



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: September 14, 2023

From: Milton Chan, P.Eng
Director, Engineering

File: 10-6000-01/2023-Vol
01

Re: Proposed 2024 Paving Program

Staff Recommendation

That the staff report titled, "Proposed 2024 Paving Program," dated September 14, 2023, from the Director, Engineering be received for information.

Milton Chan, P.Eng
Director, Engineering
(604-276-4377)

Att. 3

REPORT CONCURRENCE		
ROUTED TO: Roads & Construction	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous city.

2.3 Ensure that both built and natural infrastructure supports sustainable development throughout the city.

2.4 Enhance Richmond's robust transportation network by balancing commercial, public, private and active transportation needs.

The annual Paving Program is required to maintain the City's road network at current operating levels, as well as reduce the need for costly repairs. Staff have developed a prioritized list of locations to be included in the 2024 Paving Program.

Analysis

The scope of work includes the milling and paving of roads and asphalt surfaces in priority order, as identified by the City's Pavement Management System and staff. This also includes preparatory work such as curb and gutter repairs. The Pavement Management System takes into account items such as the age, structure and current condition of the road. Updated pavement deflection data is gathered to ensure that the Pavement Management System model results are accurate. The data is being gathered on an assortment of road types including arterial roads, the TransLink Major Road Network (MRN), recently resurfaced segments, and sections with substantial surface cracking. TransLink provides funding for the MRN projects. Non-MRN projects are funded by the City.

Attachment 1 provides a list of the primary paving sites to be included in the 2024 Paving Program. As with past years, some of the identified paving locations may not be able to be completed due to conflicts with development projects, which are unknown at this time. Any deferred primary paving locations would be replaced with the secondary paving locations, should the seasonal paving restrictions permit. These secondary locations are listed in Attachment 2. Two maps of the proposed paving locations – Richmond West and Richmond East – are included in Attachment 3.

In most years, some paving work is required to address unforeseen road condition issues that arise during the year, such as settling utility trenches. These are added to the Paving Program throughout the course of the year. Since the specific locations are not known at this time they are not shown on the attached location maps.

Since 2021, escalation of paving costs has exceeded annual budget increases due to the increase in global oil and gas prices, supply chain issues and inflation. Recent years have also seen accelerated road deterioration, which results in increased costs due to the additional rehabilitation and gravel base repair work required to repair and repave the roadway. This deterioration is a result of high traffic volumes and harsh winter conditions and is compounded by deferral of repair works. As a result of these increased costs, some project locations, including on the City's Major Road Network (MRN) have been deferred to future years.

The Ageing Utility and Road Infrastructure Planning – 2022 Update report identified the required annual funding levels for roads and road assets. To manage funding gaps it was noted that staff will bring forward paving program funding recommendations that will include on-going capital funding, combined with one-time allocation of surpluses to meet the five year capital needs of the roadway paving program. Aligned with this, staff are preparing additional level requests for assessment through the 2024 Capital Budget process that would allow for completion of all the priority locations identified in this report.

The procurement of this year's Paving Program is tentatively scheduled to be issued to the market in November 2023. Historically, early procurement of this program has resulted in increased competitiveness, and lower costs to the City. By soliciting this work early, staff are taking measures to ensure that paving contract procurements receive competitive pricing and provide good value to the City. This includes monitoring the market to ensure ideal timing to conduct procurement, and the potential of including a variable cost, commodity price indexing structure in the paving contracts.

The 2024 Paving Program also reflects the City's environmental initiatives by allowing the use of recycled asphalt. In alignment with the City's sustainability goals, the successful bidder will be encouraged to employ sustainable methodologies, practices and materials that would assist in reducing green house gas emissions. If market conditions indicate that favourable pricing would be received by issuing to the market early, the procurement process will note that the contract award is subject to approval of the 2024 Capital Budget by Council.

Financial Impact

Proposed funding for the 2024 Paving Program has been submitted as part of the 2024 Capital Budget as follows:

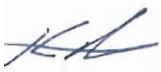
Table 1. Proposed 2024 Paving Program Budgets

Proposed Funding	Amount (\$)
2024 Annual Asphalt Re-Paving Program – MRN	\$ 3,370,000
2024 Annual Asphalt Re-Paving Program – Non-MRN	\$ 3,940,000
Total Proposed Funding	\$ 7,310,000


Award of the 2024 Paving Program will occur once the 2024 Capital Budget is approved by Council.

