Bottom)			20			
12017 - 4	Storm Water Management Ponds	Whitcombe Way (DRS) SWM: Headwall			50			
1_SWI_202 _SURFACE	Storm Sewer Inlet	Cassin Court Storm Sewer Storm Sewer Inlet	2007	\$3,724	50			Medium
1_SWI_27B	Storm Sewer Inlet	Fox Run Drive Storm Sewer Storm Sewer Inlet	2016	\$3,724	50			Medium
1_SWO_20 2_SURFACE	Storm Sewer Outflow	Cassin Court Storm Sewer Storm Sewer Outflow	2007	\$5,000	50			Medium
1_SWO_27 B	Storm Sewer Outflow	Fox Run Drive Storm Sewer Storm Sewer Outflow	2016	\$5,000	50			Medium
1_SWI_203 _SURFACE	Storm Sewer Inlet	Daymond Drive Storm Sewer Storm Sewer Inlet	2007	\$3,724	50			Medium
1_SWO_20 3_SURFACE	Storm Sewer Outflow	Daymond Drive Storm Sewer Storm Sewer Outflow	2007	\$5,000	50			Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
2_SWI_203 SURFACE	Storm Sewer Inlet	Daymond Drive Storm Sewer Storm Sewer Inlet	2007	\$3,724	50			Medium
2_SWO_20 3 SURFACE	Storm Sewer Outflow	Daymond Drive Storm Sewer Storm Sewer Outflow	2007	\$5,000	50			Medium
3_SWI_203 SURFACE	Storm Sewer Inlet	Daymond Drive Storm Sewer Storm Sewer Inlet	2007	\$3,724	50			Medium
3_SWO_20 3_SURFACE	Storm Sewer Outflow	Daymond Drive Storm Sewer Storm Sewer Outflow	2007	\$5,000	50			Medium
15_SWI_20 5	Storm Sewer Inlet	Fox Run Drive Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
15_SWO_2 05	Storm Sewer Outflow	Fox Run Drive Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
16_SWI_20 5	Storm Sewer Inlet	Fox Run Drive Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
16_SWO_2 05	Storm Sewer Outflow	Fox Run Drive Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
17_SWI_20 6	Storm Sewer Inlet	Fox Run Drive Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
17_SWO_2 06	Storm Sewer Outflow	Fox Run Drive Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
18_SWI_20 1 SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
18_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
19_SWI_20 1_SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
19_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
2_SWI_202 _SURFACE	Storm Sewer Inlet	Cassin Court Storm Sewer Storm Sewer Inlet	2007	\$3,724	50			Medium
2_SWO_20 2_SURFACE	Storm Sewer Outflow	Cassin Court Storm Sewer Storm Sewer Outflow	2007	\$5,000	50			Medium
20_SWI_20 1_SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
20_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
21_SWI_20 1_SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
21_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
22_SWI_20 1_SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
22_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
23_SWI_20 1_SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
23_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium
24_SWI_20 1_SURFACE	Storm Sewer Inlet	Carriage Lane Storm Sewer Storm Sewer Inlet	2000	\$3,724	50			Medium
24_SWO_2 01_SURFAC E	Storm Sewer Outflow	Carriage Lane Storm Sewer Storm Sewer Outflow	2000	\$5,000	50			Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
25_SWI_20	Storm Sewer Inlet	Bridle Path Storm Sewer Storm	1990	\$3,724	50			Medium
4_SURFACE		Sewer Inlet						
25_SWO_2	Storm Sewer	Bridle Path Storm Sewer Storm	1990	\$5,000	50			Medium
04_SURFAC	Outflow	Sewer Outflow						
E								
26_SWI_20	Storm Sewer Inlet	Bridle Path Storm Sewer Storm	1990	\$3,724	50			Medium
4_SURFACE		Sewer Inlet						
26_SWO_2	Storm Sewer	Bridle Path Storm Sewer Storm	1990	\$5,000	50			Medium
04_SURFAC	Outflow	Sewer Outflow						
E								
27_SWI_20	Storm Sewer Inlet	Bridle Path Storm Sewer Storm	1990	\$3,724	50			Medium
4_SURFACE		Sewer Inlet						
27_SWO_2	Storm Sewer	Bridle Path Storm Sewer Storm	1990	\$5,000	50			Medium
04_SURFAC	Outflow	Sewer Outflow						
E								
28_SWI_20	Storm Sewer Inlet	Bridle Path Storm Sewer Storm	1990	\$3,724	50			Medium
4_SURFACE		Sewer Inlet						
28_SWO_2	Storm Sewer	Bridle Path Storm Sewer Storm	1990	\$5,000	50			Medium
04_SURFAC	Outflow	Sewer Outflow						
Е								
29_SWI_20	Storm Sewer Inlet	Bridle Path Storm Sewer Storm	1990	\$3,724	50			Medium
4_SURFACE		Sewer Inlet						
29_SWO_2	Storm Sewer	Bridle Path Storm Sewer Storm	1990	\$5,000	50			Medium
04_SURFAC	Outflow	Sewer Outflow						
Е								
3_SWI_202	Storm Sewer Inlet	Cassin Court Storm Sewer Storm	2007	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
3_SWO_20	Storm Sewer	Cassin Court Storm Sewer Storm	2007	\$5,000	50			Medium
2_SURFACE	Outflow	Sewer Outflow						





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
30_SWI_20 4 SURFACE	Storm Sewer Inlet	Bridle Path Storm Sewer Storm Sewer Inlet	1990	\$3,724	50			Medium
30_SWO_2 04_SURFAC E	Storm Sewer Outflow	Bridle Path Storm Sewer Storm Sewer Outflow	1990	\$5,000	50			Medium
31_SWI_20 4 SURFACE	Storm Sewer Inlet	Bridle Path Storm Sewer Storm Sewer Inlet	1990	\$3,724	50			Medium
31_SWO_2 04_SURFAC E	Storm Sewer Outflow	Bridle Path Storm Sewer Storm Sewer Outflow	1990	\$5,000	50			Medium
	Storm Sewer Inlet	Bridle Path Storm Sewer Storm Sewer Inlet	1990	\$3,724	50			Medium
32_SWO_1 85_SURFAC E	Storm Sewer Outflow	Bridle Path Storm Sewer Storm Sewer Outflow	1990	\$5,000	50			Medium
33_SWI_18 5_SURFACE	Storm Sewer Inlet	Bridle Path Storm Sewer Storm Sewer Inlet	1990	\$3,724	50			Medium
33_SWO_1 85_SURFAC E	Storm Sewer Outflow	Bridle Path Storm Sewer Storm Sewer Outflow	1990	\$5,000	50			Medium
34_SWI_18 5_SURFACE	Storm Sewer Inlet	Bridle Path Storm Sewer Storm Sewer Inlet	1990	\$3,724	50			Medium
34_SWO_1 85_SURFAC E	Storm Sewer Outflow	Bridle Path Storm Sewer Storm Sewer Outflow	1990	\$5,000	50			Medium
35_SWI_18 5_SURFACE	Storm Sewer Inlet	Bridle Path Storm Sewer Storm Sewer Inlet	1990	\$3,724	50			Medium
35_SWO_1 85_SURFAC E	Storm Sewer Outflow	Bridle Path Storm Sewer Storm Sewer Outflow	1990	\$5,000	50			Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
36_SWI_51	Storm Sewer Inlet	Old Brock Road Storm Sewer Storm	2000	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
36_SWO_5	Storm Sewer	Old Brock Road Storm Sewer Storm	2000	\$5,000	50			Medium
1_SURFACE	Outflow	Sewer Outflow						
37_SWI_51	Storm Sewer Inlet	Old Brock Road Storm Sewer Storm	2000	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
37_SWO_5	Storm Sewer	Old Brock Road Storm Sewer Storm	2000	\$5,000	50			Medium
1_SURFACE	Outflow	Sewer Outflow						
38_SWI_51	Storm Sewer Inlet	Old Brock Road Storm Sewer Storm	2000	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
38_SWO_5	Storm Sewer	Old Brock Road Storm Sewer Storm	2000	\$5,000	50			Medium
1_SURFACE	Outflow	Sewer Outflow						
39_SWI_50	Storm Sewer Inlet	Cockburn Street Storm Sewer Storm	2000	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
39_SWO_5	Storm Sewer	Cockburn Street Storm Sewer Storm	2000	\$5,000	50			Medium
0_SURFACE	Outflow	Sewer Outflow						
40_SWI_46	Storm Sewer Inlet	Gilmour Road Storm Sewer Storm	2007	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
40_SWO_4	Storm Sewer	Gilmour Road Storm Sewer Storm	2007	\$5,000	50			Medium
6_SURFACE	Outflow	Sewer Outflow						
41_SWI_46	Storm Sewer Inlet	Gilmour Road Storm Sewer Storm	2007	\$3,724	50			Medium
_SURFACE		Sewer Inlet						
41_SWO_4	Storm Sewer	Gilmour Road Storm Sewer Storm	2007	\$5,000	50			Medium
6_SURFACE	Outflow	Sewer Outflow						
42_SWI_28	Storm Sewer Inlet	Victoria Street And Church Street	2000	\$3,724	50			Medium
_SURFACE		Storm Sewer Storm Sewer Inlet						
42_SWO_2	Storm Sewer	Victoria Street And Church Street	2000	\$5,000	50			Medium
8_SURFACE	Outflow	Storm Sewer Storm Sewer Outflow						
43_SWI_28	Storm Sewer Inlet	Victoria Street And Church Street	2000	\$3,724	50			Medium
_SURFACE		Storm Sewer Storm Sewer Inlet						



