



SUBJECT: Addition of Local Road Resurfacing Program to 2021 Capital Program
TO: Environment, Infrastructure & Community Services Cttee.
FROM: Engineering Services Department

Report Number: ES-30-21

Wards Affected: All

File Numbers: 570.02-995

Date to Committee: June 10, 2021

Date to Council: June 22, 2021

Recommendation:

Approve the Total Cost of \$1,000,000 to fund the Local Resurfacing Program in 2021, to be financed from the Infrastructure Renewal Reserve Fund; and

Authorize the Director of Engineering Services to include additional roadways for resurfacing, identified in the Local Roads Resurfacing program, up to the budget limit.

PURPOSE:

Vision to Focus Alignment:

- Support sustainable infrastructure and a resilient environment

Background and Discussion:

The Local Road Resurfacing (shave and pave) program is an annual program to resurface asphalt roadways before further deterioration leads to weakening of the base and sub-base courses of the road, thus requiring a more costly partial or full reconstruction of the roadway. Replacement of the asphalt surface at the optimal time in the pavement lifecycle will extend the service life many years and delay more costly treatments.

The Local Road Resurfacing program was very successful in prior years, as it allowed the City to apply the right rehabilitation strategy at the right time to a portion of our local road network. This allowed for the network pavement quality index (PQI) to stay near performance targets, thereby maintaining a consistent service level for users.

The resurfacing program was removed in 2020 from the 10-year capital forecast. This was due to category guideline adjustments and the need to prioritize and redirect limited capital funding to the City's urban arterial network, bridges and projects jointly delivered with Halton Region's state of good repair program. If funding allows, the intention is to restore the program in the capital forecast, in order to properly maintain and rehabilitate the City's road network.

Favourable spring tenders realized this year allow us the opportunity to reintroduce this program outside of the budget cycle.

Proposed Work

The scope of work will include the replacement of the asphalt surface on various roads throughout the City and may include localized minor curb and sidewalk renewal. The candidate roads have been reviewed and prioritized based on the following suitability factors:

- pavement quality index (PQI) rating;
- age and material of storm and regional services;
- pavement thickness and subgrade;
- curb condition (10% deficient or less); and
- future sidewalk and active transportation requirements

As this was an unbudgeted program, we have intentionally selected streets that are low risk for underground servicing failure and future utility replacement that would require full road reconstruction.

The duration of the program is late July to October 2021. Short term road closures and lane restrictions may be required during construction.

The following table lists the resurfacing locations proposed in the 2021 program.

Proposed 2021 Resurfacing Locations

ROADWAY	FROM	TO
MYSTIC CRT	FOLKWAY DR	END
KEITH CLOSE	PHILIP ST	S. END
KEVIN CRES	FOLKWAY DR	PHILIP ST

BERKSHIRE LANE	HEADON FOREST DR	FOLKWAY DR
BUTTERNUT CRES	FOLKWAY DR	HEADON FOREST DR
HEADON FOREST DR	CHARNWOOD DR	BUTTERNUT CRES
HEADON FOREST DR	APPOLLO RD	BERRYMAN CRT
PINEMEADOW DR	GUELPH LINE	HEADON FOREST DR
PIPERS CRT	MCCLEARY AVE	END
ANNETTE CRT	MCCLEARY AVE	END
WATERBRIDGE DR	MILLCROFT PARK DR	WILLIAM O'CONNELL
MC CLEARY AVE	WATERBRIDGE DR	WILLIAM O'CONNELL
GORDIE TAPP CRES	WILLIAM O'CONNELL	ANGUS CRT

Strategy/process

The Local Road Resurfacing program has been very successful in prior years, it allows the City to apply the right rehabilitation strategy at the right time. Resurfacing aligns with the City's asset management lifecycle management strategy which describes resurfacing as a key contributor to achieve the extension of the lifecycle of the road. A local road is designed with an estimated service life of 60 years, but the lifecycle pattern is dependent on two rehabilitation milestones, generally occurring at 25 and 40 years. The rehabilitation milestones are not based exclusively on age; condition is heavily weighted as a deciding factor. It is far more cost effective to maintain and rehabilitate roads before they reach a condition where the only option is a costly reconstruction.

The Local Roads Resurfacing program was removed in 2020 from the 10-year capital forecast for reasons stated previously. In planning for the 2022 Capital Budget & Forecast, staff will be looking to reintroduce the program, however that plan is subject to review and risk analysis of all roadway infrastructure needs, both new, growth and state of good repair.

Local Road Resurfacing candidates have been identified based on condition (PQI), storm and Regional servicing material and age, pavement thickness, curb condition, and future sidewalk and active transportation requirements.

The intention is to tender the resurfacing contract in June so that resurfacing can commence in July through to October 2021. Any resurfacing candidates that cannot be completed will be included in the 2022 Local Road Resurfacing program (*subject to budget inclusion*).

Financial Matters:

This spring the city's capital program has realized significant savings on several road renewal tenders. This is largely the result of favourable asphalt pricing. As part of our standard practice, the unused capital funding resulting from these favourable tenders is returned to city capital reserve funds.

To date just over \$2.2 million of net savings have been realized in 2021. Of these savings it is recommended that \$1 million be used to fund a Local Road Resurfacing Program in 2021 and that the funding be drawn from the Infrastructure Renewal Reserve Fund. The balance of the tender savings will be retained in capital reserve funds to be used to support future corporate capital needs.

Climate Implications

With the resurfacing of a road wearing surface, we can prolong its lifespan and reduce the amount of equipment fossil fuels used in a full road reconstruction. As the process is less complex than a full reconstruction, there is less potential for material contamination and the asphalt grindings can be reclaimed and reused as a recycled product in future road reconstruction projects by the contractor.

There will be no significant environmental impacts resulting from this project. Any loose gravel will be collected, and any potential dust will be suppressed with water or calcium chloride (salt).

Engagement Matters:

This type of program is generally completed in relatively short period of time, resulting in minimal impacts to residents. Prior to work being initiated, adjacent residents will be given notification of the project, timelines for completion, parking information and contacts for any questions that they may have related to the project.

Conclusion:

Staff recommends the addition of the Local Road Resurfacing program to the 2021 Capital Program to the limit of \$1,000,000, funded by the savings realized in the early tenders and competitive pricing obtained from this year's projects currently underway.

Respectfully submitted

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Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.