



# FIVE YEAR ASPHALT PLAN

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2024 – 2028



## PURPOSE AND BACKGROUND

This plan represents the second cycle of the five-year Asphalt Plan for the Township. The same can be said for this plan as for the five-year Surface Treatment Plan in that these plans are invaluable when it comes to budget forecasts, long term planning, and capital project scheduling. These plans give the Township direction with respect to current and future road needs.

This plan will also ensure compliance with O.Reg 588/17 and the requirement to develop an Asset Management Plan (AMP) for all Core Municipal Infrastructure Assets, and is compliant with the deadlines defined in the regulation. This plan will form part of the overall AMP.

The Township's 2021 Roads Needs Study (RNS) along with site inspections of the asphalt road segments provided the basis for the recommendations laid out in this Plan.

This five-year cycle will focus on maintenance and preventative measures in order to mitigate pre-mature degradation of road surfaces, and to improve the Pavement Condition Index (PCI) of each road segment, as well as some reconstruction needs. It will also ensure that the life-cycle of these assets is being maximized by implementing a maintenance program. Some road surfaces within road segments considered to be at the end of their life cycle will be reconstructed within the term of this five-year plan. Once reconstruction has been completed it will reset the life cycle for the surface of that road segment. The life cycle of an asphalt road typically has a duration of 20-25 years. During that term maintenance should be completed every 5-7 years as needed in order to maximize the life span. This is based on the assumption that the road base is in good condition and that there are no drainage issues.

The allocation of funds will be presented in the budget year that the work is expected to be completed.



Where we are  
& WHY

# 2024 ASPHALT PLAN

The 2024 Asphalt Plan will include maintenance layers and a reconstruction project. These road segments were identified in the 2021 RNS as either in need of reconstruction or resurfacing either 'Now' or in '1-5 years'.

## DD/AN Boundary - County Rd 40 to Asphodel 11th Line (2.75 km)

- Repair surface defects as needed
- Replace cross culverts as needed
- Add 5/8" Granular M supplied from the Township Sand Road Pit to correct shoulders damaged from washouts
- Costs for surface repairs, culvert replacement, and shoulder restoration will be funded with a 50/50 cost share with the Township of Douro-Dummer. This will be dependent on budget approval from both Townships
- Complete a Maintenance Layer

Estimated cost is **\$140,000.00**.

50/50 Cost share with the Township of Douro-Dummer is equal to **\$70,000.00** for both Asphodel-Norwood and Douro-Dummer, dependent on budget approval from both Townships.

## Wellington Street - County Rd 40 to Dead End (0.11 km)

- Engineering design required for full reconstruction
- Remove and replace existing asphalt
- Drainage improvements including curb and gutter
- Replace road base granulars supplied from the Township Sand Road Pit

Estimated cost is **\$53,000.00**.

The table on the following page is a list of road segments along with estimated costs to have the following work completed:

- Repair any surface defects
- Maintenance Layer

# 2024 ASPHALT PLAN CONTINUED

Road Segment	From	To	Work Type	Length (km)	Estimated cost
Elm St	Queen St	King St	Maintenance Layer	0.10	\$1,300.00
Elm St	King St	0.1KM E. of King St	Maintenance Layer	0.10	\$1,300.00
Belmont St	Hwy 7	Hwy 7	Maintenance Layer	0.21	\$2,730.00
King St	Flora St	Alma St	Maintenance Layer	0.16	\$2,288.00
King St	Alma St	Elm St	Maintenance Layer	0.18	\$2,574.00
King St	Elm St	Cedar St	Maintenance Layer	0.18	\$2,574.00
King St	Cedar St	Mill St	Maintenance Layer	0.27	\$3,861.00
Spring St	Oak St	Pine St	Maintenance Layer	0.21	\$2,310.00
Spring St	Pine St	CTY Rd 45	Maintenance Layer	0.27	\$2,970.00
Oak St	Hwy 7	Spring St	Maintenance Layer	0.14	\$1,540.00
Pine St	Hwy 7	Spring St	Maintenance Layer	0.14	\$1,540.00
Flora St	Queen St	King St	Maintenance Layer	0.10	\$1,300.00
Flora St	King St	Dead End	Maintenance Layer	0.22	\$2,860.00
Pine St	Hwy 7	Ridge St	Maintenance Layer	0.08	\$960.00
Pine St	Ridge St	Robert Rd	Maintenance Layer	0.12	\$1,200.00
Robert Rd	Pine St	Dead End	Maintenance Layer	0.24	\$3,216.00
Murray St	Robert Rd	Dead End	Maintenance Layer	0.25	\$3,350.00
Asp 11th Line	Hwy 7	DD/AN Boundary Rd	Maintenance Layer	0.15	\$8,168.00
Total Estimate					\$46,041.00

