



ASSET MANAGEMENT PLAN UPDATE

Township of Drummond/North Elmsley



October 2016

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1.0 EXECUTIVE SUMMARY

The Township's first asset management plan was developed in 2013 and three years have now passed. The purpose of this update is to report on the progress to date, make corrections to the original assumptions in the first plan, and update and extend the work action plan to 2026.

We are pleased to see that the AMP is working. The Township has undertaken a significant amount of asset renewal despite shrinking OMPF transfer payments and rising OPP costs. The Township has completed 12 km of road reconstruction, one bridge replacement, and purchased a grader, two loaders, plow truck and two trucks.

However, the end of 2016 will see the Township's reserves depleted, the debt level increased over 2013 levels, and development charges revenues exhausted even though there are 3 years remaining on the 2014 Development Charges By-law. The way forward will be challenging.

This update is meant to be read in conjunction with the 2013 AMP.

2.0 ASSET MANAGEMENT PERFORMANCE 2014-2016

2.1 Roads

The 2013 AMP noted that the optimum condition rating for hard surface roads should be between 6.3 and 6.75 (page 12), and that a rating below that range indicates underfunding. The AMP established an overall weighted road condition of 6.88 at that time. It further recommended that \$9,655 per kilometer of hard surface roads should be spent annually to maintain a condition rating of 6.0. This equates to \$1.2M per year.

The chart below shows the road work undertaken 2014-2016, showing an average spending of \$1M per year, slightly below the \$1.2M recommendation.

| Year | Road Reconstruction | Length | Cost |
|------|-----------------------------|-----------------|--------------------|
| 2014 | Westshore Drive | 1.2 km | \$387,000 |
| 2014 | Road Design | | \$41,819 |
| 2015 | Drummond School Road | 2.62 km | \$612,400 |
| 2015 | Wildlife Road (Phase 1) | | \$27,000 |
| 2015 | Road Design (3 Roads) | | \$78,000 |
| 2016 | Wildlife Road | 2.0 km | \$265,000 |
| 2016 | Drummond Concession 7 East | 3.8 km | \$888,000 |
| 2016 | Road Design (Tennyson Road) | | \$30,000 |
| 2016 | Coutts Bay Road | 2.0 km | \$700,000 |
| | Total | 11.62 km | \$3,029,219 |

Additionally the Township spent \$77,000 on improvements to Carroll Road, a gravel road which gravel road improvements are not calculated into the AMP.

The updated road condition rating for hard surface roads is attached to this report as Appendix A.

STATUS: UNDER FUNDED BY \$200,000 PER YEAR

2.2 Signs

The 2013 AMP recommended that 7% of the 833 Township signs be replaced annually. However due to the number of signs that are currently in the “fail” category (236), the report states that \$16,500 should be spent for 2014-2016, reducing to \$11,000 thereafter.

| Year | Budget | Actual Cost |
|--------------|---------|-----------------|
| 2014 | \$8,000 | \$7,908 |
| 2015 | \$8,000 | \$7,656 |
| 2016 | \$8,000 | \$8,576 |
| Total | | \$24,140 |

STATUS: FUNDING ON TARGET WITH 2013 AMP

2.3 Streetlights

The AMP recommends an annual expenditure of \$2,461 per year on streetlight replacement. The chart below shows expenditures for new capital installations are above this level; \$9,637 average per year. However replacement is based on calls and over time this should level out.

| Year | Budget | Actual Cost |
|--------------|-----------------|-----------------|
| 2014 | \$12,000 | \$7,535 |
| 2015 | \$12,000 | \$9,377 |
| 2016 | \$12,000 | *\$12,000 |
| Total | \$36,000 | \$28,912 |

*estimate

STATUS: EXCEEDS TARGET WITH 2013 AMP

2.4 Culverts

The replacement strategy for culverts in the 2013 AMP recommends an annual expenditure of \$53,500 to maintain the Township’s 621 culverts. The annual cost for the first 2-3 years should be \$18,000, and then increase to \$23,500. The AMP acknowledges that an additional \$30,000 for culvert replacement occurs as part of road

capital projects. The Township replaces 10 culverts each year in addition to the culverts replaced during capital road projects. Culverts replaced during road construction are noted in the chart below.

| Year | Notes | Budget | Actual Cost |
|-------------|---|----------|-------------|
| 2014 | Does not include 4 culverts replaced during the Westshore Drive capital project | \$30,000 | \$13,949 |
| 2015 | Does not include 6 culverts replaced during the Drummond School Road capital project | \$30,000 | \$22,801 |
| 2016 | Does not include culverts replaced during Wildlife Road (5), Drummond Con 7 (8), Coutts Bay Road (6) capital projects | \$30,000 | *\$30,000 |

*estimate

STATUS: ON TARGET WITH 2013 AMP

2.5 Guard Rails

The 2013 AMP recommends that the Township spend about \$4,250 per year to rehabilitate guard rails. The chart below demonstrates that the guard rails are being maintained. The high expenditure in 2014 captures some of the costs to install new guard rails to improve road safety on Riverside Drive in Perth as a cost sharing arrangement.