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
43_SWO_2	Storm Sewer	Victoria Street And Church Street	2000	\$5,000	50			Medium
8_SURFACE	Outflow	Storm Sewer Storm Sewer Outflow						
44_SWI_28	Storm Sewer Inlet	Victoria Street And Church Street	2000	\$3,724	50			Medium
_SURFACE		Storm Sewer Storm Sewer Inlet						
44_SWO_2	Storm Sewer	Victoria Street And Church Street	2000	\$5,000	50			Medium
8_SURFACE	Outflow	Storm Sewer Storm Sewer Outflow						
45_SWI_28	Storm Sewer Inlet	Victoria Street And Church Street	2000	\$3,724	50			Medium
_SURFACE		Storm Sewer Storm Sewer Inlet						
45_SWO_2	Storm Sewer	Victoria Street And Church Street	2000	\$5,000	50			Medium
8_SURFACE	Outflow	Storm Sewer Storm Sewer Outflow						
36_SWI_18	Storm Sewer Inlet	Bridle Path Storm Sewer Storm	1990	\$3,724	50			Medium
5_SURFACE		Sewer Inlet						
36_SWO_1	Storm Sewer	Bridle Path Storm Sewer Storm	1990	\$5,000	50			Medium
85_SURFAC E	Outflow	Sewer Outflow						
SW_185_S URFACE	Storm Sewer	Bridle Path Storm Sewer	1990	\$59,269	50			Medium
SW_201_S URFACE	Storm Sewer	Carriage Lane Storm Sewer	2000	\$104,428	50			Medium
SW_202_S URFACE	Storm Sewer	Cassin Court Storm Sewer	2007	\$13,487	50			Medium
SW_203_S URFACE	Storm Sewer	Daymond Drive Storm Sewer	2007	\$31,584	50			Medium
SW_204_S URFACE	Storm Sewer	Bridle Path Storm Sewer	1990	\$175,848	50			Medium
SW_205	Storm Sewer	Fox Run Drive Storm Sewer	2000	\$34,422	50			Medium
SW_206	Storm Sewer	Fox Run Drive Storm Sewer	2000	\$18,565	50			Medium
SW_27B	Storm Sewer	Calfass Road Storm Sewer	2016	\$13,144	50			Medium
SW_28_SU RFACE	Storm Sewer	Victoria Street And Church Street Storm Sewer	2000	\$28,406	50			Medium



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
SW_46_SU RFACE	Storm Sewer	Gilmour Road Storm Sewer	2007	\$36,873	50			Medium
SW_50_SU RFACE	Storm Sewer	Cockburn Street Storm Sewer	2000	\$18,328	50			Medium
SW_51_SU RFACE	Storm Sewer	Old Brock Road Storm Sewer	2000	\$407,604	50			Medium
SWI_182_S URFACE	Storm Sewer	Ikonkar Place - Morriston Estates Storm Sewer						
SWI_188_S URFACE	Storm Sewer	Whitcombe Way Storm Sewer						
SWO_ 182_SURFA CE	Storm Sewer	Ikonkar Place - Morriston Estates Storm Sewer						
SWO_ 188_SURFA CE	Storm Sewer	Whitcombe Way Storm Sewer						
1BP_ST_ Spruce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
1_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
1_ST_Flam e	StreetTree	Morriston Flame	2016	\$624	50			Low
1_ST_Locus t	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
1_ST_Picea _Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
1_ST_QM	StreetTree	Morriston Quercus macrocarpa	2016	\$724	50			Low
1_ST_Spruc e	StreetTree	Carriage Lane Spruce	2003	\$354	50			Low



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Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
10_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
10_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
10_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
10_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
11_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
11_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
11_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
11_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
12_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
12_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
12_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
12_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
13_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
13_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
13_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
13_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
14_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
14_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
14_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
14_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
15_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
15_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
15_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
15_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
16_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
16_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
16_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
16_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
17_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
17_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low





Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
17_ST_Pice	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
a_Pung								
17_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
18_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
18_ST_Fla	StreetTree	Morriston Flame	2016	\$624	50			Low
me								
18_ST_Pice	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
a_Pung								
18_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
19_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
19_ST_Fla	StreetTree	Morriston Flame	2016	\$624	50			Low
me								
19_ST_Pice	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
a_Pung								
19_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
2_BP_ST_S	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
pruce								
2_ST_Autu	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
mnB								
2_ST_Flam	StreetTree	Morriston Flame	2016	\$624	50			Low
e								
2_ST_Locus	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
t -								
2_ST_Picea	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
_Pung								







Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
2_ST_QM	StreetTree	Morriston Quercus macrocarpa	2016	\$724	50			Low
2_ST_Spruc e	StreetTree	Carriage Lane Spruce	2003	\$354	50			Low
20_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
20_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
20_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
20_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
21_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
21_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
21_ST_Pice a_Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
21_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
22_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
22_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low
22_ST_Spr uce	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
23_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
23_ST_Fla me	StreetTree	Morriston Flame	2016	\$624	50			Low





Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
23_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
24_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
24_ST_Fla	StreetTree	Morriston Flame	2016	\$624	50			Low
me								
24_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
25_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
25_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
26_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
26_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
27_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
27_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
28_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
28_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
29_ST_Aut	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
umnB								
29_ST_Spr	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
uce								
3_BP_ST_S	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
pruce								



PUSLINCH

Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
3_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
3_ST_Flam e	StreetTree	Morriston Flame	2016	\$624	50			Low
3_ST_Locus t	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
3_ST_Picea _Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
3_ST_QM	StreetTree	Morriston Quercus macrocarpa	2016	\$724	50			Low
3_ST_Spruc e	StreetTree	Carriage Lane Spruce	2003	\$354	50			Low
30_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
31_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
32_ST_Aut umnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
4_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
4_ST_Flam e	StreetTree	Morriston Flame	2016	\$624	50			Low
4_ST_Locus t	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
4_ST_Picea Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
4_ST_QM	StreetTree	Morriston Quercus macrocarpa	2016	\$724	50			Low
4_ST_Spruc e	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
5_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low





Asset #	Asset Class	Description	Acquisition Date	Replacement Cost	L.E	Condition Index	Condition	Risk
5_ST_Flam e	StreetTree	Morriston Flame	2016	\$624	50			Low
5_ST_Locus t	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
5_ST_Picea _Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
5_ST_Spruc e	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
6_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
6_ST_Flam e	StreetTree	Morriston Flame	2016	\$624	50			Low
6_ST_Locus t	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
6_ST_Picea _Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
6_ST_Spruc e	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
7_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
7_ST_Flam e	StreetTree	Morriston Flame	2016	\$624	50			Low
7_ST_Locus t	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
7_ST_Picea _Pung	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
7_ST_Spruc e	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
8_ST_Autu mnB	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low







Asset #	Asset Class	Description	Acquisition	Replacement	L.E	Condition	Condition	Risk
			Date	Cost		Index		
8_ST_Flam	StreetTree	Morriston Flame	2016	\$624	50			Low
e								
8_ST_Locus	StreetTree	Fox Run Drive Locust	1993	\$354	50			Low
t								
8_ST_Picea	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
_Pung								
8_ST_Spruc	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
e								
9_ST_Autu	StreetTree	Morriston Autumn Brilliance	2016	\$624	50			Low
mnB								
9_ST_Flam	StreetTree	Morriston Flame	2016	\$624	50			Low
e								
9_ST_Picea	StreetTree	Morriston Picea Pungens	2016	\$449	50			Low
_Pung								
9_ST_Spruc	StreetTree	Bridal Path Spruce	1998	\$354	50			Low
e								





#### 20.6 Comments from the Public

-----Original Message----From: Allan Gregg
Sent: Wednesday, February 6, 2019 11:54 AM

Subject: Township of Puslinch Asset Management Plan - Allan Comments

Good morning

Thank you for hosting the Public meeting last night. Compliments to You Mayor Seeley for setting and enforcing the way the meeting was to run. Thanks Jessica for the heads up about the meeting and Mathew for your follow up note.

It appeared that Gravel Roads has a separate project being considered at the direction of Council so I did not continue to question the Consultants last night.

However, I would like to restate my concerns with the proposed Puslinch Asset Management document as presented last night;

- \* It appears that certain assumptions were made regarding gravel roads
- o "As per the proposed service level policy all gravel roads have been assumed to have a PCL score of 90. This assumption is based strictly off staff understanding of the gravel surface" See 6.11 (Attached)
- \* It appears that "the Township does NOT have a formal policy for documenting gravel road condition" See 6.10 (Attached)
- \* It appears that Gravel Roads are deemed to be Good. See 7.4 Page 65 66 70 (Attached)
- \* It appears that Carter Road has a "Acquisition date 2003, Replacement Year 2034, Replacement cost 328113.2899, Condition 4 with Risk High" see page 276 (Attached)

This data and lack of data along with the conditions of gravel roads in the Township leads me to believe that the value and the condition of the Gravel Roads in the document is over stated. If correct then the cost to the Township to bring the roads up to the stated value will cost the township more money and a need to restate the financials in the Puslinch Asset Management document as presented last night.

Further I have concerns with the UEM Proposed Level of Service: Gravel Roads See 5.2 (Attached) 1. With the lack of data, as stated by Consultant Wayne Wood, setting the criteria for consideration of "surface treatment including asphalt and/or reconstruction" is not based on facts 2. No other UEM Proposed Level of Service of Policy has the mandate of "if all of the following criteria are met"

It appears that the UEM Proposed Level of Service for Gravel Roads is written to be very restrictive to limit the Township to entertain surfacing gravel road. I would suggest that the criteria be removed from the proposal at this time. Pending the results of the Gravel Roads Project set by Council the criteria should be set at a later date.



