



Economic and Development Services Department

Date: December 20, 2022 File: 03-05
To: Mayor Carter and Members of Council
From: Warren Munro, HBA, RPP, Commissioner
Economic and Development Services
Re: Reconstruction Costs for Roselawn Avenue, Bickle Drive and Winifred Avenue

1.0 Purpose

On September 26 2022, City Council considered the following Recommendation from DS-22-194 – Investigation of Cost to Reconstruct Roselawn Avenue, Winifred Avenue and Bickle Drive (Ward 2) and referred it to Engineering Services staff for a report back at the time of the 2023 Budget deliberations:

“Whereas, Thornton Road North is an important road in Oshawa, connecting the Highway 407 East with the Northwood Business Park and areas of Oshawa further south; and,

Whereas the Region of Durham has agreed to extend water and sanitary sewer services along Thornton Road North concurrent with the reconstruction of Thornton Road North; and,

Whereas, some residents who reside in the Bickle Drive Subdivision (i.e. Roselawn Avenue, Winifred Avenue and Bickle Drive), have been experiencing water quality, and water quantity issues; and, Whereas, the cost to reconstruct Roselawn Avenue, Winifred Avenue and Bickle Drive, including installation of regional water and sewer services, is currently unknown,

Therefore be it resolved, that Development Services staff report to City Council through the 2023 budget deliberations on the estimated cost for reconstruction of Roselawn Avenue, Winifred Avenue and Bickle Drive, including estimates from the Region for regional services, and associated project timelines”.

The purpose of this Memorandum is to provide the information requested by DS-22-194.

2.0 Input From Other Sources

The following have been consulted in the preparation of this Memorandum:

- Commissioner, Community and Operations Services
- Region of Durham

3.0 Analysis

3.1 Background

There are five road sections associated with Roselawn Avenue, Winifred Avenue and Bickle Drive as detailed below in Table 1:

Table 1: Road Section Location and Rating

Road Section Number	Street Name	From	To	Pavement Condition Rating
930600	Bickle Drive	123 metres (403.5 ft.) west of Winifred Avenue	Winifred Avenue	75
930610	Bickle Drive	Winifred Avenue	Thornton Road North	75
937300	Roselawn Avenue	123 metres (103.5 ft.) west of Winifred Avenue	Winifred Avenue	75
937310	Roselawn Avenue	Winifred Avenue	Thornton Road North	75
939200	Winifred Avenue	Bickle Drive	Roselawn Avenue	75

The City applies a systematic processes that facilitates decision-making in regards to the construction, acquisition, operation, maintenance, renewal, replacement, and disposition of assets in the most cost-effective manner. The process takes into consideration whole life costs, climate change and adaptation, and risk and is reflected in Table 2 below.

Table 2: Oshawa Road Ratings and Strategies

Pavement Condition Rating	Structural Adequacy	Strategy	Description
80-100	16-20	Preventative	The roads are functioning as intended. Limited, if any, deterioration observed.
60-79	12-15	Restorative	The roads are functioning as intended. Normal deterioration and minor distress observed. Maintenance will be required within the next 5 years to maintain functionality.
40-59	08-11	Rehabilitative	The roads are starting to not function as intended. Significant distress observed. Maintenance and some repair required within the next few years to restore functionality.
0-39	1-7	Reconstruction	The roads are not functioning as intended. Significant deterioration and major distress observed, with possible damage to the base. Requires immediate attention.

Based on current road conditions, maintenance demands and infrastructure risk there are no restorative, rehabilitative or replacement roadwork forecasted at this time. All five roads are currently rated 75. According to Table 2, this means, the roads are functioning as intended and limited, if any, deterioration was observed

If the Region proceeds with servicing, the City may perform road improvements at the same time and coordinate the work with the Region's work.

These road sections had major rehabilitation work to a full rural standard in 2012 with significant open ditching for drainage. This work cost \$385,000 and there is an estimated remaining service life of 10 years.

3.2 Current Operations and Maintenance Program

There are no unusual demands with Roselawn Avenue, Winifred Avenue and Bickle Drive area. Road Operations have performed spray patch treatment on the shoulders and road edge, which is common on rural roads.

3.3 Current Infrastructure Program

Currently Roselawn Avenue, Winifred Avenue and Bickle Drive area are in good condition as detailed by the Pavement Condition Rating of 75 (see Table 1). Preventative work was anticipated in 2023 to maintain the road condition (slurry seal) but was delayed due to conflicts with adjacent infrastructure work on Thornton Road North.

Engineering staff inspect city roads for condition assessments every 3 years. These road sections were last inspected in 2020.

Cost estimates for reconstruction of Roselawn Avenue, Winifred Avenue and Bickle Drive area not including Regional infrastructure are as follows:

- Urbanize, with Stormsewer and Sidewalk \$4,061,161;
- Urbanize, with Sidewalk and no Storm \$2,752,489;
- Urbanize, no Stormsewer and no Sidewalk \$2,535,488; and,
- Rural Reconstruction (expanded asphalt), \$1,284,292.

3.4 Regional Infrastructure Program

Region of Durham have a policy for servicing which lays out what triggers servicing and how cost sharing is addressed.

Since the local residents were advised on the costs to service their homes with municipal water already, the Region will not share the details of their estimates with city staff as it is deemed confidential.

Based on current practices the current road condition would not prompt City participation, and the Region would restore the current road design. The existing rural roadside environment, particularly the depth of the ditches it is anticipated depth of Regional services would be significant. Improving the roadside environment could reduce the regional services depth.

3.5 Coordination with Other Adjacent Works

Staff can investigate opportunities to bundle the roadwork and the installation of Regional services on Bickle Drive and Roselawn and Winifred Avenues in conjunction with work on Thornton Road North. Should this bundling of work not prove to have efficiencies or is problematic this work would not happen until after Thornton Road North construction.



Warren Munro, HBA, RPP, Commissioner,
Economic and Development Services Department