



CYCLE TRACK MAINTENANCE in 2014-2015

Attachment

Transportation Department

The City of Calgary, Roads

Maintenance Division

2014 December

Cycle Track Maintenance in 2014 - 2015

INTRODUCTION

The 7 Street SW cycle track was introduced in 2013 July and in this first season, snow clearance was contracted. This report provides an overview of winter cycle track maintenance experience gained since the cycle track was opened. Photos show contractor and City practices and offer a lessons-learned approach to delivering high quality facility that will attract cyclists year round. Throughout the 2014-2015 SNIC season this report will be updated as new practices are trialed in response to the varying Calgary weather.

1. 2013 – 2014 SNIC SEASON - CONTRACTORS

The following photos depict the equipment, approach used by the contractor to address the snow on the 7 Street SW cycle track in the 2013 – 2014 SNIC season. The contractor provided a high quality standard of SNIC cycle track maintenance during the 2013/2014 season within a Priority 1 response time. Engagement with the adjacent landowners for sidewalk snow clearing into the cycle track right-of-way added to the complexity and cost of the contractor's cycle track SNIC operations.

CONTRACTED CYCLE TRACK WINTER MAINTENANCE - PHOTO OVERVIEW

Photo 1 – Snow Covered 7th St Cycle Track



Photo 1 is an example of the 7th Street cycle track immediately following a snow event and shows the significance of the work required to deliver an attractive cycling surface.

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Photo 2 & 2A – Snow Clearing Equipment



Photos 2 and 2A shows a skid steer which is the equipment used exclusively by contractors during the 2013 - 2014 winter season. Snow was removed using one ton trucks (Photo 2A) and transported to a City storage site.

Photo 3 – Snow Removal



Photo 3 shows contractors conducting hand work.

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Photo 4 – Excessive Salt Use



Photo 4 was taken during 2013 and depicts the overuse of SNIC materials. This practice represents a quality concern and operational issue.

Summary - Contractors

The total cost to provide snow and ice control clearance from the cycle track for the 2013 - 2014 snow season was \$119,160 or \$726.14 per centimetre of snowfall (164.1 centimetres). Contractors delivered high quality service that was well-received by cyclists.

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2. CITY OF CALGARY CYCLE TRACK WINTER MAINTENANCE

After reviewing the first year of operations, it was decided that for the 2014-2015 winter season, City crews would assume responsibility. City crews have the advantage of applying several types of equipment options for clearing cycle tracks. The City of Calgary used a different combination of equipment in dealing with the snow that had fallen on the on the Cycle track in November 2014. The cost per centimetre of snowfall in November 2014 is \$ 72.65 per centimetre, approximately 10 % the cost of contractors. It should be noted the costs are a function of total snowfall, as well as type and duration of snowfall. Additionally, snow removal by City crews can be coordination with removal of snow from the adjacent driving lanes. Continued estimates of City practices will give a better indication of cost trends.

Photo 5 & 5A – Clearing Snow with Street Sweepers



Photo 5 was taken on 2014 November following a 12 cm snow event. The cycle track was swept throughout the snow event using a sweeper. The sweeper is able to both remove snow and ensure the cycle track is free of salt and gravel. Sweepers are generally appropriate for under 3 centimetre accumulations for temperatures less than -6, or less in wet snow conditions. Since sweepers are already in use for downtown snow clearing (Photo 5A, Stephen Avenue), little time is needed to bring them in and out of service.

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Photo 6 – Wille



Photo 6 shows specialized snow equipment used by City crews. The Wille was acquired in late 2014 and has different attachments that can be applied depending on snow conditions. Generally, the brush can be used for snow accumulations under 15 centimetres. For greater accumulations, the bucket is used.

For greater accumulations, hand work is also typically required to remove snow that builds up in corners. To-date, City crews have not had to conduct any hand work on the 7 Street SW cycle tracks.

Summary – City Crews

Early cost data indicate that City crews can deliver high quality snow clearance of the 7 Street SW cycle tracks at a low cost. Applying specialized equipment according to temperature and snowfall and in coordination with adjacent lane clearing allows City forces to be efficient. City-crews are trained to apply materials in accordance with environmental best-management practices and can provide safe, cost-effective snow and ice control operations for cycle track users. Continued growth of the cycle network will mean more opportunities for training, experience and reduced time dedicated to taking equipment in and out of service, relative to in-service time. Continued review of costing information will ensure best practices are applied. Cycle track maintenance costs will be included in all snow and ice reporting.

3. GOING FORWARD – CYCLE TRACK MAINTENANCE

In summer 2015 the City of Calgary will pilot several more cycle track links in the downtown. The practices established through maintaining the 7 Street SW cycle tracks can be documented and applied by City crews, or external contractors depending on the results of a Request for Proposals.