



CITY of NOVI CITY COUNCIL

Agenda Item 6
October 22, 2018

SUBJECT: Approval to purchase a 930M Wheeled Loader from MacAllister Machinery Co. dba Michigan CAT in the amount of \$189,801.50 through the MiDeal Cooperative Purchasing Contract.

SUBMITTING DEPARTMENT: Department of Public Works, Fleet Asset Division
Department of Public Works, Field Operations Division

CITY MANAGER APPROVAL: 

EXPENDITURE REQUIRED	\$189,801.50
AMOUNT BUDGETED	\$275,000
APPROPRIATION REQUIRED	N/A
LINE ITEM NUMBER	101-442.20-984.016

BACKGROUND INFORMATION:

The DPW utilizes front-end loaders on a daily basis for loading dirt, debris, and road salt; as well as for unloading gravel train deliveries. The DPW Loaders are also used for snow removal on bridge decks and parking areas. The proposed new loader will also be equipped with a pallet-fork attachment to move materials and equipment efficiently and safely on or off site.

This new asset replaces unit #689, a 1995 Case Loader 821B, which is in poor condition and has exceeded its useful life. Maintenance and repairs are excessive and expensive totaling \$30,703.72 to date. This purchase is in line City's plan to replace assets and equipment by capturing optimal resale value; thereby, bringing the overall cost of the units' life cycle as low as possible in purchase, maintenance, and value.

RECOMMENDED ACTION: Approval to purchase a 930M Wheeled Loader from MacAllister Machinery Co. dba Michigan CAT in the amount of \$189,801.50 through the MiDeal Cooperative Purchasing Contract.



October 23, 2017

City of Novi
45175 W 10 MILE RD FINANCE DEPT
Novi, Michigan 48375

Dear **City of Novi**,

Thank you for this opportunity to quote a solution from Michigan CAT for your business needs. We are pleased to submit the following for your purchase consideration.

One (1) New CATERPILLAR Model: 930M Wheel Loader with the following factory and dealer options included below:

STOCK NUMBER:	SERIAL NUMBER:	YEAR:	SMU:
MACHINE			
930M WHEEL LOADER DCA1			521-3604
430-2806 930M WHEEL LOADER			430-2806
430-2833 HYD,3V,COUPLER READY,STD LIFT			430-2833
333-6850 STEERING, STANDARD			333-6850
333-6529 DIFFERENTIAL, OPEN REAR			333-6529
430-2855 ENVIRONMENT, STANDARD			430-2855
454-0609 WEATHER STANDARD			454-0609
521-3244 CAB, DELUXE			521-3244
423-7201 SEAT, DELUXE			423-7201
372-1868 RADIO, BLUETOOTH, AUX, MIC			372-1868
366-8148 FENDERS, STANDARD			366-8148
333-6691 COUNTERWEIGHT, HEAVY			333-6691
377-5635 CAMERA, REAR VIEW			377-5635
430-2860 RIDE CONTROL			430-2860
430-2977 QUICK COUPLER, FUSION			430-2977
430-3038 ENGINE AR			430-3038
454-0589 PRODUCT LINK, CELLULAR PL641			454-0589
488-1113 LIGHTS, AUX HALOGEN			488-1113
519-8081 TOOLBOX AUX, NONE			519-8081
TIRES,20.5R25 MX XHA2 * L3			366-6880
KIT,SERIALIZED TECHNICAL MEDIA			0P-2491
INSTRUCTIONS, ANSI, US			430-2963
BUCKET, GP, 3.2YD3, FUS, BOCE			417-4925
FORKS, 60" CONSTRUCTION			452-6546
KIT, ELITE, NETWORK MANAGER			4948000

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Kalkaska . Brownstown Twp. Kalamazoo

KIT, CONTROL GP, PAYLOAD	4947950
KIT, BLOCK HEATER, 120V	3745855
KIT, ETHER START	3745854

SELL PRICE \$189,801.50

WARRANTY

Standard Warranty:	Michigan CAT 12 Month, Unlimited Hour Standard Full Machine Warranty Service Agreement with 6 Months Mileage
Extended Warranty:	930-60 MO/5000 HR PREMIER (Tier 4)

F.O.B/TERMS: Corporate

We believe the equipment as quoted will exceed your expectations. On behalf of Michigan CAT, thank you for the opportunity to supply Caterpillar machinery. This quotation is subject to machine availability and valid for 30 days, after which time we reserve the right to update the quote. If there are any questions, please do not hesitate to contact me.

