



2025 Budget Request

Request: 2025 Budget Request – Hard Surface Preservation Program

From: Kevin Verkindt, Manager of Engineering and Infrastructure

Department: Development and Engineering Services

Total Financial Ask: \$950,000

Type of Budget Request: *Capital*

This document and its attachments are public and available in an accessible format upon request.

Background and Strategic Priority

Deliver Effective and Cost-Efficient Services

Staff completed nearly 10 km of hard surface preservation in 2024 utilizing various technologies including Single Surface Treatment (SST) and Hot Mix Asphalt (HMA). Staff are proposing a similar program in 2024 that will utilize SST and HMA on various section of roads throughout the Township.

Analysis

Staff are proposing a program of hard surface preservation works as outlined below.

The roads to which preservation techniques are to be applied were identified using data generated by the 2022 review of pavement conditions completed using Streetlogix. Staff focused on road sections believed to be in “fair” condition to include in the surface preservation program.

The maintenance of the road sections will essentially prolong the asset and prevent further deterioration, delaying the need for more expensive capital repairs and improvements.



Technologies

The quotation will be split into three main hard surface preservation technologies, including Single Surface / Double Surface Treatment (SST / DST), Cold in Place Recycling (CIPR) and Hot Mix Asphalt (HMA).

Single Surface t / Double Surface Treatment

Single Surface Treatment is a preventative maintenance tool that preserves and reinforces existing pavements and surface treated roads, extending their life expectancy.

It is constructed by spraying a uniformed single application of asphalt emulsion on a clean surface with a Computerized Distributor Truck, followed by a layer of cover aggregate that is applied with a Computerized Chip Spreader. This is immediately followed by a minimum of two Pneumatic Rubber Tired Rollers, which seats the aggregate properly into place.

Staff are in the opinion that Concession 2 NCD from Highway 6 to Concession 14, Concession 14 from Concession 2 NCD to end (Hepworth Creek) and Stone School Road from Queen Street East (Highway 6) to Concession 2 NCD with a total preservation of approximately 10 km is a candidate to receive SST / DST.

Cold in Place Recycling (CIPR) / Hot Mix Asphalt (HMA)

Staff are recommending a full depth replacement, including pulverization, and reshaping of the road base for approximately 2.3 km on West Street from Vault Works Road to Grey Road 17B. The road replacement will utilize CIPR and HMA.

CIPR is an innovative road rehabilitation technique that has become a proven, cost effective and environmentally sustainable process utilized throughout North America for over 20 years.

The CIPR process in full depth applications, where both the old hot mix asphalt and a portion of the underlying granular material is stabilized with expanded asphalt and placed to the specified depth and cross fall.

The CIPR will be followed by a HMA surface course application where asphalt is applied to the CIPR road.

Without the proposed works the current level of service expected by the community will not be achieved and the road will further degrade to where unexpected failure and maintenance (pothole repairs) becomes more likely.



Financial Impact

The proposed hardtop surface preservation would result in a budget contribution of \$950,000. It is proposed that approximately \$254,800 of this work is funded from the Ontario Community Infrastructure Fund (OCIF), \$245,200 is funded from Canada-Community Building Fund (CCBF) and the remaining \$450,000 is funded from the road construction reserve.



Report Approval Details

Document Title:	2025 Budget Request - Hard Surface Preservation.docx
Attachments:	- 2025 Budget Request - Single Surface Treatment.pdf - 2025 Budget Request - Hot Mix Asphalt.pdf
Final Approval Date:	Sep 11, 2024

This report and all of its attachments were approved and signed as outlined below:

Niall Loble, Chief Administrative Officer