



# City of Moose Jaw

## COMMUNICATION # CC-2020-0266

**TITLE:** 2021 TR-2 – Sidewalks, Curbs, and Median Replacement Program

**TO:** Special City Council

**FROM:** Department of Engineering Services

**DATE:** November 5, 2020

**PUBLIC:** PUBLIC DOCUMENT

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### **RECOMMENDATION**

THAT Communication # CC-2020-0266 regarding the 2021 TR-2 – Sidewalks, Curbs and Median Replacement Program be received and filed.

### **EXECUTIVE SUMMARY**

To provide City Council with the background and information on TR-2 Sidewalk, Curbs, and Median Program respecting the future funding and scope of this project.

### **BACKGROUND**

The City maintains approximately 219 km. (or approximately 146,000 slabs) of concrete sidewalks and 102 km of curb and gutter. The sidewalk replacement program is informed by a Sidewalk Condition Assessment (the assessment). Completed in 2019, this assessment catalogues and prioritizes sidewalk deficiencies based on the criteria outlined in the table below:

**Table:**

Defect		Severity		
	Code	Minor	Moderate	Severe
Longitudinal Cracking	S1	< 12 mm	12 mm – 50 mm	> 50 mm
Transverse Cracking	S2	< 12 mm	12 mm – 50 mm	> 50 mm
Heaving	S3	No impediment	Noticeable	Impediment

Defect		Severity		
Dip	S4	No impediment	Noticeable	Impediment
Spalling	S6	< 25 % of panel, < 5 mm	< 50 % of panel, < 15 mm	> 50 % of panel, > 15 mm
Asphalt Cap	S7	Good condition	Fair condition (cracks, surface wear)	Poor condition (deflection, broken)
Vegetation	S8	Light to moderate weeds	Moderate to heavy weeds	Tree roots
Missing Structure	S9	N/A	< 150 mm x 150 mm	> 150 mm x 150 mm
Other	S0	No impediment	Noticeable	Impediment

The assessment includes geographic information as well as the nearest adjacent address. Based on the defect criteria and severity, each deficiency is then rated between 1 to 15. This prioritized list is then field confirmed by a member of the Department of Engineering Services and subsequently included in the annual sidewalk replacement program.

Sidewalk replacement is also informed by complaints, as required. In 2020, this drove approximately 10% of sidewalk replacement funds. The downtown area, schools, and locations with other community services are given priority when reviewing recorded deficiencies.

The replacement program is complemented by alternative actions including slab slicing, slab jacking, and potential 'thin repairs' such as crack sealing or concrete overlays.

As outlined in an Executive Committee report from May of 2018 (Attachment i – 2018 EC Sidewalk Replacement Report), the current budget allocation to sidewalk replacement indicates that replacement cycle of this infrastructure is approximately 200 years.

## **DISCUSSION**

The assessment currently has 6,538 recorded deficiencies. Of those recorded deficiencies, 1,926 of these are rated 9 or higher – these deficiencies are displayed in the map attached (Attachment ii – Sidewalk Assessment Map).

The annual 2021 Budget request for TR2 Sidewalks is outlined below, representing an approximate 3% annual increase.

### Program Components

Component	2021	2022	2023	2024	2025	Total
Replacement of Sidewalks, Curb & Gutters, and Paraplegic Ramps	511,000	528,000	544,000	566,000	590,000	2,739,000
Slab Jacking	30,500	16,000	16,700	18,200	19,000	100,400
Slab Slicing and Remediation	16,500	17,200	17,800	18,500	19,300	89,300
TOTALS	558,000	561,200	578,500	602,700	628,300	2,928,700

The total number of locations completed from previous years are:

2018: 140

2019: 147

2020: 120

At a high level, using an average of 135 locations completed per year, the current registry of 1,926 locations would be replaced in approximately 15 years. This can be concluded assuming annual budget asks are congruent with supply and install costs associated with sidewalk replacement, and that no further deficiencies will be incurred on the system.

### **FINANCIAL IMPLICATIONS**

According to the attached 2018 report, the City's Inventory of sidewalks, curbs, and medians has been calculated to have a replacement value of \$106,000,000, resulting in an anticipated asset cycle of approximately 200 years.

### **STRATEGIC PLAN**

This report supports the long-term strategy under the Strategic Goal of Fiscal Management and Accountability.

### **PRESENTATION**

Mr. Bevan Harlton, Director of Engineering Services, will provide a brief overview of this report.

### **ATTACHMENTS**

- i. 2018 EC Sidewalk Replacement Report
- ii. Sidewalk Assessment Map

## **REPORT APPROVAL**

Written by: Bevan Harlton, Director of Engineering Services  
Reviewed by: Tracy Wittke, Assistant City Clerk  
Approved by: Jim Puffalt, City Manager  
Approved by: Fraser Tolmie, Mayor

*To be completed by the Clerk's Department only.*

Presented to Regular Council or Executive Committee on \_\_\_\_\_.

Resolution No. \_\_\_\_\_

## Report Approval Details

Document Title:	2021 TR-2 Sidewalks, Curbs, and Median Replacement Program - CC-2020-0266.docx
Attachments:	- i 2018 EC Sidewalk Replacement Report.pdf - ii Sidewalk Assessment Map.pdf
Final Approval Date:	Nov 26, 2020

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



Bevan Harlton

**No Signature found**

Brian Acker



Tracy Wittke



Jim Puffalt



Fraser Tolmie