



Staff Report

Operations Department

Report To: Committee of the Whole
Meeting Date: November 3, 2020
Report Number: CSOPS.20.058
Subject: Winter Maintenance Contract Extensions and Equipment Needs
Prepared by: Jim McCannell, Manager of Roads and Drainage

A. Recommendations

THAT Council receive Staff Report CSOPS.20.058, entitled “Winter Maintenance Contract extensions and Equipment Needs”;

AND THAT Council endorse Option #1 and direct Staff to extend the three, six-month snow plow Operator contracts to the end of the 2023 winter season;

AND THAT Council directs Staff to bring forward a Capital budget sheet for consideration in the 2022 budget deliberation process for vehicle replacements to allow for winter maintenance activities.

B. Overview

On May 3, 2018, Committee of the Whole received Staff Report CSPW.18.041 entitled “Winter Road Maintenance for the 2018/2019 and 2019/2020 Season” (Attachment #1). As a result, Staff were directed to hire three contract snowplow drivers along with the purchase of 3 used snowplow trucks in response to increasing prices for contracted services for winter snowplowing. Staff is looking to extend the seasonal employment contracts with the current complement of drivers until the end of the 2023 winter control period. During this time, Staff will be assessing the longer term needs of the Town going forward. The growth in the Town requires a review of service levels which in turn affects equipment, staffing and facility needs.

C. Background

During the winter of 2018, the Town tendered for a Service Contract to include three snowplow trucks and several drivers to provide snowplowing services for the Town. Through this process the Town received one non-local bidder. The Town experienced a significant price increase to the point it was more economical to hire staff and purchase equipment to provide this service. Staff has found that by using Town staff for winter services there is a stronger relationship between the snowplow Operator and the residents that provides enhanced customer service level and reduces the number of service requests for additional service. Issues that trigger service requests include but are not limited too; pushing snow into laneways, drainage

problems due to snow filled ditches, excessive boulevard damage, the placement of snow in cul-de-sacs and mailbox damage.

The Town has several options for winter maintenance including: tendering out for the service of private snowplow trucks and drivers; leasing trucks and hiring drivers; or, purchasing trucks and hiring drivers. These options were considered in the May 3, 2018 Staff Report (Attachment #1). At that time, Council endorsed hiring drivers and purchasing used equipment as a pilot program to provide the required service for two (2) winters ending in 2020.

Staff are continuing the use of contracted, seasonal staff and the used trucks for the winter of 2020/2021 but require Council endorsement to extend the contracts.

D. Analysis

In 2018, the Town looked at several options on how to provide winter snowplowing services. The option of not providing winter maintenance is not available to the Town. In 2018, Staff completed a detailed review of the costs associated with using Town staff compared to contracting the service out. The cost comparison weighed in favour of hiring staff and purchasing equipment.

Option #1 - Continue with three, six-month contract snow plow Operator contracts to the end of the 2023 winter season;

And bring forward a Capital budget sheet for consideration in the 2022 budget deliberation process for vehicle replacements to allow for winter maintenance activities.

Pros:

- Provides expected level of service to the residents.
- New equipment provides for good reliability and low maintenance costs.
- Flexible staff that are willing to adjust schedules to be on call for duty.

Cons

- The purchase of trucks will require a significant investment in new equipment (~\$1,000,000). (Current pricing will reflect prices for the recent tender.)
- The delivery time of new snowplow trucks is approximately 12 months. New replacement trucks ordered in 2022 could not be ordered and confidently received in time for the start of the 2022/23 winter season.
- Additional facility space is required to store equipment. This could include Expansion of the Ravenna Yard plus a satellite storage area in Craighleith. This item will be included as a separate capital budget item for consideration in future Budgets.

Option #2 - Continue with three, six month contract positions. Lease snowplow trucks.

Pros

- Lower initial cost than purchasing
- Leasing new equipment provides for good reliability and low maintenance costs
- Ability to retain equipment only as needed.
- There may be opportunities to lease used equipment but will be limited.

Cons

- The annualized costs are more than purchasing and financing the truck by the Town directly especially if the equipment is to be used over an extended period of time.
- Lease terms less than a few years long will carry a premium to finance the disposition of used equipment.
- Due to the specialized nature of the equipment, the Town will pay a premium to not lease the equipment over the summer-time since there is limited interest to lease live bottom trucks (used for spreading salt and sand) during summer months
- The Town may only be able to lease trucks year-round and will incur carrying and storage costs.