The total estimated cost to complete asphalt maintenance in **2024** is **\$169,041.00** for **5.98 km** of road.

# 2025 ASPHALT PLAN

The 2025 Asphalt Plan will include completing maintenance layers to existing asphalt roads.

The following table is a list of road segments along with estimated costs to have the following work completed:

- Repair any surface defects
- Complete a Maintenance Layer

Road Segment	From	To	Work Type	Length (km)	Estimated cost
Helen St	Charles St	Millpond Lane	Maintenance Layer	0.08	\$1,512.00
Helen St	Millpond Lane	Millpond Lane	Maintenance Layer	0.15	\$2,835.00
Helen St	Millpond Lane	Albine St	Maintenance Layer	0.05	\$945.00
Millpond Lane	Helen St (S. End)	Darrell Drain Cres	Maintenance Layer	0.15	\$2,835.00
Millpond Lane	Darrell Drain Cres	Darrell Drain Cres	Maintenance Layer	0.15	\$2,835.00
Millpond Lane	Darrell Drain Cres	Helen St (N. End)	Maintenance Layer	0.15	\$2,835.00
Darrell Drain Cres	Millpond Lane	Noah Lane	Maintenance Layer	0.10	\$1,890.00
Darrell Drain Cres	Noah Lane	Ethan Lane	Maintenance Layer	0.10	\$1,890.00
Darrell Drain Cres	Ethan Lane	Ethan Lane	Maintenance Layer	0.32	\$6,048.00
Darrell Drain Cres	Ethan Lane	Noah Lane	Maintenance Layer	0.10	\$1,890.00
Darrell Drain Cres	Noah Lane	Millpond Lane	Maintenance Layer	0.10	\$1,890.00
Noah Lane	Darrell Drain Cres	Darrell Drain Cres	Maintenance Layer	0.15	\$2,835.00
Ethan Lane	Darrell Drain Cres	Darrell Drain Cres	Maintenance Layer	0.15	\$2,835.00
Helen St	CTY Rd 40	Charles St	Maintenance Layer	0.30	\$5,355.00
Albine St	CTY Rd 40	Helen St	Maintenance Layer	0.16	\$2,688.00
Total Estimate					<b>\$41,118.00</b>

The total estimated cost to complete asphalt maintenance in **2025** is **\$41,118.00** for **2.21 km** of road.



# 2026 ASPHALT PLAN

The 2026 Asphalt Plan will include completing maintenance layers to existing asphalt roads.

The following table is a list of road segments along with estimated costs to have the following work completed:

- Repair any surface defects
- Complete a Maintenance Layer

Road Segment	From	To	Work Type	Length (km)	Estimated cost
Centre Line Rd	CTY Rd 45	Asphodel 8th Line	Maintenance Layer	1.4	\$21,560.00
Centre Line Rd	Asphodel 8th Line	Asphodel 7th Line	Maintenance Layer	1.4	\$21,560.00
Centre Line Rd	Asphodel 7th Line	Asphodel 6th Line	Maintenance Layer	1.4	\$21,560.00
Total Estimate					<b>\$64,680.00</b>



The total estimated cost to complete asphalt maintenance in **2026** is **\$64,680.00** for **4.20 km** of road.



