

Mickey Frost

Subject: Urgent Concerns Re: Winter Maintenance Tender Corporate Report to Budget Committee

From: Christian Parise

Sent: Tuesday, June 23, 2020 12:36 AM

To: Mayor Bonnie Crombie; Stephen Dasko; Karen Ras; Chris Fonseca; John Kovac; Carolyn Parrish; Ron Starr; Dipika Damerla; Matt Mahoney; Pat Saito; Sue McFadden; George Carlson

Cc: Paul Mitcham; Geoff Wright; Mickey Frost; Scott Holmes

Subject: Urgent Concerns Re: Winter Maintenance Tender Corporate Report to Budget Committee

Madame Mayor & Members of Budget Committee,

I write to you with significant concerns regarding a Corporate Report coming to the Budget Committee on Wednesday (Agenda Item 6.4) which recommends the award of the 2021-2029 Winter Maintenance Contract. In light of the strenuous fiscal future that lies ahead for everyone I implore that both Council and staff see pause to this contract award given the concerns I will detail in this communication. These concerns represent a range of issues relating to both the quality of information presented within the Corporate Report, the winter maintenance contract & resulting costs, however I will focus on the following 4 points:

1. Removal of detailed financial analysis of bid prices, of standby costs (fixed costs) and of operational costs (variable costs) per service item from the Corporate Report.
2. The significant increase to the base contract of \$3.8 million annually and the failure to present an honest assessment of cost changes associated with changes incorporated in to the base contract.
3. The "baked-in" increase in level of service to secondary roads to the base budget by eliminating snow pack conditions through equipment changes that allow salting of secondary roads at the same time as plowing, which was not a formal Council directed activity and which carries a cost increase.
4. Information provided by staff in this report that indicates contractors under the existing contract are not adhering to conditions of the existing contract and that contractors under employment of the City are in contravention with HTA regulation 555/06 'Hours of Service'. *Legal implications*

To be clear I am not a friend, relative and/or acquaintance of any prospective winter maintenance contractor or employee and have nothing to gain personally by addressing these matters. I believe I offer Council a uniquely qualified opinion on this matter for a few reasons briefly summarized in this paragraph. The geographical assignment of resources (namely vehicular) is a topic I have great passion for and which I have studied on my own time for several years, namely through the lens of transit scheduling. Winter maintenance activities can be quantified very similarly to the way public transit operations are. Service levels are not determined by policy, but by how much resources you apply to any given area and based on the productivity of such resources. With this in mind it should be of no surprise that I took a very keen interest in municipal winter maintenance back in the fall of 2012. In person observation of winter maintenance activities with many sleepless nights along with the study of staff reports and winter maintenance tenders of various GTA municipalities has contributed to my knowledge base and continued interest in the topic. It is with this experience and knowledge that I bring you these concerns and by extension a better deal for Mississauga.

- We have time

Before I delve into these 4 concerns raised I would like to assure Members of Council that there is no rush to make a decision on Wednesday. If Council chooses to award this contract on Wednesday then it will be doing so 16 months in advance of the start of contracted services. This 16 month period is far longer than the previous

contract which was awarded 4 months in advance of the contracted services start date. Likewise various surrounding GTA municipalities have had far shorter award periods:

- The City of Toronto awarded its winter maintenance contracts for approximately 1000 pieces of equipment/crews on 12 & 19 March and 12 May 2015, 5-7 months in advance of the contracted services start date.
- The City of Vaughan awarded their winter maintenance contracts for 123 pieces of equipment/crews on 19 April 2016, 6 months in advance of the contracted services start date.
- The City of Brampton awarded their winter maintenance contracts for 250 pieces of equipment/crews around April-May of 2017, 5-6 months in advance of the contracted services start date.
- The Region of Peel awarded their winter maintenance contract for 54 pieces of equipment/crews on 31 May 2019, 5 months in advance of the contracted services start date
- The City of Hamilton awarded their winter maintenance contract for 52 pieces of equipment/crews on 27 January 2020, 9 months in advance of the contract services start date.
- The City of Burlington awarded their winter maintenance contract for 24 pieces of equipment/crews on 21 April 2020, 6 months in advance of the contracted services start date.

In addition to the above, provision 10 of the Form of Tender of this contract stipulates that bid prices received will remain open for acceptance for a period of 210 days from the closing day of the tender. This tender closed on 4 May 2020 which means that the bid prices received are able to be accepted by the City up until 30 November 2020.

- The Concerns

1: The removal of detailed financial analysis of bid prices, of standby costs (fixed costs) and of operational costs (variable costs) per service item from the Corporate Report.