| Year | Budget | Actual Cost |
|--------------|-----------------|-----------------|
| 2014 | \$5,000 | \$22,000 |
| 2015 | \$5,000 | \$3,162 |
| 2016 | \$5,000 | *\$5,000 |
| Total | \$15,000 | \$30,162 |

*estimate

STATUS: EXCEEDS TARGET WITH 2013 AMP

2.6 Bridges

The 2013 AMP estimates that the Township should invest \$21,125 per year into its bridges. The Township spent \$145,429 in the 2014-2016 time period; an average of \$48,476. Additionally, the Township transferred Porter Road Bridge to the abutting landowner in 2016 and is no longer part of the Township's inventory. This has saved the Township \$600,000 in future bridge repair expenses.

| Year | Description | Actual Cost |
|--------------|--|------------------|
| 2014 | Buttermilk Road Bridge Assessment | \$32,700 |
| 2015 | Repairs to Porter Bridge Deck | \$32,729 |
| 2016 | Design for Armstrong Road and Buttermilk Hill Road Bridges | *\$80,000 |
| TOTAL | | \$145,429 |

*estimate

STATUS: EXCEEDS TARGET WITH 2013 AMP

2.7 Transportation / Environmental Equipment

The 2013 AMP sets the estimated cost per year for equipment replacement at \$184,100 per year (page 24). In the last three years, the Township has spent \$728,088, an average of \$242,696 per year.

| Year | Equipment | Actual Cost |
|--------------|------------------|------------------|
| 2014 | Plow Truck | \$248,890 |
| 2015 | Case Loader | \$93,975 |
| 2015 | Track Loader | \$88,531 |
| 2016 | Grader | \$216,692 |
| 2016 | Two ¾ Ton Trucks | \$80,000 |
| TOTAL | | \$728,088 |

STATUS: EXCEEDS TARGET WITH 2013 AMP

3.0 STATE OF THE INFRASTRUCTURE REPORT

This AMP Update builds on the state of the infrastructure reported in 2013. It includes the updated Road Condition rating in Appendix A, and the OSIM Bridge, as Appendix B. The state of the infrastructure for other assets remains the same.

4.0 ACTION PLAN 2017-2026 (APPENDIX C)

2017-2026 Actions

Bridge, road construction and equipment reserves are depleted and need to be replenished. The next step would be for Council to consider imposing an infrastructure levy to raise funds to assist with the AMP goals. The Financial Plan (Appendix H Table 1) in the 2013 AMP points to a 3-5% annual tax increase to address asset renewal.

Appendix C is attached and represents the consolidated action plan 2017-2026 for all asset categories.

Roads

It is recommended that the Township undertake another road condition rating inspection in 2018 to assess the condition of Township roads and then update the AMP based on this information.

The new Ten Year Priorities for Road Reconstruction in the Action Plan replaces the schedule on Page 13 of the AMP. Priorities have significantly changed over the past three years. The first schedule was simplistic in that the decision to include a road was more subjective in nature. Now, roads have been assessed according to road age, traffic counts, and the road condition rating and roads that would make a good business case for funding programs. Many of the subdivision roads are over 60 years old and the Township needs to address their rehabilitation. As well, some of the roads in the original Ten Year Priority List have low traffic counts so they have been moved down on the list so that roads with higher traffic counts that impact more people will be reconstructed earlier.

Public input into the AMP through petitions and comments has resulted in some of the roads moving up on the priority list.

Signs

The Township expects to purchase a reflectometer in 2018 and signs will be tested on a routine basis and the AMP adjusted accordingly.

Streetlights

It is expected that the Township will implement an LED replacement program in the near future which will assist the replacement of streetlights assets while reducing energy consumption.

Culverts

It is recommended that the Township re-inspect all culverts in 2018 to assess their condition and adjust the AMP based on this information.

Bridges

The bridges are inspected every two years as part of OSIM requirements. There are two bridges that require reconstruction within the next 4 years and they have been included in the Action Plan 2017-2026.

Transportation/Environment Equipment

The new Ten Year Priorities for Road Reconstruction in the Action Plan replaces the schedule on Page 13 of the AMP.

5.0 FINANCIAL STRATEGY

2014-2016 Actions

The Action Plan indicates that the roads and bridges asset groups will be unfunded by almost \$8M over the ten-year period. The provincial and federal infrastructure programs have an important role to play in order for the Township to achieve the AMP goals. Signs, streetlights, culverts

Since the 2013 AMP, the Township has implemented the following tools:

- 1) Implementation of an investment strategy to increase investment income;
- 2) New reserve policy that consolidated old reserves and established designated thresholds;
- 3) Utilization of an online vendor process for disposing of surplus equipment to maximize profit;
- 4) Budget surpluses are put into capital reserves;
- 5) Purchase of second hand gently used equipment rather than buying expensive new equipment;
- 6) Increase of \$20 in the household waste management levy to increase reserves (\$75,000/year) for future capital works, and
- 7) Increased Development Charges fees IN 2014 to better reflect the cost of growth. (increase from \$2,000 to a phase of \$2,500 to \$3,000 by 2019)

Use of Debt & Reserves

By the end of 2016, the Township will be drawing down capital reserves by \$600,000 and incur a \$1.1M debt to pay for the 2016 capital road works. The Township originally planned to reconstruct only two roads, Couatts Bay Road and Drummond Concession 7 however low oil prices and a local depressed construction market resulted in lower tender prices than budgeted. The Township was able to add an extra road and increase the service level by upgrading surface treatment to asphalt hard surface.