Option #3 - Re-Tender for Contract services.

Pros

- Contractors provide just the service required and no value-added customer service
- Town has less responsibility to store and maintain equipment.

Cons

- New drivers cause more damage to boulevards and infrastructure and place snow in unfavourable locations due to the lack of familiarity with the route.
- Town has little control over who the contractor assigns to drive the route.
- Level of Service is decreased as Staff are not available to other works outside of snow plowing. The additional activities include tree cutting, sign and pothole repairs, pushing back snowbanks for sightlines, guiderail repairs (due to plow damage) drainage works during rain events.

Staff is recommending Option #1 which allows for the continuation of hiring contract staff each winter through to 2023 while purchasing Town owned vehicles and equipment.

Staff are continuing to assess improvements to the Ravenna Works Yard and to a future presence in the Craigeith area. Development growth may require Staff to research alternative types of equipment. Staff will investigate if alternative types of equipment might be better suited for new developments. For example, higher density development may require smaller types of plowing equipment. The introduction of more but smaller pieces of equipment may allow for increased efficiencies.

E. Strategic Priorities

1. Communications and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders.

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

4. Quality of Life

We will foster a high quality of life for full-time and part-time residents of all ages and stages, while welcoming visitors.

F. Environmental Impacts

There is no change in the Town's practice for snow removal activities. The burning of hydrocarbon fuels will release greenhouse gasses. Older diesel trucks will not operate as efficient or as clean as new equipment.

The Town will continue to monitor the use of winter deicing materials

G. Financial Impact

No change in the Town current Operating budget. Continuing the use of older equipment beyond its expected life cycle can result in increased maintenance and repairs costs. The Town should anticipate increased "down" time which in turn reduces the level of service provided to residents.

H. In Consultation With

Sam Dinsmore, Deputy Treasurer/Manager of Accounting and Budgets

I. Public Engagement

The topic of this Staff Report has not been subject to a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required. Comments regarding this report should be submitted to Jim McCannell, managerroadsdrainage@thebluemountains.ca.

J. Attached

1. Attachment 1, CSPW.18.041 entitled "Winter Road Maintenance for 2018/2019 and 2019/2020 Seasons"

Respectfully submitted,

Jim McCannell
Manager of Roads and Drainage

Shawn Carey
Director of Operations

For more information, please contact:
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This document can be made available in other accessible formats as soon as practicable and upon request



Staff Report

Infrastructure & Public Works

Report To: Committee of the Whole
Meeting Date: May 14, 2018
Report Number: CSPW.18.041
Subject: Winter Road Maintenance for 2018/2019 and 2019/2020 Seasons
Prepared by: Jim McCannell, Manager of Roads and Drainage

A. Recommendations

THAT Council receive Staff Report CSPW.18.041 entitled "Winter Road Maintenance for 2018/2019 and 2019/2020 Seasons";

AND THAT Council cancel Tender 2018-21-T-IPW: Winter Road Maintenance;

AND THAT Council increase the Winter Control Budget from \$856,000 by \$80,000 to \$936,000 to allow for increased winter maintenance costs;

AND THAT Council directs Staff to negotiate for the purchase of three (3) used snowplow trucks to an upset limit of \$150,000 by means satisfactory to the Director of Finance and IT Services and the Director of Infrastructure and Public Works;

AND THAT Council directs Staff to reallocate funds from Contract Services to wages to allow for the hiring of three (3) six month contract snow plow drivers for the winter control seasons of 2018/2019 and 2019/2020;

AND THAT Council directs Staff to bring forward a business plan and budget sheet for consideration within the 2019 budget deliberation process for winter maintenance activities beyond the 2018/2019 winter control season.

B. Overview

A recently released tender for contract winter maintenance operators and equipment is over budget. The Town is in need of replacing this contracted service. Staff have considered several alternative methods to provide this service. The purpose of this Report is to ensure adequate operator and equipment resources are in place for the 2018/2019 and 2019/2020 winter control seasons and beyond.

C. Background

The Town currently operates 4 Town owned snow plow trucks and 3 road graders for winter control. In addition, the Town has hired three (3) contract snow plow trucks with drivers to assist with snow plow duties. During snow events the Town uses all 10 pieces of equipment to clear and plow Town roads within the expected time period to meet the Town's level of service. The Town is in the process of ordering a new single axle snowplow which will be new to the fleet and will assist with plowing roads in the urban areas. This will increase the number of plows from 10 to 11. The additional plow is being added to the fleet to address the number of new roads within the Town.