# Schedule A to Report FIN-2019-022

## THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

## Here are my requests;

#### Please

- \* Comment on my concerns
- \* Pass on this document to other council members
- \* Clarify what "Acquisition date 2003" for Carter Road means on page 276
- \* Add my comments to the Public Meeting recorded notes
- \* When completed please send me the Public Meeting notes
- \* Advise when the completed report will be ready for review and when it will go to council for final approval.
- \* Advise how I would get the details (Mandate, scope and timelines etc.) on the Mayor referenced Gravel Road Council directed project

In addition am I to email with Township Staff rather than You - not sure of the protocol- please advise.

Thank You.

Gregg





R.E Puslinch Asset Management Plan

Mr. Gregg Allan,

Please accept this letter as a response to your email of February 6<sup>th</sup>, 2019 in regard to the Township of Puslinch Asset Management Plan. We appreciate your comments, and initially want to indicate that your email has been placed into the report documenting the plan as part of appendix 20.6 of the Asset Management Plan.

As part of the project the UEM Team was required to draft service level policies for infrastructure that is the responsibility of the Township. The UEM Team reviewed gravel roads, and any activities used to maintain Gravel Roads by the Township. It was determined that there was not a documented policy nor records in regard to how Gravel Roads are to be maintained, nor how reconstruction of such roads including improvements to the surface are reported to Council.

Therefore, the UEM Team was required to develop a service level policy for Gravel Roads. The UEM Team was requested by staff of Puslinch to initiate discussions with municipalities in the County of Wellington and to review of what other road authorities have adopted as policies relating to the maintenance and improvement of gravel roads. All Municipalities in the County were contacted, and it was established that the Municipalities had not established formalized policies associated with maintaining or upgrading the surface of gravel roads. In addition, informal discussions occurred with members of the Ontario Good Roads Association (OGRA). A data review of road authorities in the United States was undertaken by the UEM Team and based upon all of the above the UEM Team established that the primary indicators for improving the surface of a gravel road is volume of traffic and budget limitations. The concept of volume of traffic was integrated into the service level policy for gravel roads for Puslinch that is a component of the Asset Management Plan.

In regard to your email the Township undertakes a Pavement Condition Index Study that documents condition and needed improvements. However, in the past gravel roads were excluded from this pavement condition study. As result, the UEM Team recommended that in the next Pavement Condition Index Study gravel roads be included as a component to determine needed improvements including the application of a hard surface. The study should include a review of a number of factors to determine the need for applying a hard surface versus complete reconstruction. Such factors such as granular thickness, presence of contaminants in the granular, presence of organic material and adequacy of underlying soil should be considered as part of the study.

You are correct in that assumption that gravel roads were classified as "Good". Because of the lack of data in regard to gravel roads, a recommendation in the report was to document gravel road maintenance activities in a tabular format to be stored in the Asset Registry. It is recognized that Township staff inspect gravel roads and grade such roads as required and documenting such activities will then allow a direct comparison to the recommended gravel road service level policy in part to be a factor in presenting recommendations to Council in regard to road improvements.

Replacement costs project total reconstruction and not limited to surface treatment or the application of asphalt. This is a conservative methodology and can be modified in the future once the next pavement condition index study is completed.

## Schedule A to Report FIN-2019-022



#### THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

In regard to Carter Road, the acquisition date of 2003 was sourced from the 2013 Asset Management Plan. The replacement year of 2034 was based upon a linear depreciation rate of 2 PCI points per year. The Risk associated with Carter Road has been developed from a risk profile explained in detail in the Asset Management Plan and inputted into the Asset Registry. The risk is consistent for all gravel roads but increased or decreased depending on the condition of the surface of the gravel road.

Asset Management Plans in general were never intended to be static documents. Such plans are "living plans" in that Asset Management Plans should be updated at least annually to reflect updated data.

Council at its meeting held on January 30, 2019 passed Council Resolution No. 2019-060 to continue the gravel roads study in 2019 as outlined below:

WHEREAS the Township has approximately 200km of paved roads and 50km of unpaved roads;

AND WHEREAS road works are a significant portion of the Capital Budget and it is highly desirable to reduce these costs;

AND WHEREAS new technologies are available for extending the life of paved roads and which are being used by various municipalities in Ontario;

AND WHEREAS it is desirable to pave unpaved roads with appropriate pavement;

NOW THEREFORE that staff obtain a funding estimate from an Engineering company to produce a report to:

- 1. Identify an appropriate and cost-effective method of extending the life of paved roads;
- 2. Develop criteria to prioritize the paving of unpaved roads, including the trigger points/ criteria suggested by the asset management plan; as well as impact to the area residents;
- 3. Identifying an appropriate and cost-effective pavements (such as tar and chip) to be used for unpaved roads;
- 4. Developing a listing and schedule for the paving of unpaved roads.

And that these costs be identified at the earliest opportunity for inclusion in the Capital Budget, with a commitment to pave the roads at the earliest opportunity.

Staff are presently in discussions with a consultant to produce such a report that would result in improved data that could be Inputted into the Asset Registry.

The Asset Management Plan including service level policies will be presented to Council on April 17<sup>th</sup>, 2019. The document is available at the Township website at www.puslinch.ca.

Sincerely,

Wayne Wood P. Eng

agne Road



# Schedule A to Report FIN-2019-022

## THE TOWNSHIP OF PUSLINCH 2019 ASSET MANAGEMENT PLAN

From: Margaret Hauwert

Sent: Thursday, February 7, 2019 11:20 AM

To: Nina Lecic

Subject: budget

Questions for capital budget

- 1. Why are the roads in such poor shape all of a sudden, have they not been properly maintained over the last couple years?
- 2. I do not want the township to borrow any money?
- 3. Has council looked into how many firefighters do we have and is it too much?
- 4. Has council looked into how many people are on the payroll and maybe it is too much?

These are some of my concerns after looking at recommendations by the asset manager presentation.

Margaret Hauwert



# **REPORT FIN-2019-023**

TO: Mayor and Members of Council

FROM: Michelle Cassar, Taxation and Customer Service Supervisor

Mary Hasan, Director of Finance/Treasurer

MEETING DATE: May 15, 2019

SUBJECT: 2019 Final Tax Levy and Rates

File No. F22 TAX

#### **RECOMMENDATIONS**

THAT Report FIN-2019-023 regarding the 2019 Final Tax Levy and Rates be received; and

THAT the final property tax rates as identified in Schedule B and Schedule C to Report FIN-2019-023 be approved; and

THAT the final property tax due dates be established as Friday August 30, 2019 and Thursday October 31, 2019; and

THAT Council enact a by-law for the levy and collection of property taxes for the 2019 taxation year.

#### **DISCUSSION**

#### **Purpose**

The Municipal Act, 2001 requires a municipality to adopt its final tax levy, due dates and tax rates annually through the passing of a by-law.

## **Background**

To enable the billing of final taxes for 2019, a by-law is required to establish the levy, due dates and other administrative needs regarding the final property tax amounts. The tax rates set out in the attached schedules for the Township and the County are based on 2019 budget

requirements. The Education rates are set by the Province through Ontario Regulation 400/98, as amended under the Education Act.

## **Due Dates**

The 2019 final tax levy will be payable in two installments due August 30, 2019 and October 31, 2019. This bill will reflect the new assessed value of the property for 2019 as well as the 2019 tax rates. The amount of the 2019 interim tax bill will be deducted from the total levied with the balance being the 2019 final tax bill.

The properties enrolled in the Township's 11-month pre-authorized tax payment plan have their property tax payments withdrawn from their bank accounts in eleven installments on the fifteenth (or next business day) of each month.

#### FINANCIAL IMPLICATIONS

The tax rates indicated in Schedule B and Schedule C will generate a total 2019 levy (Township + County + Education) of \$24,832,798. The tax levies for Township, County and Education purposes are summarized in Schedule A to Report FIN-2019-023

The County of Wellington and School Board's final payment due dates by the Township are September 30, 2019 and December 13, 2019.

## APPLICABLE LEGISLATION AND REQUIREMENTS

Section 290 of the Municipal Act, 2001, as amended, states that a local municipality shall in each year prepare and adopt a budget including estimates of all sums required during the year for the purposes of the municipality. On February 20, 2019 Council approved the Township's 2019 Budget in accordance with By-law No. 010-2019.

Ontario Regulation 400/98, as amended under the Education Act established the education tax rates for all property classes in 2019.

The County of Wellington established upper and lower-tier property tax ratios and tax reductions for prescribed subclasses for the year 2019 as per the County By-law number 5614-19 dated April 25, 2019. The County adopted a by-law to establish and levy tax rates for upper tier purposes as per the County By-law number 5615-19 dated April 25, 2019. The County adopted estimates of all sums required by the County during the year 2019 for all purposes of the County and has provided a general levy on area municipalities as per By-law Number 5601-19 dated January 31, 2019.

Once all required by-laws and regulations have been passed, the municipal Council may levy its taxes. The Township, as a lower-tier municipality, is required to collect the County and Education tax levies and remit the amounts to them regardless of a resident's payment of property taxes.

Section 342 of the Municipal Act, 2001 allows the ability to collect taxes in one payment or by installments. The Township has elected to collect its property taxes in four installments: February 28, April 30, August 30, and October 31, 2019.