Other impacts to the Financial Strategy:

The OCIF permanent funding program will increase from \$25,000 to \$50,000 in 2017-18 and to \$63,000 in 2019. The program now allows the ability to accumulate the funding for up to five years to address larger priority infrastructure projects. This will be helpful as \$25,000 (to increase to \$50,000) is not enough to enable the Township to take on any significant project over \$100,000.

Participation in MFOA Asset Management Training Program

Township staff are participating in MFOA's Asset Management Training Program to develop increased capacity and improve the asset management plan.

6.0 SUMMARY

The accomplishments to date indicate that asset management planning is working for the Township. It provides a road map that directs municipal spending and provides accountability to the taxpayers.



APPENDIX A - ROAD CONDITION RATING

| No. | Road Name | From | To | km | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-----|------------------|--------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0.3 | | | | | | | | | | | | | | |
| 422 | Armstrong Rd | Glenview Rd | Burns Rd | 1.58 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 422 | Armstrong Rd | Burns Rd | Station Rd | 2.23 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 422 | Armstrong Rd | Station Rd | Churchill Rd | 2.1 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 319 | Bernice Cres | County Road 1 E | Sheil Drive | 0.02 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 319 | Bernice Cres | Sheil Drive | Karen Lane | 0.31 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 321 | Bernice Cres | Karen Lane | County Road 1W | 0.69 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 426 | Bracken Ave | Station Rd | Cromwell Cres (N) | 0.29 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 430 | Bracken Ave | Cromwell Cres (N) | Capt.Sherwood Dr | 0.2 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 430 | Bracken Ave | Capt.Sherwood Dr | Cromwell Cres (S) | 0.22 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 430 | Bracken Ave | Cromwell Cres (S) | Western Ave | 0.56 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 430 | Bracken Ave | Western Ave | County Rd 43 | 0.25 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 331 | Burgess Dr | Otty Way | Otty Lake S.R. | 0.15 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 428 | Capt.Sherwood Dr | Bracken Ave | Moores Place | 0.25 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 428 | Capt.Sherwood Dr | Moores Place | Dead End | 0.35 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 413 | Carroll Rd | Buttermilk Hill Rd | Ferguson Tetlock | 2.93 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 413 | Carroll Rd | Ferguson Tetlock | Porter Rd | 0.24 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 413 | Carroll Rd | Porter Rd | Kelly Jordan Rd | 1.38 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 413 | Carroll Rd | Kelly Jordan Rd | Scholtan Rd | 0.25 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 415 | Carroll Rd | Scholtan Rd | Mazie St | 2.79 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 325 | Carson Circle | Poole Dr | Dead End | 0.85 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 434 | Centre Dr | Duncan St | Pine Ave | 0.19 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 312 | Church Ave | Healey Dr | Cul de Sac | 0.6 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 401 | Churchill Rd | County Rd 43 | Armstrong Rd | 1.51 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 401 | Churchill Rd | Armstrong Rd | Dopson Rd | 1.64 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 403 | Churchill Rd | Dopson Rd | Drummond Conc. 1 | 2.06 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 317 | Clifford Cres | County Road 1 | Robert Run | 0.11 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 317 | Clifford Cres | Robert Run | Robert Run | 0.17 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 317 | Clifford Cres | Robert Run | Dead End | 0.25 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 235 | Code Rd | The Old Road | Drummond Conc. 4D | 0.36 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 238 | Code Rd | Tennyson Rd | Drummond Conc. 4D | 0.8 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 245 | Code Rd | The Old Road | Drummond Conc. 5B | 0.95 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 245 | Code Rd | Drummond Conc. 5B | Drummond Conc.6B | 1.44 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 247 | Code Rd | Drummond Conc.6B | Drummond Conc. 7 | 1.18 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 110 | Collings St | Ewart Ave | Wayside Dr | 0.43 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 302 | Coutts Bay Rd | Dead End | Cats Cove | 0.73 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 302 | Coutts Bay Rd | Cats Cove | Westpoint Drive | 0.47 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 302 | Coutts Bay Rd | Westpoint Drive | County Rd 1 | 0.7 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| | Crampton Rd | Hwy # 7 | Boundary | 0.88 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 427 | Cromwell Cres | Bracken Ave (N) | Bracken Ave (S) | 0.66 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 2.7 | 2.4 | 2.1 |
| 407 | Drummond Conc. 1 | County Rd #43 | Spence Rd | 1.07 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 407 | Drummond Conc. 1 | Spence Rd | Moores Rd | 1.17 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 407 | Drummond Conc. 1 | Moores Rd | Ebert Rd | 2.2 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 407 | Drummond Conc. 1 | Ebert Rd | Churchill Rd | 0.84 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 2.7 | 2.4 | 2.1 |
| 407 | Drummond Conc. 1 | Churchhill Rd | Richardson Sd Rd | 2.17 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 410 | Drummond Conc. 1 | Richardson Sd Rd | PIN 485(Old Bunker) | 0.52 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |

APPENDIX A - ROAD CONDITION RATING

| | | | | | | | | | | | | | | |
|-----|--------------------|----------------------|--------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 410 | Drummond Conc. 1 | PIN 485(Old Bunker) | Burns Rd | 1.86 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 410 | Drummond Conc. 1 | Burns Rd | Dead End | 0.33 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 409 | Drummond Conc. 2A | County rd 10 | Dead End | 0.25 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 119 | Drummond Conc. 4A | Cty 511 | Dead End | 0.3 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 124 | Drummond Conc. 5A | Cty 511 | Georgina St | 0.45 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 158 | Drummond Conc. 7 | Cty Rd 511 | Barries Side Rd | 1.38 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 158 | Drummond Conc. 7 | Barries Side Rd | Maple Lane Rd | 0.16 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 158 | Drummond Conc. 7 | Maple Lane Rd | Thompson Sd Rd | 2.13 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 160 | Drummond Conc. 7 | Thompson Sd Rd | Widermaier Rd | 2.41 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 160 | Drummond Conc. 7 | Widermaier Rd | Ebbs Side Road | 1.72 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 160 | Drummond Conc. 7 | Ebbs Side Road | Drummond School Rd | 0.34 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 201 | Drummond Conc. 7 | Drummond School Road | Miller Drive | 0.91 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 223 | Drummond Conc. 7 | Hwy # 7 | Code Rd | 0.04 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 223 | Drummond Conc. 7 | Code Rd | Drummond Conc. 7B | 2.02 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Drummond Conc. 7B | Mallochs Landing | 0.6 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Mallochs Landing | Moss Shore Rd | 0.68 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Moss Shore Rd | Sunsetview Rd | 0.1 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Sunsetview Rd | Hillview Rd | 0.15 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Hillview Rd | Acacia Rd | 0.08 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Acacia Rd | Lakeview Rd | 0.07 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Lakeview Rd | Birchgrove Rd | 0.27 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Birchgrove Rd | Hardwood Lane | 0.1 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Hardwood Lane | Sugarbush Dr | 0.49 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Sugarbush Dr | Sugarbush Dr | 0.01 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Sugarbush Dr | Beck Shore Rd | 0.52 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 225 | Drummond Conc. 7 | Beck Shore Rd | Tennyson Rd | 0.82 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 248 | Drummond Conc. 7 | Hwy # 7 | Miller Drive | 0.15 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 157 | Drummond Conc. 8A | Maple Lane Rd | Curb & Gutter | 1.51 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 157 | Drummond Conc. 8A | Curb & Gutter | County Rd #511 | 0.35 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 101 | Drummond School Rd | Drummond Con 7 | Hwy # 7 | 2.62 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 |
| 114 | Dufferin Rd | Hwy # 7 | Stamford Dr | 0.29 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 116 | Dufferin Rd | Stamford Dr | Sheldon Place | 0.11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 116 | Dufferin Rd | Sheldon Place | Morris Rd S | 0.06 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 118 | Dufferin Rd | Morris Rd S | Morris Rd N | 0.04 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 118 | Dufferin Rd | Morris Rd N | PIN #173 | 0.3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 433 | Duncan St | Pine Ave | Centre Dr | 0.22 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 433 | Duncan St | Centre Dr | Dead End | 0.12 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 208 | Ebbs Bay Rd | Hwy # 7 | Drummond Conc. 11 | 2.41 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 208 | Ebbs Bay Rd | Drummond Conc. 11 | Rothwell Pk Rd | 1.54 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 210 | Ebbs Bay Rd | Rothwell Pk Rd | Drummond Conc. 9B | 1.2 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 212 | Ebbs Bay Rd | Drummond Conc. 9B | Ebbs Bay Dr | 0.14 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 212 | Ebbs Bay Rd | Ebbs Bay Dr | End of Pavement | 0.16 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 212 | Ebbs Bay Rd | End of Pavement | Pretties Island Rd | 1.57 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 404 | Ebert Rd | County Rd 10 | Drummond Conc. 1 | 1.38 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 328 | Elmsley Cres | Otty Way | Rideau Court | 0.49 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 330 | Elmsley Cres | Rideau Court | Burgess Dr | 0.14 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 109 | Ewart Ave | Wayside Dr | Collings St | 0.15 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |

APPENDIX A - ROAD CONDITION RATING

| | | | | | | | | | | | | | | |
|-----|-------------------|-------------------|-------------------|------|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|
| 109 | Ewart Ave | Collings St | Hwy # 7 | 0.18 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 120 | Georgina St | McPherson Way | McPherson Way | 0.77 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 120 | Georgina St | McPherson Way | Drummond Conc. 5A | 0.74 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 417 | Glenview Rd | County Rd 43 | Porter Rd | 2.61 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 419 | Glenview Rd | Porter Rd | Armstrong Rd | 1.68 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 405 | Hands Rd | Tennyson Rd | County Road 10 | 2.46 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 311 | Healey Dr | Thompson Dr | Cul de Sac | 0.2 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 311 | Healey Dr | Thompson Dr | Church Ave | 0.1 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 311 | Healey Dr | Church Ave | Cul de Sac | 0.5 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 207 | Innisville N | Hwy # 7 | Isabella Street | 0.13 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 207 | Innisville N | Isabella Street | Dead End | 0.09 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 206 | Innisville S | Hwy # 7 | Moore Dr | 0.39 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 206 | Innisville S | Moore Dr | McManus Dr | 0.13 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 206 | Innisville S | McManus Dr | Dead End | 0.04 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 207 | Isabella St | Innisville North | Wellington St. | 0.19 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 207 | Isabella St | Wellington St. | Dead End | 0.16 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 345 | Jodi Ln | County Rd 18 | Tayview Dr | 0.21 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 345 | Jodi Ln | Tayview Dr | Point View Ln | 0.24 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 345 | Jodi Ln | Tayview Dr | Dead End | 0.16 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 134 | John's Rd | Highway 511 | Dead End | 0.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 103 | Leachs Rd | Drummond Conc. 5B | Hwy #7 | 0.21 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 241 | Leachs Rd | Tennyson Rd | Drummond Conc. 4C | 0.39 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 243 | Leachs Rd | Drummond Conc. 4C | Hwy # 7 | 1.08 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| SF | Mazie St | Carroll Rd | County Rd 43 | 0.42 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 313 | McLaren Dr | Mile Point Rd | Barr Place | 0.48 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 315 | McLaren Dr | Barr Place | County Rd 1 | 0.14 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 342 | Meadow Ln | County Rd 43 | Dead End | 0.51 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 309 | Mile Point Rd | County Rd 1 | McLaren Rd | 0.51 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 202 | Miller Dr | Drummond Conc. 7 | Hwy # 7 | 1.96 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 429 | Moore's Place | Capt.Sherwood Dr | Dead End | 0.22 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 117 | Morris Rd S | Dufferin Rd | Hwy # 7 | 0.29 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 117 | Morris Rd S | Morris Road S | Dead End | 0.09 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 436 | North Rd | Pine Ave | Dead End | 0.77 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 112 | Oak Ln | Wayside Dr | Dead End | 0.37 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| TV | Otty Lake Sd. Rd. | County Rd. No.10 | Kenyon Road | 4.2 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 332 | Otty Way | Burgess Dr | Whipperwill Dr | 0.88 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 332 | Otty Way | Whipperwill Dr | Darou Dr | 0.07 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 332 | Otty Way | Darou Dr | Elmsley Cres | 0.13 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 332 | Otty Way | Trillium Dr | Elmsley Cres | 0.28 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 432 | Pine Ave | Western Ave | Duncan St | 0.19 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 432 | Pine Ave | County Rd 43 | Duncan St | 0.02 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 435 | Pine Ave | Zaches Lane | Centre Dr | 0.15 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 435 | Pine Ave | Centre Dr | North Rd | 0.12 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 437 | Pine Ave | North Rd | Western Ave | 0.04 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 346 | Point View Dr. | Jodi Ln | Tayview Dr | 0.22 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 346 | Point View Dr. | Tayview Dr | Cul de Sac | 0.15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 324 | Poole Dr | Trillium Dr | Carson Circle | 1.01 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |

APPENDIX A - ROAD CONDITION RATING

| | | | | | | | | | | | | | | |
|-----|------------------|-----------------------|-----------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 326 | Poole Dr | Carson Circle | Trillium Dr | 0.19 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 416 | Poonamalie Rd | County Rd 43 | PIN 712 | 1.53 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 154 | Prestonvale Rd | Ferguson's Falls Rd | Baptist Church Rd | 1.16 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 154 | Prestonvale Rd | Baptist Church Rd | Drummond Conc. 10A | 0.73 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 156 | Prestonvale Rd | Drummond Conc. 10A | Drummond Conc. 9A | 2.82 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 156 | Prestonvale Rd | Drummond Conc. 9A | Dunlop Side Rd | 1.18 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 156 | Prestonvale Rd | Dunlop Side Rd | Drummond Conc. 8A | 1.55 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 408 | Richardson Sd Rd | Drummond Conc. 1 | County Road 10 | 1.39 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 106 | Richmonds Rd | Drummond Conc. 5B | Drummond Conc. 4B | 1.43 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 106 | Richmonds Rd | Drummond Conc. 4B | Hwy #7 | 0.11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 329 | Rideau Ct | Elmsley Cres | Dead End | 0.18 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 318 | Robert Run | Clifford Cres | Clifford Cres | 0.96 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 344 | Sherwood St | County Road 18 | Dead End | 0.11 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 334 | South St | County Rd 1 | Sherbrook St | 0.43 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 334 | South St | Sherbrook St | Dead End | 0.19 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 115 | Stamford Dr | Dufferin Rd | Dead End | 0.36 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 425 | Station Rd | Stone Rd | Bracken Ave | 0.68 | 6.8 | 6.5 | 6.2 | 5.9 | 5.6 | 5.3 | 5 | 4.7 | 4.4 | 4.1 |
| 425 | Station Rd | County Rd 43 | Bracken Ave | 0.91 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 | 6.7 | 6.4 | 6.1 |
| 121 | Street "A" | Georgina St | Street "B" | 0.24 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 123 | Street "A" | Street "B" | Drummond Conc. 4A | 0.39 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 122 | Street "B" | Street "A" | Cty 511 | 0.23 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 347 | Tayview Dr | Point View Ln | Jodi Ln | 0.27 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 226 | Tennyson Rd | Drummond Conc. 7 | Coleman Rd | 1.31 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 226 | Tennyson Rd | Coleman Rd | Shail Rd | 0.27 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 228 | Tennyson Rd | Shail Rd | Jerico Rd | 1.08 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 229 | Tennyson Rd | Drummond Conc. 7 | Moulton Rd | 0.51 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 229 | Tennyson Rd | Moulton Rd | Drummond Conc. 5B | 1.7 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 233 | Tennyson Rd | Drummond Conc. 5B | Drummond Conc. 4D | 1.84 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 237 | Tennyson Rd | Drummond Conc. 4D | Code Rd - McPhails Rd | 1.87 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 240 | Tennyson Rd | Code Rd - McPhails Rd | Hands Rd - Leach's Rd | 3.35 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 240 | Tennyson Rd | Hands Rd - Leach's Rd | Hwy # 7 | 2.18 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| BT | Tennyson Rd | Jericho Rd | Craigs Ln | 0.69 | 5.8 | 5.5 | 5.2 | 4.9 | 4.6 | 4.3 | 4 | 3.7 | 3.4 | 3.1 |
| 327 | Trillium Dr | Poole Dr | Otty Way | 0.15 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| 333 | Trillium Dr | Otty Way | Poole Dr | 0.59 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 333 | Trillium Dr | Poole Dr | Otty Lake S.R. | 0.13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 111 | Wayside Dr | Hwy # 7 | Collings St | 0.22 | 3 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 111 | Wayside Dr | Collings St | Hudson Rd | 0.18 | 3 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 111 | Wayside Dr | Hudson Rd | Ewart Ave | 0.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2.7 | 2.4 | 2.1 |
| 111 | Wayside Dr | Ewart Ave | Oak Ln | 0.18 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2.7 | 2.4 | 2.1 |
| 113 | Wayside Dr | Oak Ln | Hwy # 7 | 0.59 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2.7 | 2.4 | 2.1 |
| 431 | Western Ave | Bracken Ave | Pine Ave | 0.52 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2.7 | 2.4 | 2.1 |
| 301 | Westpoint Drive | Coutts Bay Rd | Dead End | 1.23 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 |
| 203 | Westshore Dr | Hwy # 7 | Island View Dr | 1.09 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.4 | 7.1 | 6.8 | 6.5 |
| 203 | Westshore Dr | Island View Dr | McCreary' Beach Rd | 0.1 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.4 | 7.1 | 6.8 | 6.5 |
| 323 | Wild Life Rd | County Road 1 | Perth Landfill Gate | 0.53 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 323 | Wild Life Rd | Perth Landfill Gate | Otty Lake S.R | 1.61 | 9.7 | 9.4 | 9.1 | 8.8 | 8.5 | 8.2 | 7.9 | 7.6 | 7.3 | 7 |
| 305 | Yacht Club Rd | County Rd 1 | Manor Way | 0.5 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

APPENDIX A - ROAD CONDITION RATING

| | | | | | | | | | | | | | | |
|-----------------------------------|---------------|---------------|---------------|--------|--------|--------|--------|--------|-------|-------|-------|------|-------|------|
| 305 | Yacht Club Rd | Manor Way | Stone Edge Ln | 0.01 | 3.8 | 3.5 | 3.2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 305 | Yacht Club Rd | Stone Edge Ln | Dead End | 0.62 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3 | 3 | 3 | 3 |
| TOTAL | | | | 140.25 | 1183.7 | 1143.8 | 1094.3 | 1045.9 | 999.7 | 953.5 | 907.5 | 870 | 832.5 | 795 |
| WEIGHTED AVERAGE CONDITION RATING | | | | | | | | | | | | | | |
| AVERAGE RATING | | | | | 8.44 | 8.16 | 7.80 | 7.13 | 7.13 | 6.80 | 6.47 | 0.69 | 0.68 | 0.68 |

7.0 CAPITAL PROGRAM

The recommended Ten Year Capital Plan and estimated cost for enhanced OSIM Inspections are presented in Table 7.1 and 7.2, respectively. Estimates include engineering and contingencies, but do not include taxes. Estimates are in 2015 Dollars and it is therefore important to add appropriate construction inflation each year when budgeting.