I am often critical of transparency at The City of Mississauga, however on the subject of Winter Maintenance Tender Award Reports the City has been a leader. The provision of detailed financial analysis of contracted winter maintenance costs dates back to the formation of the Corporation in 1974 and has been applied consistently until this Corporate Report. The inclusion of this information has shown Council and the public how much equipment is being procured and at what cost. It demonstrates exactly what the City's contracted standby (fixed) costs are per service item, costs we assume regardless of the amount of winter events we see, and what the estimated operational hours and costs are, costs which we incur only as we see winter events.

The removal of this information from the Corporate Report is akin to removing a microscope on the costs of the winter maintenance program. It is a step in the direction away from transparency and trust and it is particularly egregious at a time when the City and its citizens face troubling financial headwaters. I believe for this reason alone it is inappropriate for the Committee to follow staff's recommendation to award this contract at this time and until a full breakdown of prices is provided.

For reference I have appended a folder to the end of this email containing every single Winter Maintenance Contract Award Report from 1974 onward with the exception of the 1979/1980 and 2000/2003 contract reports which have not been located. APPENDIX A

2: The significant increase to the base contract of \$3.8 million annually and the failure to present an honest assessment of cost changes associated with changes incorporated in to the base contract.

It is crucial to pay close attention to standby costs as these are costs we assume regardless of how much the equipment/crews are used, they represent the fixed cost of the program. Likewise a contract that assumes there

will be operational savings to offset the increase in standby costs depends on high volumes of winter events, as the less winter events we see the less opportunity there is to generate savings through operational costs. Let's examine these costs.

2014-2021 Tender:

- 2014-2015 Contract Season (initial term)
- Standby Cost: \$9,810,908.66 (71% of total cost)
- Operational Cost: \$4,015,046.22 (29% of total cost)
- Total Cost: \$13,825,954.88

2020-2021 Contract Season (with 2% annual cost escalation applied to initial term costs)

- Standby Cost: \$11,184,435.87 (71% of total cost)
- Operational Cost: \$4,577,152.69 (29% of total cost)
- Total Cost: \$15,761,588.56

2021-2029 Tender:

- 2021-2022 Contract Season (initial term)
- Standby Cost: \$15,074,617 (72.5% of total cost)
- Operational Cost: \$5,698,589 (27.5% of total cost)
- Total Cost: \$20,773,206

Change in Costs from 2020-2021 to 2021-2022:

- Standby Cost: + \$3,890,181.13 (35% increase)
- Operational Cost: + \$1,121,436.31 (24.5% increase)
- Total Cost: + \$5,011,617.44 (32% increase)

As we can see from the above analysis this new contract involves a significant increase to both standby and operational costs totaling \$5,011,617.44 annually representing just under a 32% increase. It should be noted that this report actually cites two different numbers for the 2021-2022 winter costs. On page 6 in the breakdown of standby, operational and total costs it cites a total cost of \$20,773,206, however in Table 1 on page 9 cites a total annual cost of \$18.6 million. Likewise where my analysis based on a 2% annual cost escalation shows a total cost of the last year of the existing contract to be \$15,761,588.56, Table 1 on page 9 cites a total annual cost of \$14.8 million for the existing contract. Unfortunately and despite providing a different set of numbers, Table 1 on page 9 does not breakdown the standby and operational costs associated with each line item.

On page 3 of this Report we are told that:

"An eight year period was selected to take advantage of more competitive pricing that is expected for a longer term contract. The existing contract was seven years in length. Staff decided to move forward with an eight-year contract based on discussions with other municipalities and also based on the financial benefit received from increasing the City's previous contract from five to seven years."

I believe it is reasonable for staff to have expected more competitive pricing as it's a simple question of amortization. If I need to procure a piece of equipment that costs \$200,000 and I need to recuperate that cost in seven years, then to break even I need to charge \$28,571 annually to break even on capital acquisition costs. However, if I instead have 8 years to recuperate that capital acquisition cost of \$200,000, then I need to charge \$25,000 annually to break even on capital acquisition costs, which represents a savings of \$3,571 annually per piece of equipment. Multiply that by 200 pieces of equipment and you stand to generate annual savings of \$714,200. If this contract did in fact receive more competitive pricing on a per unit basis then that would mean

that the increase in costs of the base contract are in fact greater than the \$3.8 million cited in the report and are offset by savings achieved through a longer contract term. To indicate both the savings achieved by the longer term of the contract and the true cost impact of changes to the contract would be a far more honest presentation of this new contract. This report camouflages these positive and negative impacts by only presenting the net impact on the budget and by extension removes the opportunity for scrutiny.