# 2027 ASPHALT PLAN

The 2027 Asphalt Plan will include completing maintenance layers to existing asphalt roads.

The following table is a list of road segments along with estimated costs to have the following work completed:

- Repair any surface defects
- Complete a Maintenance Layer

Road Segment	From	To	Work Type	Length (km)	Estimated cost
Centre Line Rd	Asphodel 6th Line	Asphodel 5th Line	Maintenance Layer	1.3	\$21,021.00
Centre Line Rd	Asphodel 5th Line	Asphodel 4th Line	Maintenance Layer	1.3	\$21,021.00
Total Estimate					<b>\$42,042.00</b>

The total estimated cost to complete asphalt maintenance in **2027** is **\$42,042.00** for **2.60 km** of road.





# 2028 ASPHALT PLAN

The 2028 Asphalt Plan will include completing maintenance layers to existing asphalt roads.

The following table is a list of road segments along with estimated costs to have the following work completed:

- Repair any surface defects
- Complete a Maintenance Layer

Road Segment	From	To	Work Type	Length (km)	Estimated cost
Centre Line Rd	Asphodel 4th Line	Asphodel 3rd Line	Maintenance Layer	1.4	\$23,814.00
Ridge St	Pine St	Dead End	Maintenance Layer	0.14	\$2,109.00
Charles St	Helen St	Margaret St	Maintenance Layer	0.05	\$729.00
Margaret St	Charles St	CTY Rd 40	Maintenance Layer	0.14	\$2,041.00
Total Estimate					<b>\$28,693.00</b>

The total estimated cost to complete asphalt maintenance in **2028** is **\$28,693.00** for **1.73 km** of road.





# PLAN SUMMARY

Based on recommendations from the RNS and Township Staff, the 2024-2028 five-year Asphalt Plan is summarized as follows:

Year	Estimated Cost	Length (km)
2024	\$169,041.00	5.98
2025	\$41,118.00	2.21
2026	\$64,680.00	4.20
2027	\$42,042.00	2.60
2028	\$28,693.00	1.73
Total	<b>\$345,574.00</b>	<b>16.72</b>

It is recommended that this plan be adopted and implemented to ensure that the Township is compliant with maintaining levels of service as mandated by current legislation.

The total estimated investment cost to implement this five-year plan is **\$345,574.00** for **16.72 km** of road maintenance.



## Five year Plan SUMMARY

## APPENDIX

<b>Township of Asphodel-Norwood Asphalt Road Inventory</b>			
Road Segment	From	To	Length (km)
Albine St	CTY Rd 40	Helen St	0.16
Albine St	Helen St	Keeler Crt	0.35
Alma St	King St	CTY Rd 42	1.05
Alma St	CTY Rd 45	King St	0.25
Asphodel 11th Line	Hwy 7	DD/AN Boundary Rd	0.15
Asphodel 7th Line	Hwy 7	Sand Rd	0.64
Asphodel 8th Line	Hwy 7	2.6KM N. of Centre Line Rd	0.62
Baker St	CTY Rd 45	Dead End	0.42
Belmont St	Hwy 7	Hwy 7	0.21
Birch St	CTY Rd 45	Spruce St	0.30
Birch St	Spruce St	Maple Ave	0.35
Bradley Lane	Keeler Crt	Maryann Lane	0.15
Cedar St	Queen St	King St	0.10
Cedar St	Hwy 7	Queen St	0.25
Centre Line Rd	CTY Rd 45	Asphodel 8th Line	1.40
Centre Line Rd	Asphodel 8th Line	Asphodel 7th Line	1.40
Centre Line Rd	Asphodel 7th Line	Asphodel 6th Line	1.40
Centre Line Rd	Asphodel 6th Line	Asphodel 5th Line	1.30
Centre Line Rd	Asphodel 5th Line	Asphodel 4th Line	1.30
Centre Line Rd	Asphodel 4th Line	Asphodel 3rd Line	1.40
Centre Line Rd	Asphodel 3rd Line	CTY Rd 38	1.30
Charles St	Helen St	Margaret St	0.05
Darrell Drain Crescent	Millpond Lane	Noah Lane	0.10
Darrell Drain Crescent	Noah Lane	Ethan Lane	0.10
Darrell Drain Crescent	Ethan Lane	Ethan Lane	0.32
Darrell Drain Crescent	Ethan Lane	Noah Lane	0.10
Darrell Drain Crescent	Noah Lane	Millpond Lane	0.10
DD/AN Boundary Rd	CTY Rd 40	Asphodel 11th Line	2.75
Elm St	Queen St	King St	0.10