The Town's contract with Arnott Construction has ended after 6 years on April 15, 2018. The Town issued a tender on February 28, 2018 which closed on March 29, 2018. The terms and conditions were similar to the previous winter road maintenance contract. Only one bid submission was received from Orin Construction from Concord, Ontario for Tender 2018-21-T-IPW and was over budget. Under the terms and conditions of the Tender, the Town is able to cancel the tender call for those reasons.

The 2018 winter budget for this service was approximately \$152,000. The tendered price is just over \$215,000 per winter for the 3 trucks. This is an increase of approximately \$65,000 per winter maintenance season. Staff expect to pay a fuel surcharge of \$3 per hour which raises the cost for the 2018/2019 winter season to \$218,880 which is an increase of \$66,800 (\$218,800 - \$152,000). The tender price is based on 45 working days plus 120 days of standby pay when the trucks are not working. The contracted trucks and drivers are only available to plow snow and not for other maintenance duties. Staff expect that a new contractor will require enhanced contract administration and training at least initially. This cost is estimated at \$17,000 per year in Staff time for a total cost increase of \$83,800 (\$17,000 + \$66,800). This represents an increase to 55% over budget.

D. Alternatives

A decision to not provide winter maintenance services is not available to the Town. The Town must replace the Arnott contract operators and trucks. Since the tendered price is well above the Town's budget and the service provided is critical and high profile, a full review of options is warranted. Staff have considered several alternative methods as described below.

Alternative 1: Increase the contracted services budget to award tender to the Bidder

Pros

- The Town has retained a contractor for a minimum of three years of winter control.
- Least investment of Staff time before the 2018/2019 winter maintenance season

Cons

- Significant increase in cost of winter maintenance by \$83,800 (55% over budget) without the increasing the level of service

- New drivers cause more damage to boulevards and infrastructure, and place snow in unfavourable locations due to the lack of familiarity with the route.
- Town has little control over who the contractor assigns to drive the route.

Alternative 2: Review contract terms and re-tender to try to lower costs

Pros

- May obtain better pricing if terms change or become less restrictive.
- Could alter the specification for different types of service i.e. Area Maintenance Contract
- Could consider several contracts rather than 1 contractor to supply all equipment

Cons

- Too late in the season to draft new specifications, tender and have staff and equipment in place for Nov 1.
- A late issued tender often results in increased prices.

Alternative 3: Town procured equipment and hired operators

This alternative is divided into one set of sub-options for equipment (sub-options A) and another for operators (sub-options B) because the means of obtaining equipment and contracting operators is independent.

Alt 3 Sub-Option A1: Purchase new snow plow trucks

Pros

- New equipment provides for good reliability and low maintenance costs.

Cons

- The purchase of trucks will require a significant investment in new equipment (~\$825,000).
- The delivery time of new snow plow trucks is approximately 9 - 12 months and as such new snow plow trucks could not be ordered and confidently received in time for the start of the 2018/ 2019 winter season.

Alt 3 Sub-Option A2: Lease snow plow trucks

Pros

- Lower initial cost than purchasing
- Leasing new equipment provides for good reliability and low maintenance costs

- Ability to retain equipment only as needed.
- There may be opportunities to lease used equipment but will be limited.

Cons

- The annualized costs are more than purchasing and financing the truck by the Town directly especially if the equipment is to be used over an extended period of time.
- Lease terms less than a few years long will carry a premium to finance the disposition of used equipment.
- Due to the specialized nature of the equipment, the Town will pay a premium to not lease the equipment over the summer time since there is limited interest to lease live bottom trucks (used for spreading salt and sand) during summer months
- The Town may only be able to lease trucks year round and will incur carrying and storage costs.

Alt 3 Sub-Option A3: Purchase used snow plow trucks

Pros

- The purchase of used equipment costs less than new and offers short term flexibility until a permanent decision can be formulated.
- Arnott has indicated that they may be interested in selling the 3 trucks that have been used within the Town.

Cons

- The cost or repairs to older trucks are unpredictable and could prove to be high since the trucks are near the end of their useful life.
- The loss of a truck mid-winter due to a major failure will impact the Town's ability to meet the required level of service.