Conclusion

Staff have prepared a list of priority locations for the 2024 Paving Program and the procurement documents are being prepared. Contract award and commencement of paving will occur once the 2024 Capital Budget is approved by Council.



Kevin Roberts, P. Eng.
Acting Manager, Engineering Design & Construction
(604-204-8512)



Wasim Memon
Supervisor – Inspections
(604-247-4189)

- Att. 1: Proposed 2024 Paving Program – Primary Locations
- 2: Proposed 2024 Paving Program – Secondary Locations
- 3: 2024 Paving Program Proposed Locations – Richmond West and Richmond East

PROPOSED 2024 PAVING PROGRAM – PRIMARY LOCATIONS

Location	Road Type
Knight Street (Southbound Lanes from Bridge Deck to 50m South)	MRN
Knight Street Southbound On and Off Ramps at Bridgeport Road	MRN
Bridgeport Road (Viking Way to Sweden Way)	MRN
Cambie Road (Shell Road to No. 5 Road)	MRN
No. 3 Road (Alderbridge Way to Capstan Way)	MRN
No. 4 Road and Alderbridge Way Intersection	MRN
No. 6 Road (Bridgeport Road to Cambie Road)	MRN
Steveston Highway (Westbound Lanes from Shell Road to No. 5 Road)	MRN
Westminster Highway (North of Highway 91 to Mclean Avenue)	MRN
Westminster Highway (Gilbert Road to No. 3 Road)	MRN
Beckwith Road (Sexsmith Road to Smith Street)	Non-MRN
Blundell Road (No. 4 Road to No. 5 Road)	Non-MRN
Blundell Road (Sidaway Road to No. 6 Road)	Non-MRN
Garden City Road (Cambie Road to Bridgeport Road)	Non-MRN
Leonard Road (Ryan Road to Williams Road)	Non-MRN
Maddocks Road (Aintree Crescent to Shell Road)	Non-MRN
No. 1 Road (Francis Road to Blundell Road)	Non-MRN
No. 1 Road (Westminster Highway to Granville Avenue)	Non-MRN
No. 5 Road (Williams Road to Kingsbridge Drive)	Non-MRN
No. 6 Road (Bridgeport Road to Vulcan Way)	Non-MRN
River Road (Cambie Road to Capstan Way)	Non-MRN
Shell Road (Steveston Highway to Williams Road)	Non-MRN
Shell Road (Bridgeport Road to River Drive)	Non-MRN
Vulcan Way (No. 5 Road to No. 6 Road)	Non-MRN

PROPOSED 2024 PAVING PROGRAM – SECONDARY LOCATIONS

Location	Road Type
Bridgeport Road (St. Edwards Drive to Shell Road)	MRN
Bridgeport Road (No. 5 Road to Sweden Way)	MRN
Steveston Highway (No. 5 Road to Hwy 99 limits)	MRN
Steveston Highway (Highway 99 limits to No. 6 Road)	MRN
Westminster Highway (Westbound Lanes from Garden City Road to No. 3 Road)	MRN
Cambie Road (No. 4 Road to Shell Road)	MRN
No. 4 Road (Granville Avenue to Westminster Highway)	Non-MRN
No. 5 Road (Bridgeport Road to Vulcan way)	Non-MRN
Francis Road (Railway Avenue to No. 2 Road)	Non-MRN
Francis Road (Gilbert Road to No. 3 Road)	Non-MRN
Westminster Highway (No. 7 Road to No. 8 Road)	Non-MRN
Williams Road (Parsons Road to Gilbert Road)	Non-MRN
Machrina Way (Horseshoe Way to No. 5 Road)	Non-MRN
Trumond Avenue (Wellmond Road to Gormond Road)	Non-MRN





2024 Paving Program Proposed Locations Richmond East



Legend

- Proposed Primary Locations
- Proposed Secondary Locations

Note:
The information shown on this map is compiled from various sources and the City makes no warranties, expressed or implied, as to the accuracy or completeness of the information.
Users are reminded that lot sizes and legal description must be confirmed at the Land Title office in New Westminster.
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Meters

NORTH