3: The "baked-in" increase in level of service to secondary roads to the base budget by eliminating snow pack conditions through equipment changes that allow salting of secondary roads at the same time as plowing, which was not a formal Council directed activity and which carries a cost increase.

Let's examine average standby prices provided in the initial term of the 2014-2021 winter maintenance tenders:

- Average standby costs for Tractor plows were \$22,145 per unit and multiplied by 10 units for a total annual standby cost of \$221,450.
- Average standby for Loader plows were \$25,338 and multiplied by 21 units for a total annual standby cost of \$532,098.
- Total standby costs for the 31 loader and tractor plows were \$753,548, for an average per unit standby cost of \$24,308
- Average standby costs for single axle combination trucks were \$45,385 representing a premium of \$21,077 per unit compared to loader/tractor plows

Based on this information we can then apply a per unit premium of \$21,077 to the 31 loader/tractor units being replaced with single axle combination trucks, along with a \$45,385 cost for the additional 24 single axle combination truck costs. Based on the 2014-2021 tender prices we can therefore calculate the cost increase for this equipment/service level change:

- An annual increase in standby costs of \$653,387 for the conversion of 31 loader/tractor plows to single axle combination trucks
- An annual increase in standby costs of \$1,089,240 for the addition of 24 single axle combination trucks
- An annual increase in total standby costs of \$1,742,627

Owing to the significant premium for combination salt/plow trucks and at an operational rate of \$80 an hour, this change would require each vehicle to produce an annual savings of **396 hours** in order to break even. Per the new winter maintenance contract (PRC002049) each single axle combination truck is estimated to work an average of **200 hours** per year. In other words it is virtually impossible for this change to produce any cost savings for the City.

Given that this change in service level was not directed by Council, why was it appropriate for staff to bake this change into the contract? Fortunately staff included a request for loader plows in the contract so this is not a change that is set in stone.

4: Information provided by staff in this report that indicates contractors under the existing contract are not adhering to conditions of the existing contract and that contractors working for the City are in contravention with HTA regulation 555/06 'Hours of Service'.

On page 5 of the Report in the section regarding the base contract we are told that:

"Further, in the existing Winter Maintenance Contract, there are 31 tractor and loader plow units, which using the same operator, are required to operate for more than 24 consecutive hours to complete their routes, which is outside MMS Regulation 239/02. To ensure the City is in compliance with the time limits around all

applicable legislation for winter operations, including prescribed time limits that operators can work under the Hours of Service (HOS) requirements in the Highway Traffic Act, staff have replaced these 31 units with 55 units of single-axle and tandem axle vehicle plows, which are more appropriate for the intended work, and result in a net increase to the base contract of 24 units. The additional equipment will provide for a more effective removal of packed snow on the secondary roads, while applying road salt at the same time. This would be in keeping with best practices currently being performed by other GTA municipalities."

In this paragraph staff suggest that not only are Council established levels of service and MMS 239/09 levels of service are not being met on secondary roads, they also indicate that City contractors are not in compliance with the Ontario HTA Regulation 555/06 "Hours of Service" which restrict extended operation of commercial vehicles by a single operator to no more than 14 hours of active duty time within a 24 hour time period. City staff note that loader/tractor plows are being operated for more than 24 consecutive hours, 10 hours in excess of the HTA regulation.

On the subject of service levels not being met on secondary roads following plowing events, this report represents the first time that staff have noted in a Corporate Report that this is in fact the case. However, in the 2020 Roads Budget & Business Plan Document Key Performance Indicators we are told that staff met Winter Response Times 100% of the time for 2016, 2017, 2018 and that levels would be met 100% for 2019 through 2023. If this is not in fact the case and that levels of service on secondary roads are not being met then why are we only being told this 6 years into the existing winter maintenance contract?

On the subject of loader/tractor plows being operated by the same operator for more than 24 consecutive hours, this in spite of the existing winter maintenance contract including provisions that are meant to prevent this very sort of thing from happening. Tender FA.49.324-14 (existing winter maintenance contract) includes the following special provisions:

- SP 28 QUALIFIED OPERATORS

The Contractor shall provide qualified winter roadway maintenance operators that are competent to operate the equipment supplied. A qualified operator shall have the appropriate licenses to operate the equipment specified and has operated a similar piece of equipment for winter roadway maintenance purposes. The qualified operator shall also understand and be able to operate the equipment including all apparatus and controls in a safe, efficient and effective manner while completing work.