## **ATTACHMENTS**

Schedule A: Summary of Tax Levies – 2019 Final

Schedule B: 2019 Property Tax Rates

Schedule C: 2019 Barber's Beach Street Lights and Cambridge Fire Special Area Tax Rates

Schedule A Summary of Tax Levies - 2019 Final

	TAX LEVY	TOTAL TAX LEVY	SHARE %
TOWNSHIP PURPOSES	٦		
General Purposes	<b>\$</b> 3,974,776		
Barber's Beach Streetlights	\$3,046		
Cambridge Fire	\$97,532		
	Total Township Purposes	\$4,075,354	16.41%
COUNTY PURPOSES	٦		
County of Wellington	\$14,685,426		
, ,	Total County Purposes	\$14,685,426	59.14%
EDUCATION PURPOSES	\$6,072,018		
	Total Education Purposes	\$6,072,018	24.45%
TOTAL LEVY		\$24,832,798	100%

Schedule B 2019 Property Tax Rates

						Tax Rate				Levy			
	2019	Transition	Tax	Weighted	Weighted								
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Township	County	Education	Total	Township	County	Education	Total
res/farm (RT)	1,787,351,286	1.000000	0.00%	1.000000	1,787,351,286	0.00167135	0.00617506	0.00161000	0.00945641	2,987,288	11,037,001	2,877,636	16,901,925
multi-res (MT)	1,954,325	1.900000	0.00%	1.900000	3,713,218	0.00317556	0.01173261	0.00161000	0.01651817	6,206	22,929	3,146	32,282
new multi-residential (NT)	0	1.100000	0.00%	1.100000	0	0.00183848	0.00679257	0.00161000	0.01024105	0	0	0	0
farmlands (FT)	185,112,142	0.250000	0.00%	0.250000	46,278,036	0.00041784	0.00154376	0.00040250	0.00236410	77,347	285,769	74,508	437,623
commercial (CT)	100,888,787	1.491000	0.00%	1.491000	150,425,181	0.00249198	0.00920701	0.00962131	0.02132030	251,413	928,884	970,682	2,150,979
industrial (IT)	64,337,558	2.400000	0.00%	2.400000	154,410,139	0.00401124	0.01482014	0.01290000	0.03173138	258,073	953,492	829,954	2,041,519
large industrial (LT)	20,388,872	2.400000	0.00%	2.400000	48,933,293	0.00401124	0.01482014	0.01290000	0.03173138	81,785	302,166	263,016	646,967
pipeline (PT)	5,843,607	2.250000	0.00%	2.250000	13,148,116	0.00376054	0.01389388	0.01290000	0.03055442	21,975	81,190	75,383	178,548
shopping centre (ST)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00962131	0.02132030	0	0	0	0
managed forests (TT)	14,498,662	0.250000	0.00%	0.250000	3,624,666	0.00041784	0.00154376	0.00040250	0.00236410	6,058	22,382	5,836	34,276
res/farm farmland class 1 (R1)	745,500	1.000000	25.00%	0.750000	559,125	0.00125351	0.00463129	0.00120750	0.00709230		3,453	900	5,287
residential taxable shared (RH)	0	1.000000	0.00%	1.000000	0	0.00167135	0.00617506	0.00161000	0.00945641		0	0	0
commercial excess/vacant unit (CU)	7,638,056	1.491000	0.00%	1.491000	11,388,341	0.00249198	0.00920701	0.00817811		19,034	70,324	62,465	151,822
commercial vacant land (CX)	14,775	1.491000	0.00%	1.491000	22,030	0.00249198	0.00920701	0.00817811	0.01987711	· ·	136	121	294
commercial farmland class 1 (C1)	0	1.000000	25.00%	0.750000	0	0.00125351	0.00463129	0.00120750	0.00709230	0	0	0	0
commercial taxable shared (CH)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00962131	0.02132030	0	0	0	0
commercial vacant land taxable shared (CJ)	0	1.491000	0.00%		0	0.00249198	0.00920701	0.00817811	0.01987711		0	0	0
commercial small scale on farm (C7)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00257500	0.01427399		0	0	0
parking lot (GT)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00962131	0.02132030		0	0	0
industrial-hydro (IH)	672,250	2.400000	0.00%	2.400000	1,613,400	0.00401124	0.01482014	0.01290000			9,963	8,672	21,331
industrial vacant land shared (IJ)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.01064250	0.02947388		0	0	0
industrial excess land shared (IK)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.01064250	0.02947388		0	0	0
industrial excess land (IU)	311,332	2.400000	0.00%		747,197	0.00401124	0.01482014	0.01064250	0.02947388	1,249	4,614	3,313	9,176
large industrial excess land (LU)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.01064250	0.02947388	,	0	0	0
industrial vacant land (IX)	6,400,599	2.400000	0.00%	2.400000	15,361,438	0.00401124	0.01482014	0.01064250	0.02947388		94,858	68,118	188,650
industrial farmland class 1 (I1)	0	1.000000	25.00%	0.750000	0	0.00125351	0.00463129	0.00120750	0.00709230	,	0	0	0
industrial farmland class 2 (I4)	0	2.400000	0.00%		0	0.00401124	0.01482014	0.01290000	0.03173138		0	0	0
industrial small scale on farm (I7)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.00257500	0.02140638		0	0	0
shopping centre excess land (SU)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00817811	0.01987711		0	0	0
new construction industrial (JT)	14,730,983	2.400000	0.00%	2.400000	35,354,359	0.00401124	0.01482014	0.01030000			218,315	151,729	429,134
new construction industrial excess land (JU)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.00849750	0.02732888	· ·	0	0	0
new construction industrial vacant land (JX)	0	2.400000	0.00%	2.400000	0	0.00401124		0.00849750	0.02732888		0	0	0
new construction industrial small on farm (J7)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.00257500	0.02140638		0	0	0
new construction large industrial (KT)	0	2.400000	0.00%	2.400000		0.00401124	0.01482014	0.01030000	0.02913138		0	0	0
new construction large industrial excess land (KU)	0	2.400000	0.00%	2.400000		0.00401124	0.01482014	0.00849750	0.02732888		0	0	0
new construction commercial (XT)	68,214,220	1.491000	0.00%		101,707,402	0.00249198	0.00920701	0.00962131	0.02132030		628,049	656,310	1,454,348
new construction commercial vacant land (XU)	1,842,441	1.491000	0.00%		2,747,080	0.00249198	0.00920701	0.00817811	0.01987711	·	16,963	15,068	36,622
new construction commercial small on farm (X7)	0	1.491000	0.00%	1.491000		0.00249198	0.00920701	0.00257500	0.01427399		0	0	0
new construction office bldg (YT)	536,300	1.491000	0.00%	1.491000	799,623	0.00249198	0.00920701	0.00237300	0.02132030		4,938	5,160	11,434
new construction office building excess land (YU)	0	1.491000	0.00%	1.491000	·	0.00249198	0.00920701	0.00902131	0.01987711	0	0	0,100	0
new construction shopping centre (ZT)	0	1.491000	0.00%		0	0.00249198	0.00920701	0.00962131	0.02132030	0	0	0	0
new construction shopping centre (Z1)	-	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00902131	0.02132030		0	0	0
			0.0076	1.431000	2,378,183,928	0.00243130	0.00320701	0.00017011		3,974,776	14,685,426	6,072,018	24 732 220
Iota	2,281,481,695	_			2,370,103,920					3,314,110	14,000,420	0,012,010	24,732,220

Schedule C 2019 Barber's Beach Street Lights Special Area Tax Rates

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
res/farm (RT)	18,740,976	1.000000	0.00%	1.000000	18,740,976	0.00016253	3,046
multi-res (MT)	0	1.900000	0.00%	1.900000	0	0.00030881	0
new multi-residential (NT)	0	1.100000	0.00%	1.100000	0	0.00017878	0
farmlands (FT)	0	0.250000	0.00%	0.250000	0	0.00004063	0
commercial (CT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
industrial (IT)	0	2.400000	0.00%	2.400000	0	0.00039007	0
large industrial (LT)	0	2.400000	0.00%	2.400000	0	0.00039007	0
pipeline (PT)	0	2.250000	0.00%	2.250000	0	0.00036569	0
shopping centre (ST)	0	1.491000	0.00%	1.491000	0	0.00024233	0
managed forests (TT)	0	0.250000	0.00%	0.250000	0	0.00004063	0
res/farm farmland class I (R1)	0	1.000000	25.00%	0.750000	0	0.00012190	0
residential taxable shared (RH)	0	1.000000	0.00%	1.000000	0	0.00016253	0
commercial excess/vacant unit (CU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial vacant land (CX)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial farmland class 1 (C1)	0	1.000000	25.00%	0.750000	0	0.00012190	0
commercial taxable shared (CH)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial vacant land taxable shared (CJ)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial small scale on farm (C7)	0	1.491000	0.00%	1.491000	0	0.00024233	0
parking lot (GT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
industrial-hydro (IH)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial excess land shared (IJ)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial excess land shared (IK)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial excess/vacant unit (IU)	0	2.400000	0.00%	2.400000	0	0.00039007	0
large industrial excess land (LU)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial vacant land (IX)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial farmland class 1 (I1)	0	1.000000	25.00%	0.750000	0	0.00012190	0
industrial farmland class 2 (I4)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial small scale on farm (I7)	0	2.400000	0.00%	2.400000	0	0.00039007	0
shopping centre excess land (SU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction industrial (JT)	0	2.400000	0.00%	2.400000	0	0.00039007	-
new construction industrial excess land (JU)	0	2.400000	0.00%	2.400000	0	0.00039007	0

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
new construction industrial vacant land (JX)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction industrial small on farm (J7)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction large industrial (KT)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction large industrial excess land (KU)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction commercial (XT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction commmercial vacant land (XU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction commercial small on farm (X7)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction office bldg (YT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction office building excess land (YU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction shopping centre (ZT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction shopping centre excess land (ZU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
Total	18,740,976				18,740,976		3,046