Table 7.1: Capital Work Program (\$1,000s)

| No. | Description | Urgency (yrs.) | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|------------------------|----------------------------------|----------------|-------|-------|-----|------|-----|-----|------|-------|-----|------|
| 15-107 | Armstrong Road | | | | | | | | | | | |
| | • Detailed deck condition survey | 1 year | 15 | | | | | | | | | |
| | • Reinforce Beams | 1 year | 50 | | | | | | | | | |
| | • Replacement | | | | | | | | | | | |
| | - Design | 1 to 5 | 40 | | | | | | | | | |
| | - Construction and CA | 1 to 5 | 700 | | | | | | | | | |
| 15-108 | Buttermilk Hill Road | | | | | | | | | | | |
| | • Replacement | | | | | | | | | | | |
| | - Design | 1 to 5 | | 40 | | | | | | | | |
| | - Construction and CA | 1 to 5 | | 700 | | | | | | | | |
| C15-A08 | Maple Lane Road | | | | | | | | | | | |
| | • Replacement | | | | | | | | | | | |
| | - Design | 6 to 10 | | | | | | | 30 | | | |
| | - Construction and CA | 6 to 10 | | | | | | | | 350 | | |
| Enhanced OSIM | | | 1.75 | | | 1.75 | | | 1.75 | | | 1.75 |
| OSIM Inspection | | | 1 | 3.6 | 1 | 5.2 | 1 | 3.6 | 1 | 5.2 | 1 | 3.2 |
| Total | | | \$808 | \$743 | \$1 | \$7 | \$1 | \$4 | \$33 | \$355 | \$1 | \$5 |

8.0 CLOSURE

This report has been prepared by MPCE exclusively for the Township of Drummond/North Elmsley. The investigation undertaken by MPCE with respect to this report and any conclusions or recommendations made in

APPENDIX C

ASSET MANAGEMENT ACTION PLAN 2017-2026

Revised: September 16, 2016

| DESCRIPTION | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|--|--------------------|------------------|------------------|------------|------------------|------------------|------------------|------------|------------|------------------|
| VEHICLES/EQUIPMENT | | | | | | | | | | |
| Large Trucks 15-20 years | | | | | | | | | | |
| 2015 International Sander/Plow Truck | | | | | | | | | | |
| 2006 International 7600 Tandem Plow Truck | | | | \$210,000 | | | | | | |
| 2008 International 7600 Tandem Plow Truck | | | | | | \$210,000 | | | | |
| 2011 International 7600 Tandem Plow Truck | | | | | | | | | | \$210,000 |
| Small Trucks 10 years | | | | | | | | | | |
| 2008 Ford E350 Cube Van (former ambulance) | | | | | | \$6,000 | | | | |
| 2016 GMC 3/4 ton Pick-Up Truck (Cold Patching) | | | | | | | | | | \$45,000 |
| 2016 GMC 3/4 Ton Pick-Up Truck (Shawn J) | | | | | | | | | | \$45,000 |
| 2007 Chev Ext Cab 4X4 Pick-Up Truck (CBO) | \$35,000 | | | | | | | | | |
| 2008 Chevrolet 1/2 ton 4X4 Pick-Up Truck (Scott) | | \$35,000 | | | | | | | | |
| Heavy Equipment 20-25 years | | | | | | | | | | |
| 2013 Volvo G9060B Grader | | | | | | | | | | |
| Volvo G740 Grader (2002) | | | | | | | | | | |
| Case loader/Backhoe/Extendahoe (1999) | | | \$105,000 | | | | | | | |
| Dresser Rubber Tire Loader (1988) | | | | | | \$100,000 | | | | |
| CASE 721E Wheeled Loader (2011) | | | | | | | | | | |
| Kubota 4 Wheel Drive Tractor | \$100,000 | | | | \$100,000 | | | | | |
| Accessory Equipment | | | | | | | | | | |
| Kubota Diesel Chipper | | \$28,000 | | | | | | | | |
| Water Tank (Stainless Steel) | | | | | | | | | | |
| Water Tank (Stainless Steel) | | | | | | | | | | |
| Brush Cutting Unit | \$30,000 | | | | | | | | | |
| Rock Drill Compressor 2013 | | | | | | | | | | |
| Grader Mounted Roller Packer | | | | | | | | | | |
| Grader Mounted Roller Packer | | \$30,000 | | | | | | | | |
| Other | | | | | | | | | | |
| 35 KW Generator | | | | | | | \$30,000 | | | |
| Reflectometer | | \$10,000 | | | | | | | | |
| Emergency/Detour Equip Trailer | \$10,000 | | | | | | | | | |
| SUB-TOTAL | \$175,000 | \$103,000 | \$105,000 | \$0 | \$310,000 | \$106,000 | \$240,000 | \$0 | \$0 | \$300,000 |
| BRIDGES | | | | | | | | | | |
| Armstrong Road (2015-2020 window) | \$1,000,000 | | | | | | | | | |
| Buttermilk Hill Road (2015-2020 window) | | | \$740,000 | | | | | | | |
| Maple Lane | | | | | | \$30,000 | \$350,000 | | | |
| SUB-TOTAL | \$1,000,000 | \$0 | \$740,000 | \$0 | \$0 | \$30,000 | \$350,000 | \$0 | \$0 | \$0 |