Alt 3 Sub-Option B1: Hire 6 month fulltime contract staff (3 positions)

Pros

- Provides increased level of service because:
 - the Town has direct more control of the operators.
 - Operators become very familiar with their equipment and routes.
 - Operators tend to have a closer relationship with the residents and roadside damage tends to be less.
 - Operators are more responsive to residents' concerns and needs.

- The operators provide additional workforce to the Town for the 120 days each winter when snow plowing doesn't occur to undertake activities such as tree cutting, snow clearing and miscellaneous maintenance activities.
- Fulltime contract positions attract qualified and experienced operators. (Hiring contracted winter staff has proven to be more successful than contracted drivers.)

Cons

- Roads and Drainage Division supervisory staff must ensure that there is useful and productive work available for the additional contract staff during non-event days.

Alt 3 Sub-Option B1: Hire Stand-by drivers (5 positions)

Pros

- Standby drivers cost less than full-time contract staff since they are only paid wages while on duty plus a daily stand-by premium.
- Standby drivers can be available for non-driving activities or to fill in for other drivers who may be unavailable for added flexibility.

Cons

- In order to ensure drivers are available at all times to respond to snow events, 5 operators will be needed to rotate through the stand-by status.
- The cost to train 5 drivers increases orientation costs.
- There is additional responsibility on supervisory staff to monitor and manage the rotation of operators and ensure the stand-by operators are engaged and responsive.
- Using stand-by staff on varying routes and equipment can lead to damage along with increased health and safety risks.

E. Analysis

Award of Contracted Services

Staff have considered carefully whether to recommend increasing the winter control budget to fund the 55% increase in contracted services in order to award Tender 2018-21-T-IPW. However, in the end Staff feel that pursuing an alternate arrangement to contracting at this time is worthwhile to enable a more full review of the Town's options. Therefore, Staff recommend that Council cancel Tender 2018-21-T-IPW Winter Road Maintenance. Although Staff have this authority under the terms and conditions of the tender, Staff feel that the decision is of such profile that should Council make the final determination.

The alternative to re-issue the winter road maintenance tender is not viable. There is no time for contractors to purchase new equipment if required and/or will very likely result in even a higher bid price.

As a result of the above, Staff feel the Town needs to pursue alternatives to contracted services.

Purchase or Lease

Staff feel that purchasing new snow plow equipment is not feasible because the Town is too late to confidently receive and commission new equipment by November 1, 2018 without paying an excessive premium. In addition, this path more or less locks the Town into operating its own equipment over the long term. Staff feel a thorough review of the options available to the Town must be completed before making such a large investment. This review should be conducted over the summer of 2018 for deliberation within the 2019 Budget process.

The remaining choice available to the Town is to purchase used equipment or lease. Complicating factors include that the 2019 Budget will not be passed until the end of March 2019 due the election cycle and there is a 9 – 12 month delivery time for new snow plow equipment. The decision needs to consider that the temporary solution likely needs to be in place for two winter control seasons - 2018/2019 and 2019/2020. This understanding leads to the conclusion that the purchase of reasonably priced used equipment will be better than leasing. Leased equipment for only one or two seasons will come with a premium cost than one of a longer term. Reasonably priced used equipment can offer more flexibility than being tied into a lease.

Arnott Construction is preparing to sell their trucks at auction around May 31. Staff have had preliminary discussions with Arnott with agreement to discuss selling the trucks directly to the Town. The trucks are 13 years old and are beyond the Town's typical useful life cycle of 10 years. Based on the Town's experience with selling Town snow plows taken out of service after 10 years, Staff feel the Arnott trucks to have a purchase value of around \$40,000 each (\$120,000 total) while a reasonable leasing rate is \$25,000 annually for each truck (\$75,000 total annually). There likely will be some repairs needed to increase confidence that the trucks will operate well during the winter control season. Staff recommends that Council direct Staff to negotiate for the purchase of 3 used snowplow trucks to an upset limit of \$150,000. If a reasonable deal is not available with Arnott Construction, Staff will undertake to pursue the purchase of reasonably priced snow plows by other means as approved by the Director of Finance and IT Services and the Director of Infrastructure and Public Works. This could include public auctions and reaching out to other municipalities to see if snow plows are coming up for disposal.

Staff will ensure that the trucks are securely stored and maintained until needed.