Continued

## APPENDIX

<b>Township of Asphodel-Norwood Asphalt Road Inventory Continued</b>			
Road Segment	From	To	Length (km)
Elm St	King St	0.1KM E. of King St	0.10
Ethan Lane	Darrell Drain Cres	Darrell Drain Cres	0.15
Flora St	Queen St	King St	0.10
Flora St	King St	Dead End	0.22
Helen St	Charles St	Millpond Lane	0.08
Helen St	Millpond Lane	Millpond Lane	0.15
Helen St	Millpond Lane	Albine St	0.05
Helen St	CTY Rd 40	Charles St	0.30
Keeler Crt	Albine St	Maryanne Lane	0.10
Keeler Crt	Maryann Lane	Bradley Lane	0.20
Keeler Crt	Bradley Lane	Oliver Lane	0.10
Keeler Crt	Oliver Lane	Dead End	0.16
King St	Flora St	Alma St	0.16
King St	Alma St	Elm St	0.18
King St	Elm St	Cedar St	0.18
King St	Cedar St	Mill St	0.27
Maple Ave	Birch St	Spruce St	0.44
Maple Ave	Spruce St	Dead End	0.12
Margaret St	Charles St	CTY Rd 40	0.14
Maryann Lane	Albine St	Oliver Lane	0.20
Maryann Lane	Oliver Lane	Bradley Lane	0.10
Maryann Lane	Bradley Lane	Keeler Crt	0.10
Mill St	Hwy 7	0.1KM E. of Hwy 7	0.10
Mill St	0.1KM E. of Hwy 7	King St	0.27
Mill St	King St	Asphodel 10th Line	0.95
Millpond Lane	Helen St (S. End)	Darrell Drain Cres	0.15
Millpond Lane	Darrell Drain Cres	Darrell Drain Cres	0.15
Millpond Lane	Darrell Drain Cres	Helen St (N. End)	0.15
Mt Carmel Cemetery Rd	CTY Rd 45	Dead End	0.25

Continued



## APPENDIX

Township of Asphodel-Norwood Asphalt Road Inventory Continued			
Road Segment	From	To	Length (km)
Murray St	Robert Rd	Dead End	0.25
Noah Lane	Darrell Drain Cres	Darrell Drain Cres	0.15
Oak St	Hwy 7	Spring St	0.14
Oliver Lane	Keeler Crt	Maryann Lane	0.15
Pine St	Hwy 7	Spring St	0.14
Pine St	Hwy 7	Ridge St	0.08
Pine St	Ridge St	Robert Rd	0.12
Queen St	CTY Rd 45	Alma St	0.20
Queen St	Alma St	Elm St	0.18
Queen St	Elm St	Cedar St	0.18
Queen St	Cedar St	Mill St	0.27
Ridge St	Pine St	Dead End	0.14
Ridge St	Pine St	CTY Rd 40	0.28
Robert Rd	Pine St	Dead End	0.24
Spring St	Oak St	Pine St	0.21
Spring St	Pine St	CTY Rd 45	0.27
Spruce St	Birch St	Maple Ave	0.12
Wellington St	CTY Rd 40	Dead End	0.11
Wellington St	CTY Rd 40	Hwy 7	0.26

TOTAL LENGTH

27.23KM

The current replacement value of these assets is estimated at **\$6,537,923.00**.