APPENDIX C

| DESCRIPTION | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|------------------|------------------|------------------|------------------|--------------------|------------------|------------------|--------------------|--------------------|--------------------|
| ROADS - RECONSTRUCTION | | | | | | | | | | |
| West Shore Drive (1.2 km) | | | | | | | | | | |
| Drummond School Road (2.62 km) | | | | | | | | | | |
| Coutts Bay Road (1.9 km) | | | | | | | | | | |
| 7th Con Drummond (3.8 km) | | | | | | | | | | |
| Wildlife Road (1.73 km) | | | | | | | | | | |
| Wayside Drive (1.35 km) | | | | \$450,000 | | | | | | |
| Tennyson Road (14.8 km) | \$50,000 | \$100,000 | \$500,000 | | | \$500,000 | \$500,000 | | | \$500,000 |
| Otty Lake Road (2.1 km) | \$420,000 | | | | | | | | | |
| Widenmaier Corner Reconstruction | | | | \$40,000 | | | | | | |
| Poonamalie (3.09 km) | | | | | \$1,200,000 | | | | | |
| Richmond's Road/Conc 5B (2.93 km) | | | | | | | | \$1,200,000 | | |
| Miller Drive (2 km) | | | | | | | | | \$800,000 | |
| Bay Street Alignment | | | \$60,000 | | | | | | | |
| Burn's Road (3.31 km) | | | | | | | | | \$1,500,000 | |
| Rideau Lake Road (1 km) | | | | | | \$400,000 | | | | |
| Porter Road (1.6 km) | | | | | | | | | \$650,000 | |
| SUB-TOTAL | \$470,000 | \$100,000 | \$560,000 | \$490,000 | \$1,200,000 | \$900,000 | \$500,000 | \$1,200,000 | \$2,950,000 | \$500,000 |
| ROADS -SURFACE / RESURFACE TREATMENT | | | | | | | | | | |
| Ebert Road (1.38 km) | | | | | | | | | \$60,000 | \$60,000 |
| MacPhail's Road (1.58 km) | | | \$60,000 | \$60,000 | | | | | | |
| Portions of Prestonvale Road | | | | | \$50,000 | \$60,000 | \$60,000 | \$60,000 | | |
| SUB-TOTAL | \$0 | \$0 | \$60,000 | \$60,000 | \$50,000 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | |
| ROADS - SUBDIVISIONS RECONSTRUCTION | | | | | | | | | | |
| Scott Subdivision: | | | | | | | | | | |
| - Dufferin Road (.8 km) | | \$300,000 | | | | | | | | |
| - Stamford Road (.36 km) | | \$100,000 | | | | | | | | |
| Pine Arbour Subdivision: | | | | | | | | | | |
| - Pine Avenue (.52 km) | | | \$200,000 | | | | | | | |
| - Duncan Street (.34 km) | | | | \$136,000 | | | | | | |
| - Centre Drive (.19 km) | | | | | \$76,000 | | | | | |
| - Western Avenue (.52 km) | | | | | | \$208,000 | | | | |
| - North Road (.77 km) | | | | | | | \$308,000 | | | |
| Trillium Estates: | | | | | | | | | | |
| - Carson Court (.85 km) | | | | | | | | | | \$340,000 |
| - Poole Drive (1.2 km) | | | | | | | | | | \$480,000 |
| - Trillium Drive (.59 km) | | | | | | | | | | \$236,000 |
| Tay Rideau Estates: | | | | | | | | | | |
| - Jodi Lane (.61 km) | | | | | | | | \$244,000 | | |
| - Tayview Drive(.27 km) | | | | | | | | \$108,000 | | |
| - Pointview Drive (.37 km) | | | | | | | | \$148,000 | | |
| SUB-TOTAL | \$0 | \$400,000 | \$200,000 | \$136,000 | \$76,000 | \$208,000 | \$308,000 | \$500,000 | \$0 | \$1,056,000 |

APPENDIX C

| DESCRIPTION | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|------------------|-----------------|------------------|-----------------|-----------------|------------|-----------------|------------------|------------|--------------------|
| ENVIRONMENTAL CAPITAL PROGRAM | | | | | | | | | | |
| 1990 Rear Packer Garbage Truck (used) | | | | \$20,000 | | | | | | |
| 1996 Ford Tandem Sander/Plow Truck Waste Site | | | | | \$50,000 | | | | | |
| 2008 John Deere 605C Track Loader | | | | | | | | | | |
| Dynapac waste compactor (1980) | \$150,000 | | | | | | | | | |
| Weigh Scales (replace in 2028) | | | | | | | | | | |
| Landfill Closure (8-11 years) | | | | | | | | | | \$1,235,000 |
| Re-Use Centre | | | | | | | \$21,600 | | | |
| Phase 2 Opening | | | | | | | | \$200,000 | | |
| Landfill Garage | | \$18,700 | | | | | | | | |
| Landfill Trailer (+2031) | | | | | | | | | | |
| Buffer Property purchase | | | \$400,000 | | | | | | | |
| SUB-TOTAL | \$150,000 | \$18,700 | \$400,000 | \$20,000 | \$50,000 | \$0 | \$21,600 | \$200,000 | \$0 | \$1,235,000 |

APPROVED BY COUNCIL
 RESOLUTION NO. 16-109
 October 11, 2016