

Fire Services Equipment Standardization

Presented To: Community and
Emergency Services
Committee

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Type: Managers' Reports

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Recommended by: General Manager of
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Report Summary

This report provides recommendations to enter into two single source contracts, both with a contract term of five years, plus a five-year extension option (ten-year total) with Dependable Emergency Vehicles for the purchase of fire tankers, and with Hurst Jaws of Life for the purchase of auto extrication equipment.

Resolutions

Resolution 1:

THAT the City of Greater Sudbury authorizes the General Manager of Community Safety to enter into a single source contract with Dependable Emergency Vehicles of Brampton Ontario for a contract term of five (5) years, plus a five (5) year extension option (ten (10) year total) for the purchase of fire tankers, as outlined in the report entitled "Fire Services Equipment Standardization" from the General Manager of Community Safety, presented at the Community and Emergency Services Committee meeting on April 22, 2024.

Resolution 2:

THAT the City of Greater Sudbury authorizes the General Manager of Community Safety to enter into a single source contract with Hurst Jaws of Life of Shelby, North Carolina for a contract term of five (5) years, plus a five (5) year extension option (ten (10) year total) for the purchase of auto extrication equipment, as outlined in the report entitled "Fire Services Equipment Standardization" from the General Manager of Community Safety, presented at the Community and Emergency Services Committee meeting on April 22, 2024.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report refers to operational matters and has no direct connection to the Community Energy and Emissions Plan.

Financial Implications

If approved, the purchase of the fire tankers and auto extrication equipment will be funded on an annual basis through the 2024-2027 approved capital budgets.

In addition, future capital budgets will request the funding required.

Background

In order for Fire Services to provide a reliable and effective service delivery to the citizens of Greater Sudbury, strategic replacement of the tanker fleet is required. This replacement will ensure the FUS (Fire Underwriters Survey) rating remains at predictable norms which give stability to the insurance underwriters who provide coverage for personal, commercial, and industrial customers in Greater Sudbury. This replacement shall also ensure Fire Services provides reliable fire protection with functional apparatus which meet the industry standards and best practices under the National Fire Protection Association (NFPA), and follow the Council directed Establishing and Regulating By-law.

New tanker apparatus provide the latest safety features in order to protect the workers and motoring public while in operation. Updated warning systems (lighting and sirens) and engineering safety technologies create a safe emergency response for both the workers and the public when attending to emergency incidents. Inclusion of tank baffles, pressure relief systems, and stable weight distribution designs reduce risk from shifting water, providing greater safety margins while the apparatus is in operation.

New battery operated edraulics auto extrication equipment will replace existing gasoline operated hydraulic auto extrication equipment that has reached or surpassed their service life. The replacement of all hydraulics with edraulics will eliminate emissions associated with operating auto extrication equipment. Battery operated edraulics are more efficient and effective as an independent tool by allowing the operator to move freely around the vehicle without the need for tethered hydraulic lines and providing an expedited emergency response.

The proposed single source agreements are expected to generate financial advantages to the City in the form of price escalation certainty. The agreements will include fixed-price escalation clauses for a defined period, providing the City with a clear forecast of future expenses associated with these critical assets. This certainty facilitates more accurate budgeting and financial planning, protecting the City from unexpected market fluctuations that could otherwise impact the cost of maintaining and operating our fleet of fire tankers and auto extrication tools.

Comprehensive maintenance agreements embedded within the single source contracts will ensure that both fire tankers and auto extrication equipment are maintained to the highest standards, ensuring reliability and longevity. These agreements are expected to result in lower maintenance costs over the lifecycle of the equipment, attributable to pre-negotiated rates for parts, labor, and regular service checks.

Tankers – Single Source

Greater Sudbury Fire Services operates a fleet of nine tanker apparatus as part of a total fleet of seventy-three emergency response vehicles. Tanker apparatus is an essential component of fire suppression as it provides large quantities of water for suppression activities in rural areas of the community that do not have access to fire hydrants or a permanent source of water. Multiple tankers are often required to shuttle and provide water to other fire apparatus (fire engine) to engage in suppression activities. Tankers have the ability to draft water from remote locations (lakes, rivers, wells), which allow for reduced response time, as the tanker does not always need to locate a City maintained water source or fire hydrant.

Tanker apparatus replacement follows the specifications outlined by the NFPA and FUS. These are industry best practice guidelines which recommend a life span of no longer than 20 years for front line apparatus. Over the period of 2019-2020, Greater Sudbury Fire Services purchased four identical International HV607 Tanker apparatus from Dependable Emergency Vehicles which is a Canadian owned company located in Brampton Ontario.