Sincerely,

Evan Meinicke
Account Representative
evan.meinicke@michigancat.com
248-444-6045

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Cat[®] 930M

WHEEL LOADER

M SERIES – MAKING YOUR CHOICE EASY:

- Enjoy All Day Comfort** – Have a seat in the new M Series Small Wheel Loader and enjoy automatic temperature control, class leading sound levels, excellent all around visibility and low-effort joystick controls that move with you on a fully adjustable seat suspension. A large spacious operator environment combined with Caterpillar's exclusive hydraulic cylinder damping and smooth predictable controls make this the most comfortable seat on your job site.
- Work Made Easy** – Move more with Caterpillar's patented quick loading Performance Series buckets and optimized Z-bar linkage that combines the digging efficiency of a traditional Z-bar with tool carrier capabilities. The parallel lift and high tilt forces throughout the working range allow you to safely and confidently handle loads with precise control.

Multi-function work has never been easier with dedicated pumps for each system and a flow sharing implement valve governed by an intelligent power management system. Simultaneously lift, steer and drive without compromise. The M Series Small Wheel Loader simply does what you ask it to do.

- Efficiently Powerful** – Experience hybrid like fuel efficiency with an intelligent hydrostatic power train and industry leading fuel savings through a lower maximum engine speed of just 1,600 rpm in Standard Mode. Power when you need it with Caterpillar's exclusive Power-by-Range technology that increases power in Range 4 for improved speed on grade. For your toughest and most demanding applications a new Performance Mode will allow you to boost the power and hydraulic speed in all Ranges to get the job done even quicker. Meets U.S. EPA Tier 4 Final/EU Stage IV emission standards with a Cat[®] C7.1 ACERT[™] engine that is designed to manage itself so you can concentrate on your work.
- Customize Your Experience** – Meet your application requirements and individual preferences with Caterpillar's industry first Hystat[™] Operator Modes featuring four unique power train settings. Select classic Torque Converter for smooth rollout, conventional Hystat for aggressive engine braking, an Ice Mode that maximizes your control on slippery underfoot, or default mode which blends the best of Hystat and Torque Converter characteristics. Fine tune machine performance with adjustments at your fingertips through the soft touch buttons and optional secondary display. Quickly set hydraulic response along with linkage kick-out positions, maximum wheel torque, and peak ground speed to efficiently perform a multitude of tasks.

Specifications

Engine

Engine Model	Cat C7.1 ACERT	
	Standard Mode	Performance Mode
Power Mode	Standard Mode	Performance Mode
Speed Range	Range 1-3*	Range 1-4
Maximum Gross Power		
Maximum Engine Speed	1,600 rpm	1,800 rpm
ISO 14396	119 kW 160 hp	122 kW 164 hp
ISO 14396 (DIN)	119 kW 162 hp	122 kW 166 hp
Rated Net Power	1,600 rpm	1,800 rpm
SAE J1349	115 kW 154 hp	117 kW 157 hp
SAE J1349 at		
Maximum Fan Speed	105 kW 141 hp	107 kW 143 hp
ISO 9249 (DIN)	116 kW 158 hp	119 kW 162 hp

Engine (continued)

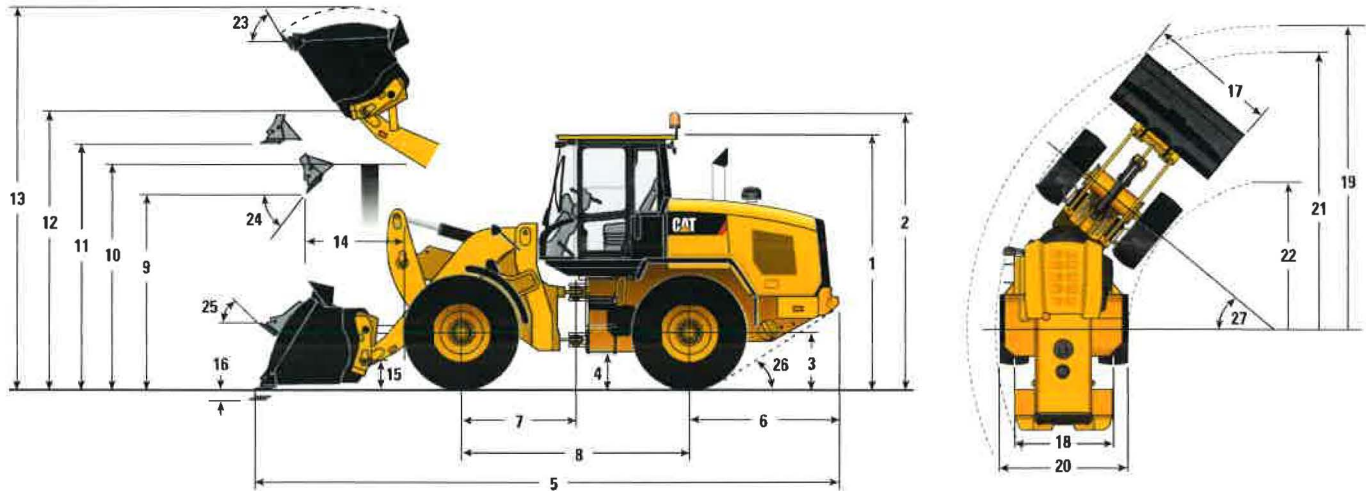
	Standard Mode		Performance Mode	
Maximum Gross Torque				
ISO 14396	804 N·m	592 lbf-ft	804 N·m	592 lbf-ft
Maximum Net Torque				
SAE J1349	768 N·m	566 lbf-ft	768 N·m	566 lbf-ft
ISO 9249 (1977)/EEC 80/1269	776 N·m	572 lbf-ft	776 N·m	572 lbf-ft
Displacement	7.01 L	427 in ³	7.01 L	427 in ³