Schedule C 2019 Cambridge Fire Special Area Tax Rates

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
res/farm (RT)	209,872,432	1.000000	0.00%	1.000000	209,872,432	0.00045595	95,690
multi-res (MT)	0	1.900000	0.00%	1.900000	0	0.00086630	0
new multi-residential (NT)	0	1.100000	0.00%	1.100000	0	0.00050154	0
farmlands (FT)	5,466,675	0.250000	0.00%	0.250000	1,366,669	0.00011399	623
commercial (CT)	1,408,149	1.491000	0.00%	1.491000	2,099,550	0.00067981	957
industrial (IT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
large industrial (LT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
pipeline (PT)	0	2.250000	0.00%	2.250000	0	0.00102588	0
shopping centre (ST)	0	1.491000	0.00%	1.491000	0	0.00067981	0
managed forests (TT)	2,291,356	0.250000	0.00%	0.250000	572,839	0.00011399	261
res/farm farmland class I (R1)	0	1.000000	25.00%	0.750000	0	0.00034196	0
residential taxable shared (RH)	0	1.000000	0.00%	1.000000	0	0.00045595	0
commercial excess/vacant unit (CU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
commercial vacant land (CX)	0	1.491000	0.00%	1.491000	0	0.00067981	0
commercial farmland class 1 (C1)	0	1.000000	25.00%	0.750000	0	0.00034196	0
commercial taxable shared (CH)	0	1.491000	0.00%	1.491000	0	0.00067981	0

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
commercial vacant land taxable shared (CJ)	0	1.491000	0.00%	1.491000	0	0.00067981	0
commercial small scale on farm (C7)	0	1.491000	0.00%	1.491000	0	0.00067981	0
parking lot (GT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
industrial-hydro (IH)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial excess land shared (IJ)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial excess land shared (IK)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial excess/vacant unit (IU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
large industrial excess land (LU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial vacant land (IX)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial farmland class 1 (I1)	0	1.000000	25.00%	0.750000	0	0.00034196	0
industrial farmland class 2 (I4)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial small scale on farm (I7)	0	2.400000	0.00%	2.400000	0	0.00109427	0
shopping centre excess land (SU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction industrial (JT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction industrial excess land (JU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction industrial vacant land (JX)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction industrial small on farm (J7)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction large industrial (KT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction large industrial excess land (KU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction commercial (XT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction commercial vacant land (XU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction commercial small n farm (X7)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction office bldg (YT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction office building excess land (YU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction shopping centre (ZT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction shopping centre excess land (ZU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
	219,038,612				213,911,490		97,532



## **REPORT BLDG-2019-005**

TO: Mayor and Members of Council

FROM: Gerald Moore, Chief Building Official

MEETING DATE: May 15, 2019

SUBJECT: Building Department Monthly Update- April 2019

## **RECOMMENDATION**

That Report BLDG-2019-005 with respect to the Building Department Monthly Update- April 2019 be received for information.

## **DISCUSSION**

## **Purpose**

The purpose of this report is to provide Council with an update of the activities in the Building Department for April 2019.

## **Background**

The purpose of this report is to provide Council with a summary of the Building Department's activities for the month of April 2019.

## **Financial Implications**

The Building Code Act requires that the total amount of building permit fees meets the total costs for the municipality to administer and enforce the Building Code Act and Regulations. Building permit fees were established to fully recover the Township's cost of providing building permit services, including an allocation of administrative overhead/indirect costs. Any surplus revenue from building permit fees is transferred to a restricted reserve, to be drawn upon in years of declining building activity.

## <u>APPLICABLE LEGISLATION AND REQUIREMENTS</u>

Building Code Act, 1992, S.O. 1992, c. 23

## **ATTACHMENTS**

Schedule A – April 2019 Monthly report

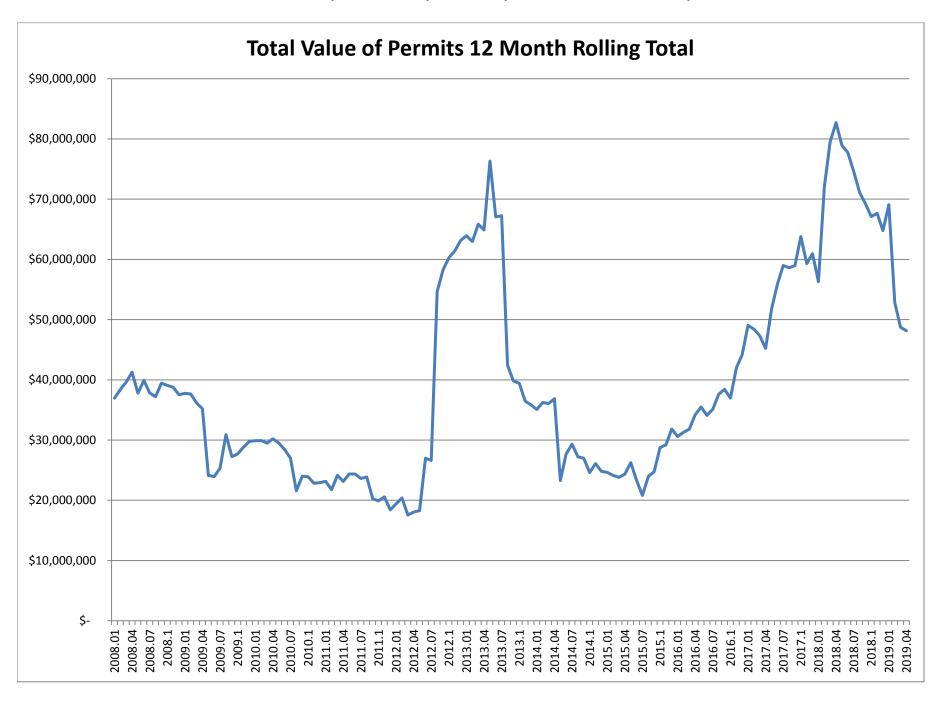
# **Permit Comparison Summary**

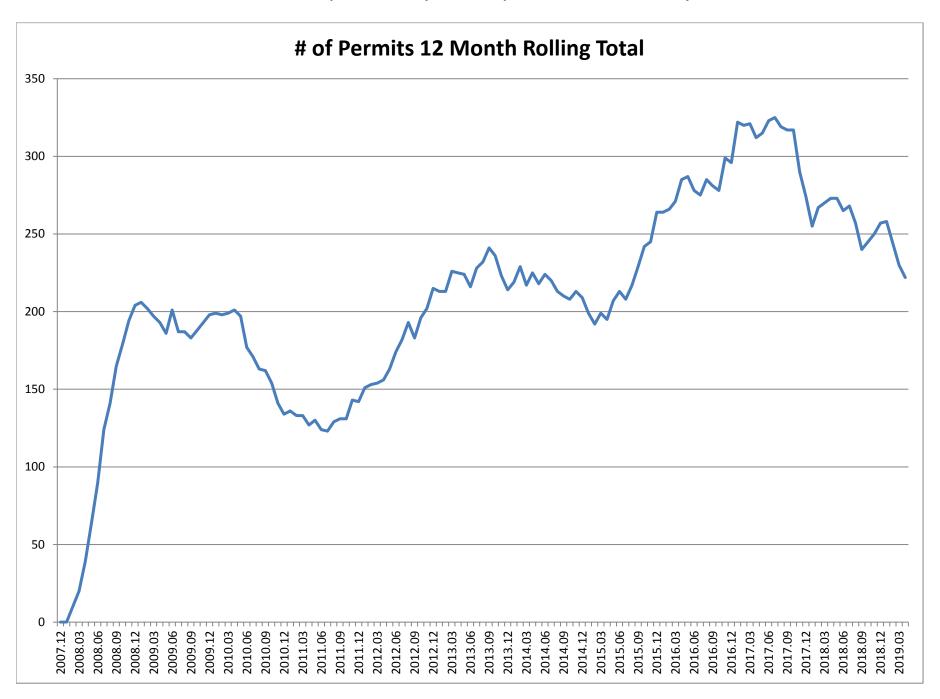
Issued For Period APR 1,2019 To APR 30,2019