In addition, the Contractor is required to supply qualified spare operators during prolonged snow falls in order that operations are continuous. Failure to provide competent and trained operators and trained operators, including spare operators, will result in liquidated damages being applied against the Contractor (refer to SP 35 - Liquidated Damages).

-SP 30 HOURS OF WORK

The contractor shall ensure that all equipment and operating personnel comply with the hour requirement of the Highway Traffic Act, as amended, and Ontario Regulation 555/06.

-SP 35 LIQUIDATED DAMAGES

All liquidated damages, as prescribed in the table below, may be deducted from any payments due to the Contractor:

Item - Qualified Operators

Description - Failure to provide competent and trained equipment operators (including spares).

Liquidated Damages - One (1) days standby amount per occurrence.

Further to the Special Provisions set out in the tender, per the "*Minutes of the Bidder's Information Meeting of Thursday, April 24, 2014*" this required compliance to HTA Regulation 555/06 is reaffirmed in response to two questions which with staff responses are cited in their entirety below:

Question 11: In order to comply with the hours of work regulations during continuous operation, do we have to bring in additional operators?

Response: Yes. The Contractor shall ensure that all equipment and operating personnel comply with the work hour requirements of the highway Traffic Act, as amended, and Ontario Regulation 555/06, please see SP28 and SP30.

Question 31: Does the hours of work requirements for licensed vehicles apply to non-license units?

Response: The work hour requirements of the Highway Traffic Act and associated regulations are to be observed for both licensed and non-licensed vehicles.

If contractors are not in compliance with HTA 555/06 "Hours of Service" regulations then City staff are failing to enforce provisions and apply liquidated damages as set out in the existing winter maintenance contract (FA.49.324-14). This responsibility falls squarely on the managers and supervisors of the Winter Maintenance Program. **This could be the result of contractors colluding with City staff and providing kickbacks to staff for not having to bear the cost of supplying spare operators to ensure compliance with the above cited regulation and this is something that should be investigated by the City's Audit and Legal Departments.**

In line with the existing tender, the new tender (PRC002049) includes clear language that indicates winter maintenance contractors must comply with "Hours of Service" Regulation 555/06.

For reference I have appended in a folder the Contract Document of the existing contract (FA.49.324-14) and the Minutes of the Bidder Information Session cited above. APPENDIX B

- Where do we go from here?

Given the number of concerns outlined above, I strongly suggest that Budget Committee seek greater understanding of the City's Winter Maintenance Operations before making any decisions on the future of Winter Maintenance in the City of Mississauga. In a worst case scenario City staff could pursue an additional one year extension to the existing contract. A number of GTA municipalities have extended their winter maintenance contracts in order for various reviews to be conducted including The Region of Peel in 2015 and in 2017 and the City of Vaughan in 2014. The City of Markham in 2015 chose to pursue a 3 year extension to their roadway salting and plowing contract in light of staff being under the impression that better prices could not be achieved through re-tender. In 2017 Markham chose to pursue a 2 year extension to their residential roadway plowing contract under the same basis.

For reference I have appended a folder with the Staff Reports to the respective councils requesting extensions to existing contracts. APPENDIX C

I am currently in the process of performing a route by route analysis of the City's winter maintenance operations that has been made possible thanks to a FOI request I filed with the City for winter maintenance route maps in February of this year (FOI #2020-1062). I have completed the analysis of the City's priority plow and secondary plow routes, along with having completed priority salt route tabulations for the Mavis Works yard. I expect to be able to furnish Madame Mayor, Members of Council and City Staff with my analysis in **3 weeks time**. I

believe the analysis I am performing could be instrumental in designing a more balanced winter maintenance program by identifying unbalanced routes, risks of poor productivity, changes to operational methodologies among other suggestions based on studied material and in person observations.

I have appended in a folder my completed route analysis work to date for those who wish to see. APPENDIX D

Given the weight of the concerns expressed here I trust that the Committee and Staff will make the right decision.

Respectfully,
Christian Parise

Appendix A



[Corporate Reports on Winter Maintenance Contrac...](#)

Appendix B



[Mississauga 2014-2021 Winter Tender](#)

Appendix C



[Winter Maintenance Contract Extensions](#)

Appendix D



[Mississauga Winter Control Route Analysis](#)

CC:
Paul Mitcham,
Chief Administrative Officer

Geoff Wright,
Commissioner of Transportation & Works

Mickey Frost,
Director, Works Operation & Maintenance

Scott Holmes,
Senior Manager, Works Administration, Operations and
Maintenance