Fulltime or Standby Contract Operators

The main advantages of fulltime contract operators are such employment opportunities attract more experienced operators and that the operators are available to do other work during the 120 non-plowing days. This permits the Town to offer an increase to the level of service for residents at a reasonable price. The Town has had good success with hiring qualified Staff when offering regular work over the winter months. The main disadvantage to standby contracted

operators is ensuring they are sufficiently engaged to be available when called and roadside damage that occurs when operators are asked to drive unfamiliar routes only during snow events.

On balance, Staff recommends hiring three (3) six month contract snow plow operators for the winter seasons of 2018/2019 and 2019/2020.

Budget Implications

A detailed discussion is provided in the Financial Impact section of this report. In summary through, an increase of \$80,000 from \$856,000 to \$936,000 in the Town's winter control budget will suffice for the purchase of used snow plow trucks and the hiring three fulltime contacted operators for 6 months.

Recommendation

In conclusion, Staff are recommending that Council:

- i. cancel Tender 2018-21-T-IPW Winter Road Maintenance;
- ii. increase the Winter Control Budget from \$856,000 by \$80,000 to \$936,000 to allow for increased winter maintenance costs;
- iii. directs Staff to negotiate for the purchase of three (3) used snowplow trucks to an upset limit of \$150,000 by means satisfactory to the Director of Finance and IT Services and the Director of Infrastructure and Public Works;
- iv. directs Staff to reallocate funds from Contract Services to wages to allow for the hiring of three (3) six month contract snow plow drivers for the winter control seasons of 2018/2019 and 2019/2020;
- v. directs Staff to bring forward a business plan and budget sheet for consideration within the 2019 budget deliberation process for winter maintenance activities beyond the 2018/2019 winter control season.

F. The Blue Mountains Strategic Plan

Goal #5: Ensure Our Infrastructure is Sustainable

G. Environmental Impacts

The environmental impacts would be the unchanged as the same number and type of trucks will continue to be used. In the future, the use of newer trucks will have fewer emissions of greenhouse gases as the newer diesel engines are more efficient.

H. Financial Impact

Looking at a two year pilot project involving the Town hiring three winter contracts as well as purchasing three used plows from Arnott, Staff are budgeting \$51,000 (\$36,000 in salaries and benefits and \$15,000 in operating costs) per plow per winter season. This would result in a total operating cost of \$306,000 over the two winter control seasons.

In addition to the operating cost the Town will also incur capital costs for the purchase of the three plows, at this time Staff are estimating at \$50,000 per plow for a total of \$150,000. Due to the age, 13 years, and the relatively unknown state of the plows staff are estimating the sales price (after the two winter season) at \$15,000 per plow resulting in a capital cost of \$105,000.

Taking the operating cost of \$306,000 and the capital cost of \$105,000 the two year pilot project will cost the Town \$411,000 whereas the current tendered cost would be \$430,000 (\$215,000 per winter control season). This results in a small savings for the Town of \$19,000 over the two year period.

For 2018, Staff are forecasting that Winter Control will end the year at an estimated \$80,000 deficit due to the extended winter into April therefore either the in-house or contract option would require the Town to go over-budget for Winter Control in 2018. At this time staff are recommending that \$43,200 be added to the salaries and benefits budget and \$18,000 to the operating cost budget for 2018. The funding will come from the Winter Control Reserve.

For the 2019 budget salaries and benefits will need to be increase by \$64,800 (for a total of \$108,000) and the operating costs by \$27,000 (for a total of \$45,000) for a total of \$91,800 in 2019. For the winter season (November and December of 2018 and January to March of 2019) the Town will in total add \$153,000 to the Winter Control budget (\$51,000 per plow). In addition for 2019 the Town will be able to decrease the Contract Services budget line by \$150,000 making the pilot project almost tax neutral. The \$150,000 is what staff were carrying in the budget for the previous winter control contractor. If the Town was to award the tender as it currently stands the Contract Service line would have to increase from the \$150,000 to \$215,000, an increase of \$65,000.

Increasing the Operating budget for Winter Control from \$836,000 by \$80,000 to \$936,000 represents a 9.5% increase.

I. In consultation with

Sam Dinsmore, Deputy Treasurer / Manager of Accounting and Budgets.
Serena Wilgress, Manager of Purchasing and Risk Management.
Senior Management Team, Town of The Blue Mountains.

J. Attached

None.

Respectfully submitted,

Jim McCannell

Jim McCannell
Manager of Roads and Drainage

Reg Russwurm

Reg Russwurm, MBA, P.Eng
Director of Infrastructure and Public Works

For more information, please contact:
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