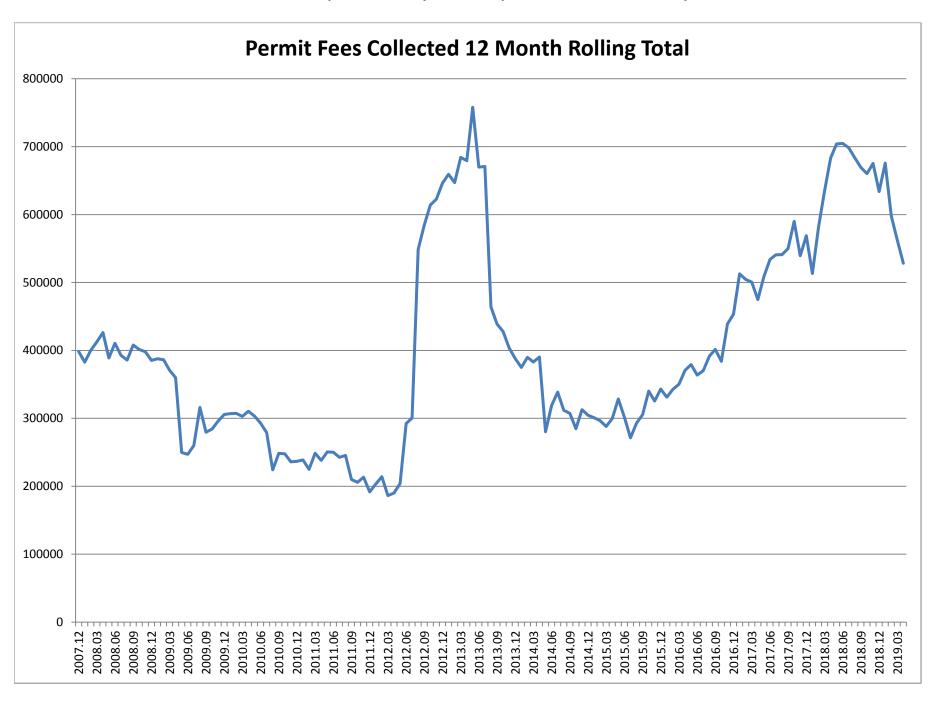
		Previous `	Year		Current Yea	ar
Pe	ermit Count	Fees	Value	Permit Count	Fees	Value
Agricultural Farm Building						
Agricultural Farm Building	8	38,347.80	1,981,101.00	0	0.00	0.00
Bylaw						
Pool Enclosure Permit	1	210.00	11,000.00	1	215.00	3,500.00
			,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Commercial/Industrial						
Commercial - No Occupancy Required	1	156.00	1,500.00	1	10,307.50	2,000,000.00
Commercial - Occupancy Required	1	2,734.97	950,000.00	0	0.00	0.00
Demolition						
Demolition Permit	2	312.00	8,000.00	3	624.00	10,500.00
New Residence						
Residential - Occupancy Required	4	31,167.36	2,634,100.00	3	20,927.52	2,666,152.00
Other						
Change of Use	0	0.00	0.00	1	200.00	0.00
Other Residential						
	4	450.00	7 500 00	4	0.540.00	000 000 00
Accessory/Farm Buildings	1	156.00	7,500.00	1	2,518.80	223,000.00
Deck Permit	1	156.00	10,000.00	0	0.00	0.00
Detached Garage	1	468.00	25,000.00	2	3,744.00	125,000.00
Residential - No Occupancy Required	1	166.40	35,000.00	0	0.00	0.00
Septic						
Sewage Disposal System Permit	1	624.00	8,500.00	3	1,248.00	69,000.00
Sewage System - Tank Replacement	0	0.00	0.00	1	468.00	17,000.00
Signs						
Sign Permit	2	360.00	17,000.00	0	0.00	0.00
	Previo	us Year		Curre	ent Year	
Total Permits Issued		24			16	
Total Dwelling Units Created		4			3	
Total Permit Value	5,688	,701.00		5,114	,152.00	
Total Permit Fees		,858.53			,252.82	
Total Compliance Letters Issu		4			7	
Total Compliance Letter Fees		300.00			528.93	
Inspection Summary						
Ward			Pern	nit Inspections	Other Roll	Inspections
000				274		6
Total				274		6
Permit C	narge			Amount		

# **Permit Comparison Summary**

Issued For Period APR 1,2019	To APR 30,2019
Accessory/Farm Buildings	2,518.80
Change of Use	200.00
Commercial - No Occupancy Req	10,307.50
Demolition Permit	624.00
Detached Garage	3,744.00
Pool Enclosure Permit	215.00
Residential - Occupancy Requir	20,927.52
Sewage Disposal System Permit	1,248.00
Sewage System - Tank Replaceme	468.00
Total	40,252.82







#### THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

## BY-LAW NO. 2019-029

Being a By-law to establish a Site Plan Control Area, to define classes of development and to delegate Council Authority pursuant to Section 41 of the *Planning Act*, R.S.O. 1990 c.P13, as amended, and to repeal By-law 16/08.

**WHEREAS** Subsection 41(2) of the Planning Act provides that the Council of a local municipality may, by By-law, designate a Site Plan Control Area;

**AND WHEREAS** the Official Plan identifies the whole of the County of Wellington as a proposed Site Plan Control Area;

**AND WHEREAS** Section 41(13)(a) of the Planning Act provides that the Council of a municipality may, by By-law, define any class or classes of development that may be undertaken without the approval of plans and drawings otherwise required under Subsection 41(4) or 41(5);

**AND WHEREAS** Subsection 41(11) of the Planning Act provides that Section 446 of the Municipal Act, 2001 applies to any requirements made under clauses (7)(a) and (b) and to any requirements made under an agreement entered into under clause (7)(c) or (c.1);

**AND WHEREAS** the Council of the Corporation of the Township of Puslinch is desirous of repealing By-law 16/08;

**NOW THEREFORE** the Council of The Corporation of the Township of Puslinch HEREBY ENACTS AS FOLLOWS:

- 1. All Lands within the corporate limits of the Township of Puslinch (hereinafter the "Township") are hereby designated as a Site Plan Control Area.
- No person shall undertake development in the Site Plan Control Area without the approval of the required plans and drawings in accordance with the requirements of Section 41 of the Planning Act.
- 3. Notwithstanding Section 2 and pursuant to Section 41(13)(a) the following types of development are exempt from Site Plan Control without the approval of plans and drawings:
  - (a) Single detached dwellings, semi-detached dwellings, duplex dwellings and triplex dwellings;
  - (b) Any building or structure deemed accessory to a single detached dwelling, semi-detached dwelling, duplex dwelling, triplex dwelling or townhouse dwelling;
  - (c) Agricultural and farm related buildings or structures, except for those associated with a commercial, industrial or farm related tourism use that serves the public;
  - (d) Aesthetic or use alteration of an existing building or structure, unless such alteration of the building or structure has the effect of substantially increasing its size and/or impact, such as the alteration of a residential building to introduce a commercial use, as determined by the Chief Building Official and/or Development & Legislative Coordinator;
  - (e) Commercial and Institutional structures and/or additions not exceeding 93 square metres, or other minor applications, provided it can be demonstrated to the Chief Building Official and/or Development & Legislative Coordinator, the addition will not have a negative impact on the Township's Urban Design Guidelines, site servicing and grading, stormwater management, parking and loading or site access.
  - (f) Industrial structures and/or additions not exceeding 186 square metres, or other minor applications, provided it can be demonstrated to the Chief Building Official and/or Development & Legislative Coordinator the addition will not have a negative impact on the

Township's Urban Design Guidelines, site servicing and grading, stormwater management, parking and loading or site access.

- (g) Building and structures for flood control or conservation purposes;
- (h) Pits and quarries licensed or permitted under the Aggregate Resources Act, R.S.O. 1990, c.A.8, as amended; and,
- (i) Expansions or modifications to existing sewage and water treatment facilities that are operated under the approval of the Ministry of Environment, Conservation and Parks.
- 4. Council's powers and authority under section 41 of the Planning Act, except the authority under Section 41(13)(a) to define classes of development that may be undertaken without the approval of plans and drawings, are hereby delegated to the Chief Administrative Officer/Clerk.
- 5. The Mayor and the Clerk of the Corporation of the Township are hereby authorized to execute all agreements (generally referred to as Site Plan Agreements) required by the municipality under subsection 41(7)(c) of the Planning Act and to affix the seal of the corporation thereto.
- 6. Notwithstanding Sections 4 and 5, the CAO/Clerk of the Township may request that certain proposals be presented to Council prior to final approval.
- 7. The Chief Building Official and/or Development & Legislative Coordinator are hereby authorized to approve minor changes to any approved site plan, in writing, without an amendment to the Site Plan Agreement.
- 8. Every person who contravenes the site plan provisions of Section 41 of the Planning Act is guilty of an offence and is liable to a fine as set out in Section 67 of the Planning Act.
- 9. In accordance with Section 446 of the Municipal Act the Township may direct or require a person to do a matter or thing as required as part of Site Plan Approval or the Site Plan Agreement, and in default of it being done by the person directed or required to do it, the matter of the thing shall be done at the person's expense.
- 10. For the purposes of Section 8, the Township may enter upon the land at any reasonable time.
- 11. The Township may recover the costs of doing a matter or thing from the person directed or required to do it by adding the costs to the tax roll and collecting them in the same matter as property taxes.
- 12. By-law 16/08 is hereby repealed.

READ THREE TIMES AND FINALLY PASSED IN OPEN COUNCIL THIS 15th DAY OF MAY 2019.

James Seeley, Mayor
Karen Landry, Clerk

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

# BY-LAW 030-2019

A by-law to provide for the levy and collection of property taxes for the 2019 taxation year.

**WHEREAS** Section 312 of the Municipal Act, S.O. 2001, as amended (Municipal Act) provides that for the purposes of raising the general local municipality levy, a local municipality shall, each year, pass a by-law levying a separate tax rate, as specified in the by-law, on the assessment in each property class in the local municipality rateable for local municipality purposes; and

**WHEREAS** Section 3 of the Assessment Act, R.S.O. 1990, as amended (Assessment Act), provides that all real property, with specific exceptions, is subject to assessment and taxation; and

**WHEREAS** the property classes have been prescribed by the Minister of Finance under the Assessment Act and the Regulations thereto; and

**WHEREAS** Ontario Regulation 400/98, as amended under the Education Act prescribes the tax rates for school purposes for all property classes; and

**WHEREAS** the Council of the Corporation of the Township of Puslinch ("Township") adopted By-law Number 010-2019 which established the Budget for the Township for the year 2019; and

**WHEREAS** pursuant to the County of Wellington ("County") By-law Number 5614-19, the County has established upper and lower-tier property tax ratios and tax reductions for prescribed subclasses for the year 2019 and By-law Number 5615-19, being a by-law to establish and levy tax rates for upper tier purposes; and

**WHEREAS** pursuant to the County By-law Number 5601-19, the County has adopted estimates of all sums required by the County during the year 2019 for all purposes of the County and has provided a general levy on area municipalities; and

**WHEREAS** it is required that the Council of the Township, pursuant to the Municipal Act, to levy upon the whole of the assessment for real property for the property classes according to the last revised assessment roll for the Township the sums set forth for various purposes in Schedule "A" attached hereto for the current year; and

**WHEREAS** the County's Tax Ratio by-law established the relative amount of taxation to be borne by each property class; and

**WHEREAS** the Municipal Act authorizes a Council to pass by-laws for the payment of taxes by installments and the date or dates in the year for which the taxes are imposed on which the taxes or installments are due; and

**WHEREAS** the Municipal Act authorizes a local municipality to pass by-laws to impose late payment charges for the non-payment of taxes or any installment by the due date; and

**WHEREAS** an interim levy was made by the Township before the adoption of the estimates for the current year as per By-law Number 002-2019.