- Engine meets Tier 4 Final/Stage IV emission standards.
 - Net power shown is the power available at the flywheel when the engine is equipped with alternator, air cleaner and diesel exhaust filter.
- *Range 4 power is boosted to be the same as Performance Mode.



930M Wheel Loader

Dimensions and Operating Specifications (All dimensions are approximate. Dimensions vary with bucket and tire choice.)



	Standard Lift		High Lift	
** 1 Height: Ground to Cab	3340 mm	(10'11")	3340 mm	(10'11")
** 2 Height: Ground to Beacon	3669 mm	(12'0")	3669 mm	(12'0")
** 3 Height: Ground Axle Center	685 mm	(2'2")	685 mm	(2'2")
** 4 Height: Ground Clearance	397 mm	(1'3")	397 mm	(1'3")
* 5 Length: Overall	7530 mm	(24'8")	8324 mm	(27'3")
6 Length: Rear Axle to Bumper	1993 mm	(6'6")	1993 mm	(6'6")
7 Length: Hitch to Front Axle	1500 mm	(4'11")	1500 mm	(4'11")
8 Length: Wheel Base	3000 mm	(9'10")	3000 mm	(9'10")
* 9 Clearance: Bucket at 45 degrees	2828 mm	(9'3")	3421 mm	(11'2")
** 10 Clearance: Loadover Height	3331 mm	(10'11")	3540 mm	(11'7")
** 11 Clearance: Level Bucket	3580 mm	(11'8")	4173 mm	(13'8")
** 12 Height: Bucket Pin	3907 mm	(12'9")	4500 mm	(14'9")
** 13 Height: Overall	5147 mm	(16'10")	5740 mm	(18'9")
* 14 Reach: Bucket at 45 degrees	1064 mm	(3'5")	1385 mm	(4'6")
15 Carry Height: Bucket Pin	458 mm	(1'6")	692 mm	(2'3")
** 16 Dig Depth	100 mm	(3.9")	135 mm	(5.3")
17 Width: Bucket	2550 mm	(8'4")	2550 mm	(8'4")
18 Width: Tread Center	1930 mm	(6'3")	1930 mm	(6'3")
19 Turning Radius: Over Bucket	5945 mm	(19'6")	6329 mm	(20'9")
20 Width: Over Tires	2540 mm	(8'4")	2540 mm	(8'4")
21 Turning Radius: Outside of Tires	5402 mm	(17'8")	5402 mm	(17'8")
22 Turning Radius: Inside of Tires	2851 mm	(9'4")	2851 mm	(9'4")
23 Rack Angle at Full Lift	54 degrees		53 degrees	
24 Dump Angle at Full Lift	49 degrees		48 degrees	
25 Rack Angle at Carry	45 degrees		50 degrees	
26 Departure Angle	33 degrees		33 degrees	
27 Articulation Angle	40 degrees		40 degrees	
* Tipping Load – Straight (ISO 14397-1)	9946 kg	21,928 lb	7146 kg	15,755 lb
* Tipping Load – Full Turn (ISO 14397-1)	8474 kg	18,683 lb	6021 kg	13,274 lb
* Breakout	12,366 kg	27,263 lb	12,062 kg	26,592 lb
* Operating Weight	13,994 kg	30,852 lb	14,226 kg	31,363 lb

*Vary with bucket.

**Vary with tire.

Dimensions listed are for a machine configured with 2.1 m³ (2.7 yd³) general purpose Fusion™ bucket, bolt-on cutting edge, heavy counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.