In May 2020, Fire Services entered into a five-year agreement with Dependable Emergency Vehicles for the purchase of tankers. Dependable Emergency Vehicles was the successful recipient providing the lowest cost

for fire tankers during the previous tender process. Within our current fleet of nine tankers, we have recently acquired four from Dependable Emergency Vehicles with a fifth tanker currently in production. Additionally, agreements are in place for the purchase of three tankers from the same supplier (one tanker currently in production). We are now seeking Council's approval to procure the remaining two tankers through a continued single purchase agreement with Dependable, completing the standardization of our tanker fleet in 2027.

The total cost for the purchase of one International cab and chassis HV607 Tanker was \$494,242 in 2023, including all taxes and charges. Council approved the purchase of one tanker per year from 2024-2027 through the capital budget.

Greater Sudbury Fire Services experience with Dependable Emergency Vehicles has been very positive, with no concerns related to the apparatus quality or workmanship. Dependable Emergency Vehicles has consistently demonstrated strong after sales service through a commitment to problem resolution and solid technical support and innovation. Dependable Emergency Vehicles has developed a reputation in the fire service sector for quality manufacturing and workmanship. Fire Services purchases of the International HV607 Tankers from Dependable Emergency Vehicles provides the benefit of fleet standardization.

Auto Extrication Equipment – Single Source

Greater Sudbury Fire Services uses auto extrication equipment to assist with motor vehicle collisions (MVC) when patients are trapped and require assistance to be removed from the vehicle in an emergency. The auto extrication equipment is an essential piece of equipment required to free patients from vehicle collisions. The manufacturer's instructions state the useful life of auto extrication equipment is 15 years.

Fire Services provides auto extrication services for motor vehicle collisions as per the level of service approved by Council. Fourteen of the twenty-two stations are equipped with auto extrication equipment and able to respond to motor vehicle collisions to stabilize the vehicle and extricate the patient. Five of the current sets of auto extrication equipment are gasoline operated hydraulic and need to be replaced with more efficient and effective edraulic sets of auto extrication equipment.

The total cost for the purchase of two sets of auto extrication tools (cutter, spreader, ram) was \$132,888 in 2024. Council approved the purchase of two set of auto extrication tools per year from 2024-2027 through the capital budget. We are now seeking Council's approval to procure the eight sets of tools through a single purchase agreement with Hurst Jaws of Life, completing the standardized of our auto extrication equipment fleet in 2027.

While opting for single sourcing inherently limits our engagement in the competitive bidding process, both Dependable Emergency Vehicles and Hurst Jaws of Life were the successful bidders in previous open competitive procurement processes for tankers and auto extrication equipment, respectively. Greater Sudbury Fire Services experience with Hurst Jaws of Life has also been positive with no concerns related to the equipment quality or workmanship. Hurst Jaws of Life has consistently demonstrated strong after sales service through a commitment to problem resolution and solid technical support and innovation. Hurst Jaws of Life is the only Hurst dealer whose sales territory for Hurst rescue equipment includes the provinces of Labrador, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island and Quebec.

Advantages of Single Source

Standardization from Dependable Emergency Vehicles and Hurst Jaws of Life ensures:

- Consistency in apparatus and equipment design and operation, significantly reduces the training hours required for firefighters to achieve proficiency in operating the tanker or auto extrication equipment. This uniformity is crucial for maintaining high readiness and effectiveness in emergency response scenarios, directly impacting operational efficiency and personnel safety.
- Efficiencies in inventory management, reduces the complexity of maintaining multiple product specific

inventories and associated costs.

- Standardization of equipment provides more efficient maintenance operation, reducing downtime and ensuring higher availability of critical equipment for emergency responses as technicians who maintain the apparatus and equipment have strong familiarity and understanding of the standardized apparatus or rescue equipment. This reduces the amount of maintenance training required by the technicians as well.
- Reduced costs resulting from a single infrastructure to maintain/support a single brand of auto extrication equipment, this includes batteries and battery charges in vehicles and stations, and compatible ancillary parts needed to configure the equipment for specific functions (e.g. chains, clevis, straps, etc.).

In the context of emergency services, the benefits of equipment standardization, reduced training times, lower maintenance costs from reduced inventory needs, operational flexibility and reliability, and vendor responsiveness are the most important considerations in vehicle and equipment procurements.

Conclusion

In conclusion, while single sourcing deviates from the conventional competitive bid process, the strategic benefits of this approach (primarily in terms of operational excellence, cost efficiency, and risk mitigation) support its adoption.

Recommendation

Staff recommend the City of Greater Sudbury Fire Services maintains a standard tanker apparatus fleet and auto extrication equipment by standardizing our purchases through a single source purchase contract with Dependable Emergency Vehicles and Hurst Jaws of Life.

With Council approval, it is permissive for non-competitive purchases under Part 22, Section 1(b)(i) of the Purchasing By-Law.