NOW THEREFORE the Council of the Corporation of the Township of Puslinch HEREBY ENACTS AS FOLLOWS:

1. For the raising of the sum of \$24,832,798 as shown in Schedule "A" attached to this by-law, for the current year lawful purposes of the Township, the County, and the School Boards, the tax rates as shown on Schedule "B" and Schedule "C"

- attached to this by-law, shall be levied and collected upon the whole rateable property of the public and separate school supporters.
- 2. The levy provided for in Schedule "A", Schedule "B" and Schedule "C" attached to this by-law shall be reduced by the amount raised by the 2019 interim levy imposed pursuant to By-law Number 002-2019, where billed.
- 3. For the year 2019, pursuant to Section 312 (4) of the Municipal Act, the Township shall levy a special tax rate against rateable property in the Barber's Beach Street Lights and Cambridge Fire areas as set out in Schedule "C" attached to this by-law.
- 4. For payments-in-lieu of taxes, the actual amount due to the Township shall be based on the assessment roll and the tax rates for the applicable classes for the year 2019.
- 5. That all taxes levied according to the provisions of this by-law shall be collected and paid over to the Treasurer of the Township.
- 6. That the amounts imposed by the rates for Commercial, Industrial, and Multi-Residential classes become adjusted according to the provisions of Section 329.1 of the Municipal Act.
- 7. The final levy shall be due and payable in two installments as follows:
  - (1) The 30<sup>th</sup> day of August, 2019; and
  - (2) The 31st day of October, 2019.
- 8. The final levy for those properties subject to the Township's Pre-Authorized Tax Payment Plan shall be due and payable to the Township in 11 monthly installments, February through to December.
- 9. That realty taxes to be levied as a result of additions to the tax roll pursuant to the Assessment Act shall be due and payable in one installment not earlier than 21 days from the date of the mailing of the tax notice.

10.

- (1) The Treasurer shall add a percentage as a penalty for default of payment of the installments in accordance with By-law No. 001/14, as amended;
- (2) The Treasurer shall also add a percentage charge as interest for default of payment of the installments in accordance with By-law No. 001/14, as amended.
- 11. The Treasurer is hereby authorized to accept part payment from time to time on account of any taxes due and to give a receipt for such part payment, provided that acceptance of any such part payment does not affect the collection of any percentage charge imposed and collectable under the provision of By-law No. 001/14, as amended, in respect of non-payment of any taxes or any classes of taxes or of any installment thereof.
- 12. That the Treasurer is hereby authorized to mail every tax notice or cause the same to be mailed to the address of the residence or place of business of each person taxed unless the taxpayer directs the Treasurer in writing to send the bill to another address, in which case it shall be sent to that address, as provided by the Municipal Act.
- 13. That the Treasurer may send a tax bill to the taxpayer electronically in the manner specified by the Township, if the taxpayer has chosen to receive the tax bill in that manner.

- 14. There may be added to the tax roll all or any arrears of charges, fees, costs or other expenses as may be permitted by Provincial legislation and such arrears of charges, fees, costs or other expenses shall be deemed to be taxes, collected as taxes, or collected in the same manner as municipal taxes, or dealt with in such fashion as may be specifically authorized by the applicable statute.
- 15. Nothing in this by-law shall prevent the Treasurer from proceeding at any time with the collection of any tax, or any part thereof, in accordance with the provisions of the applicable statutes and by-laws governing the collection of taxes.
- 16. If any section or portion of this by-law is found by a court of competent jurisdiction to be invalid, it is the intent of the Council for the Township that all remaining sections and portions of this by-law continue in force and effect.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 15<sup>th</sup> DAY OF MAY, 2019.

 James Seeley, I
Karen Landry, CAO

Schedule A Summary of Tax Levies - 2019 Final

	TAX LEVY	TOTAL TAX LEVY	SHARE %
TOWNSHIP PURPOSES	٦		
General Purposes	\$3,974,776		
Barber's Beach Streetlights	\$3,046		
Cambridge Fire	\$97,532		
	Total Township Purposes	\$4,075,354	16.41%
COUNTY PURPOSES	٦		
County of Wellington	\$14,685,426		
, -	Total County Purposes	\$14,685,426	59.14%
EDUCATION PURPOSES	\$6,072,018		
	Total Education Purposes	\$6,072,018	24.45%
TOTAL LEVY		\$24,832,798	100%

Schedule B 2019 Property Tax Rates

							Tax	Rate			L	_evy	
	2019	Transition	Tax	Weighted	Weighted								
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Township	County	Education	Total	Township	County	Education	Total
res/farm (RT)	1,787,351,286	1.000000	0.00%	1.000000	1,787,351,286	0.00167135	0.00617506	0.00161000	0.00945641	2,987,288	11,037,001	2,877,636	16,901,925
multi-res (MT)	1,954,325	1.900000	0.00%	1.900000	3,713,218	0.00317556	0.01173261	0.00161000	0.01651817	6,206	22,929	3,146	32,282
new multi-residential (NT)	0	1.100000	0.00%	1.100000	0	0.00183848	0.00679257	0.00161000	0.01024105	0	0	0	0
farmlands (FT)	185,112,142	0.250000	0.00%	0.250000	46,278,036	0.00041784	0.00154376	0.00040250	0.00236410	77,347	285,769	74,508	437,623
commercial (CT)	100,888,787	1.491000	0.00%	1.491000	150,425,181	0.00249198	0.00920701	0.00962131	0.02132030	251,413	928,884	970,682	2,150,979
industrial (IT)	64,337,558	2.400000	0.00%	2.400000	154,410,139	0.00401124	0.01482014	0.01290000	0.03173138	258,073	953,492	829,954	2,041,519
large industrial (LT)	20,388,872	2.400000	0.00%	2.400000	48,933,293	0.00401124	0.01482014	0.01290000	0.03173138	81,785	302,166	263,016	646,967
pipeline (PT)	5,843,607	2.250000	0.00%	2.250000	13,148,116	0.00376054	0.01389388	0.01290000	0.03055442	21,975	81,190	75,383	178,548
shopping centre (ST)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00962131	0.02132030	0	0	0	0
managed forests (TT)	14,498,662	0.250000	0.00%	0.250000	3,624,666	0.00041784	0.00154376	0.00040250	0.00236410	6,058	22,382	5,836	34,276
res/farm farmland class 1 (R1)	745,500	1.000000	25.00%	0.750000	559,125	0.00125351	0.00463129	0.00120750	0.00709230		3,453	900	5,287
residential taxable shared (RH)	0	1.000000	0.00%	1.000000	0	0.00167135	0.00617506	0.00161000	0.00945641		0	0	0
commercial excess/vacant unit (CU)	7,638,056	1.491000	0.00%	1.491000	11,388,341	0.00249198	0.00920701	0.00817811		19,034	70,324	62,465	151,822
commercial vacant land (CX)	14,775	1.491000	0.00%	1.491000	22,030	0.00249198	0.00920701	0.00817811	0.01987711	· ·	136	121	294
commercial farmland class 1 (C1)	0	1.000000	25.00%	0.750000	0	0.00125351	0.00463129	0.00120750	0.00709230	0	0	0	0
commercial taxable shared (CH)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00962131	0.02132030	0	0	0	0
commercial vacant land taxable shared (CJ)	0	1.491000	0.00%		0	0.00249198	0.00920701	0.00817811	0.01987711		0	0	0
commercial small scale on farm (C7)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00257500	0.01427399		0	0	0
parking lot (GT)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00962131	0.02132030		0	0	0
industrial-hydro (IH)	672,250	2.400000	0.00%	2.400000	1,613,400	0.00401124	0.01482014	0.01290000			9,963	8,672	21,331
industrial vacant land shared (IJ)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.01064250	0.02947388		0	0	0
industrial excess land shared (IK)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.01064250	0.02947388		0	0	0
industrial excess land (IU)	311,332	2.400000	0.00%		747,197	0.00401124	0.01482014	0.01064250	0.02947388	1,249	4,614	3,313	9,176
large industrial excess land (LU)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.01064250	0.02947388	,	0	0	0
industrial vacant land (IX)	6,400,599	2.400000	0.00%	2.400000	15,361,438	0.00401124	0.01482014	0.01064250	0.02947388		94,858	68,118	188,650
industrial farmland class 1 (I1)	0	1.000000	25.00%	0.750000	0	0.00125351	0.00463129	0.00120750	0.00709230	,	0	0	0
industrial farmland class 2 (I4)	0	2.400000	0.00%		0	0.00401124	0.01482014	0.01290000	0.03173138		0	0	0
industrial small scale on farm (I7)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.00257500	0.02140638		0	0	0
shopping centre excess land (SU)	0	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00817811	0.01987711		0	0	0
new construction industrial (JT)	14,730,983	2.400000	0.00%	2.400000	35,354,359	0.00401124	0.01482014	0.01030000			218,315	151,729	429,134
new construction industrial excess land (JU)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.00849750	0.02732888	· ·	0	0	0
new construction industrial vacant land (JX)	0	2.400000	0.00%	2.400000	0	0.00401124		0.00849750	0.02732888		0	0	0
new construction industrial small on farm (J7)	0	2.400000	0.00%	2.400000	0	0.00401124	0.01482014	0.00257500	0.02140638		0	0	0
new construction large industrial (KT)	0	2.400000	0.00%	2.400000		0.00401124	0.01482014	0.01030000	0.02913138		0	0	0
new construction large industrial excess land (KU)	0	2.400000	0.00%	2.400000		0.00401124	0.01482014	0.00849750	0.02732888		0	0	0
new construction commercial (XT)	68,214,220	1.491000	0.00%		101,707,402	0.00249198	0.00920701	0.00962131	0.02132030		628,049	656,310	1,454,348
new construction commercial vacant land (XU)	1,842,441	1.491000	0.00%		2,747,080	0.00249198	0.00920701	0.00302131	0.01987711	·	16,963	15,068	36,622
new construction commercial small on farm (X7)	0	1.491000	0.00%	1.491000		0.00249198	0.00920701	0.00257500	0.01427399		0	0	0
new construction office bldg (YT)	536,300	1.491000	0.00%	1.491000	799,623	0.00249198	0.00920701	0.00257300	0.02132030		4,938	5,160	11,434
new construction office building excess land (YU)	0	1.491000	0.00%	1.491000	·	0.00249198	0.00920701	0.00902131	0.01987711	0	0	0,100	0
new construction shopping centre (ZT)	0	1.491000	0.00%		0	0.00249198	0.00920701	0.00962131	0.02132030	0	0	0	0
new construction shopping centre (Z1)	-	1.491000	0.00%	1.491000	0	0.00249198	0.00920701	0.00902131	0.02132030		0	0	0
			0.0076	1.431000	2,378,183,928	0.00243130	0.00320701	0.00017011		3,974,776	14,685,426	6,072,018	24 732 220
Iota	2,281,481,695	_			2,370,103,920					3,314,110	14,000,420	0,012,010	24,732,220

