



# City of Grand Island

Tuesday, December 20, 2022

Council Session

## Item G-11

**#2022-357 - Approving Purchase of Front End Loader for the Streets Division of the Public Works Department**

Staff Contact: Keith Kurz PE, Interim Public Works Director

# **Council Agenda Memo**

**From:** Shannon Callahan, Street Superintendent

**Meeting:** December 20, 2022

**Subject:** Approving Purchase of a new Front End Loader for the Streets Division of the Public Works Department

**Presenter(s):** Keith Kurz PE, Interim Public Works Director

## **Background**

The Streets Division of the Public Works Department budgeted funds for a new Motor grader in the 2022/2023 fiscal year but is recommending the purchase of a new Front end loader rather than a Motor grader. This change will reduce the fleet of Motor graders from four (4) to three (3) and increase the fleet of Front end loaders from three (3) to four (4) since an existing Motor grader will be offered as a trade-in.

Trade in will be Unit 232 a 1980 CAT 120G Motor grader with over 10,000 hours and a repair cost to purchase ratio of 3.10. This unit is currently used, in large, for plowing snow in residential areas and as a backup for plowing on the Emergency Snow Routes. Only 1,300 hours of the 10,000 hours have been put on this machine in the last 10 years.

*Unit 232 Motor grader*





There are several reasons this change in equipment type is being recommended:

First, Front end loaders are used more frequently in everyday operations compared to a motor grader as the number of attachments make them more versatile. Loaders are used for loading trucks, moving debris, with a grapple attachment they can be used for hauling and loading trees, a Vee Plow attachment is used for plowing snow and does an excellent job clearing round-a-bouts and cul-de-sacs. A loader is also used to run the asphalt zipper (milling machine) used for asphalt patching and the large snow heaver for blowing snow into the back of trucks for hauling away (such as in the downtown area).

In contrast motor graders are used for grading gravel streets and alleys as well as plowing snow. Three (3) graders is enough to keep up with the work load for grading gravel and currently the fourth grader is only a stand-by when plowing emergency snow routes. Its use for plowing snow in residential areas can be achieved with the new front-end loader.

Second, the skill set of operating a motor grader is not common among staff and takes a good number of training hours to become proficient. There were several operators with good experience running motor grader that have retired this past year. Since front end loaders are used more often the vast majority of the staff can operator them skillfully. Also, other City Divisions' staff can run front end loaders so their skill set would carry over if required for emergency purposes.

Lastly, the cost of a new front end loader is significantly less than a new motor grader. The cost of a new front end loader with all required options was approx. \$72,000 less than the cost of a new motor grader.

## **Discussion**

The Streets Division is recommending the purchase of a new CAT 938M front end loader. This brand is being presented based on the fact that two (2) of three (3) loaders at the Streets Division are CAT loaders and will have the same control setup as the loader being recommended which will minimize operator training time. It has been proven that this make and model can successfully run our larger attachments such as the asphalt zipper. Several other City Divisions also run CAT loaders therefore Fleet Services staff are familiar with maintenance and operations and would reduce the amount of parts on-hand needed for such.

The City of Grand Island City Council approved the use of the National Joint Powers Alliance Buying Group (NJPA), now known as Sourcewell, with Resolution 2014-326.

To meet competitive bidding requirements, the Streets Division obtained pricing from the (NJPA) Sourcewell Contract No. 032119-CAT awarded to Caterpillar, Inc.; with NMC of Doniphan, NE assigned as our authorized dealer.

Per the Sourcewell Contract No. 032119-CAT the price for the new CAT 938M Front end loader with 12' Vee Plow attachment and 3.5 cubic yard bucket, that meets the City's requirements, will be \$303,586.00. NMC is offering \$22,700.00 trade value for the 1980 CAT 120G Motor grader (Unit 232) for a net purchase price of \$280,886.00.

## **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

## **Recommendation**

City Administration recommends that the Council approve the purchase of a new CAT 938M front end loader from NMC of Doniphan, NE for a net purchase price of \$280,886.00.

## **Sample Motion**

Move to approve the resolution approving the purchase of a new CAT 938M front end loader from NMC of Doniphan, NE for a net purchase price of \$280,886.00 and authorizing the Mayor to take all actions necessary to effect such purchase.



# Small Wheel Loaders



## Aggregate Handler Arrangements



	926M Aggregate Handler		930M Aggregate Handler		938M Aggregate Handler	
Engine Model*	Cat® C7.1		Cat C7.1		Cat C7.1	
Maximum Rated Gross Power:						
ISO 14396	125 kW	(168 hp)	125 kW	(168 hp)	140 kW	(188 hp)
ISO 14396 (metric)	170 hp		170 hp		190 hp	
Bucket Capacity	2.5-5.0 m³	(3.3-6.5 yd³)	2.5-5.0 m³	(3.3-6.5 yd³)	2.9-5.0 m³	(3.8-6.5 yd³)
Full Turn Tip Load	8047 kg	(17,740 lb)**	9203 kg	(20,289 lb)**	10 551 kg	(23,260 lb)**
	8148 kg	(17,962 lb)~	9302 kg	(20,507 lb)~	10 662 kg	(23,504 lb)^
Operating Weight	12 891 kg	(28,418 lb)**	14 374 kg	(31,689 lb)**	16 199 kg	(35,712 lb)**
	12 963 kg	(28,577 lb)~	14 446 kg	(31,848 lb)~	16 710 kg	(36,839 lb)^

\*Engine meets U.S. EPA Tier 4 Final, EU Stage V and Korea Tier 4 Final emission standards.

\*\*Aggregate Handler machine equipped with full counterweight and optional guards.

~Aggregate Handler equipped with full counterweight, optional guards, roading fenders, and cold start package.

^Aggregate Handler equipped with full counterweight, optional guards, roading fenders, cold start package, and 23.5R25 tires.

RESOLUTION 2022-357

WHEREAS, Sourcewell, formerly known as the National Joint Powers Alliance, cooperative purchasing group was utilized to secure competitive bids for a New Front End Loader by the Streets Division of the Public Works Department; and

WHEREAS, Sourcewell Contract No. 0032119-CAT was awarded to Caterpillar, Inc. and authorized NMC of Doniphan, NE to offer said contract pricing to the City of Grand Island, Nebraska; and

WHEREAS, the Public Works Department has recommended the purchase of a new CAT 938M Front End Loader from NMC of Doniphan, NE for a purchase price of \$303,586.00 with a trade in allowance of \$22,700.00 for a net purchase price of \$280,886.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that a purchase order and subsequent payment for the new CAT 938M Front End Loader from NMC of Doniphan, NE is hereby approved.

BE IT FURTHER RESOLVED that the Mayor and designees are authorized to take all actions necessary to carry out the intent of this Resolution.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 20, 2022.

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Roger G. Steele, Mayor

Attest:

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RaNae Edwards, City Clerk

Approved as to Form	☐ _____
December 16, 2022	☐ City Attorney