Schedule C 2019 Barber's Beach Street Lights Special Area Tax Rates

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
res/farm (RT)	18,740,976	1.000000	0.00%	1.000000	18,740,976	0.00016253	3,046
multi-res (MT)	0	1.900000	0.00%	1.900000	0	0.00030881	0
new multi-residential (NT)	0	1.100000	0.00%	1.100000	0	0.00017878	0
farmlands (FT)	0	0.250000	0.00%	0.250000	0	0.00004063	0
commercial (CT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
industrial (IT)	0	2.400000	0.00%	2.400000	0	0.00039007	0
large industrial (LT)	0	2.400000	0.00%	2.400000	0	0.00039007	0
pipeline (PT)	0	2.250000	0.00%	2.250000	0	0.00036569	0
shopping centre (ST)	0	1.491000	0.00%	1.491000	0	0.00024233	0
managed forests (TT)	0	0.250000	0.00%	0.250000	0	0.00004063	0
res/farm farmland class I (R1)	0	1.000000	25.00%	0.750000	0	0.00012190	0
residential taxable shared (RH)	0	1.000000	0.00%	1.000000	0	0.00016253	0
commercial excess/vacant unit (CU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial vacant land (CX)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial farmland class 1 (C1)	0	1.000000	25.00%	0.750000	0	0.00012190	0
commercial taxable shared (CH)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial vacant land taxable shared (CJ)	0	1.491000	0.00%	1.491000	0	0.00024233	0
commercial small scale on farm (C7)	0	1.491000	0.00%	1.491000	0	0.00024233	0
parking lot (GT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
industrial-hydro (IH)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial excess land shared (IJ)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial excess land shared (IK)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial excess/vacant unit (IU)	0	2.400000	0.00%	2.400000	0	0.00039007	0
large industrial excess land (LU)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial vacant land (IX)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial farmland class 1 (I1)	0	1.000000	25.00%	0.750000	0	0.00012190	0
industrial farmland class 2 (I4)	0	2.400000	0.00%	2.400000	0	0.00039007	0
industrial small scale on farm (I7)	0	2.400000	0.00%	2.400000	0	0.00039007	0
shopping centre excess land (SU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction industrial (JT)	0	2.400000	0.00%	2.400000	0	0.00039007	-
new construction industrial excess land (JU)	0	2.400000	0.00%	2.400000	0	0.00039007	0

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
new construction industrial vacant land (JX)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction industrial small on farm (J7)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction large industrial (KT)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction large industrial excess land (KU)	0	2.400000	0.00%	2.400000	0	0.00039007	0
new construction commercial (XT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction commmercial vacant land (XU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction commercial small on farm (X7)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction office bldg (YT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction office building excess land (YU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction shopping centre (ZT)	0	1.491000	0.00%	1.491000	0	0.00024233	0
new construction shopping centre excess land (ZU)	0	1.491000	0.00%	1.491000	0	0.00024233	0
Total	18,740,976				18,740,976		3,046

Schedule C 2019 Cambridge Fire Special Area Tax Rates

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
res/farm (RT)	209,872,432	1.000000	0.00%	1.000000	209,872,432	0.00045595	95,690
multi-res (MT)	0	1.900000	0.00%	1.900000	0	0.00086630	0
new multi-residential (NT)	0	1.100000	0.00%	1.100000	0	0.00050154	0
farmlands (FT)	5,466,675	0.250000	0.00%	0.250000	1,366,669	0.00011399	623
commercial (CT)	1,408,149	1.491000	0.00%	1.491000	2,099,550	0.00067981	957
industrial (IT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
large industrial (LT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
pipeline (PT)	0	2.250000	0.00%	2.250000	0	0.00102588	0
shopping centre (ST)	0	1.491000	0.00%	1.491000	0	0.00067981	0
managed forests (TT)	2,291,356	0.250000	0.00%	0.250000	572,839	0.00011399	261
res/farm farmland class I (R1)	0	1.000000	25.00%	0.750000	0	0.00034196	0
residential taxable shared (RH)	0	1.000000	0.00%	1.000000	0	0.00045595	0
commercial excess/vacant unit (CU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
commercial vacant land (CX)	0	1.491000	0.00%	1.491000	0	0.00067981	0
commercial farmland class 1 (C1)	0	1.000000	25.00%	0.750000	0	0.00034196	0
commercial taxable shared (CH)	0	1.491000	0.00%	1.491000	0	0.00067981	0

	2019	Transition	Tax	Weighted	Weighted	Township	Township
Description	Assessment	Ratio	Reduction	Ratio	Assessment	Tax Rate	Levy
commercial vacant land taxable shared (CJ)	0	1.491000	0.00%	1.491000	0	0.00067981	0
commercial small scale on farm (C7)	0	1.491000	0.00%	1.491000	0	0.00067981	0
parking lot (GT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
industrial-hydro (IH)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial excess land shared (IJ)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial excess land shared (IK)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial excess/vacant unit (IU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
large industrial excess land (LU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial vacant land (IX)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial farmland class 1 (I1)	0	1.000000	25.00%	0.750000	0	0.00034196	0
industrial farmland class 2 (I4)	0	2.400000	0.00%	2.400000	0	0.00109427	0
industrial small scale on farm (I7)	0	2.400000	0.00%	2.400000	0	0.00109427	0
shopping centre excess land (SU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction industrial (JT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction industrial excess land (JU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction industrial vacant land (JX)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction industrial small on farm (J7)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction large industrial (KT)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction large industrial excess land (KU)	0	2.400000	0.00%	2.400000	0	0.00109427	0
new construction commercial (XT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction commercial vacant land (XU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction commercial small n farm (X7)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction office bldg (YT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction office building excess land (YU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction shopping centre (ZT)	0	1.491000	0.00%	1.491000	0	0.00067981	0
new construction shopping centre excess land (ZU)	0	1.491000	0.00%	1.491000	0	0.00067981	0
	219,038,612				213,911,490		97,532

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

# **BY-LAW NUMBER 031-2019**

Being a by-law to authorize the entering into a Memorandum of Understanding with the City of Guelph for the Niska Road Reconstruction.

**WHEREAS** the *Municipal Act*, S.O. 2001, c.25 authorizes a municipality to enter into Agreements;

**AND WHEREAS** the Council for the Corporation of the Township of Puslinch deems it appropriate to enter into a Memorandum of Understanding with the City of Guelph for the Niska Road Reconstruction;

**NOW THEREFORE** the Corporation of the Township of Puslinch hereby enacts as follows:

- 1. That the Corporation of the Township of Puslinch enter into a Memorandum of Understanding with the City of Guelph for the Niska Road Reconstruction.
- 2. That the Mayor and Clerk are hereby authorized to execute the Memorandum of Understanding.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 15<sup>th</sup> DAY OF MAY 2019.

 James Seeley, Mayor
 Karen Landry, CAO/Clerk

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

# **BY-LAW NUMBER 032-2019**

Being a by-law to confirm the proceedings of the Council of the Corporation of the Township of Puslinch at its Regular meeting held on May 15 2019.

**WHEREAS** by Section 5 of the *Municipal Act, 2001, S.O. 2001, c.25* the powers of a municipal corporation are to be exercised by its Council;

**AND WHEREAS** by Section 5, Subsection (3) of the *Municipal Act*, a municipal power including a municipality's capacity, rights, powers and privileges under section 8, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

**AND WHEREAS** it is deemed expedient that the proceedings of the Council of the Corporation of the Township of Puslinch at its Regular meeting held on May 15, 2019 be confirmed and adopted by By-law;

**NOW THEREFORE** the Council of the Corporation of the Township of Puslinch hereby enacts as follows:

- 1) The action of the Council of the Corporation of the Township of Puslinch, in respect of each recommendation contained in the reports of the Committees and each motion and resolution passed and other action taken by the Council at said meeting are hereby adopted and confirmed.
- 2) The Head of Council and proper official of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said action of the Council.
- 3) The Head of Council and the Clerk are hereby authorized and directed to execute all documents required by statute to be executed by them, as may be necessary in that behalf and the Clerk authorized and directed to affix the seal of the said Corporation to all such documents.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 15<sup>th</sup> DAY OF MAY 2019.

James Seeley, Mayor
Karen Landry, C.A.O./Clerk