

SUBJECT: Award of bid number 22-067C to NC Machinery for the contract amount of \$306,725.00 to purchase a CAT 323 Excavator.






AGENDA OF: February 15, 2022

ASSEMBLY ACTION:

Adopted with Bernier, Trent
Sumner opposed 2-15-22
(BMM)

MANAGER RECOMMENDATION: Present to the Assembly for consideration.

APPROVED BY MICHAEL BROWN, BOROUGH MANAGER: MB

Route To:	Department/Individual	Initials	Remarks
	Purchasing Officer		
	Public Works Director	Terry Dolan <small>Digitally signed by Terry Dolan Date: 2022.02.02 16:45:28 -09'00'</small>	
	Finance Director		
	Borough Attorney		
	Borough Clerk	 2/7/22	

ATTACHMENT (S) : Fiscal Note: Yes X No _____
Quote (4p)
SWD Equipment Request (5p)

SUMMARY STATEMENT: The Public Works Department has a need for an excavator to be housed at the Central Landfill. The excavator is part of a multiple equipment purchase improving cost savings and contributing to the development of a first of its kind tire reuse and recycling program that will save the landfill approximately \$2,700,000.00 over ten years. The financing of this equipment will come from the American Rescue Plan Act.

In accordance with MSB Code 3.08.360 and utilizing the Sourcewell/CAT contract #032119-CAT, the borough requested, received and deemed acceptable a quote #224022-01 from NC Machinery.

Delivery is expected within 6 - 9 months after contract execution.

In accordance with MSB 3.08.170(B), Administration requests authority to modify the resulting contract completion date by 30 days for unforeseen circumstances.

The Public Works Department, Solid Waste Division services all assembly districts.

RECOMMENDATION OF ADMINISTRATION: Award of **BID NUMBER 22-067C** to **NC MACHINERY** for the contract amount of **THREE HUNDRED SIX THOUSAND SEVEN HUNDRED TWENTY-FIVE DOLLARS AND 00/100 CENTS (\$306,725.00)** to purchase a **CAT 323 EXCAVATOR**.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: February 15, 2022

SUBJECT: Award of bid number 22-067C to NC Machinery for the contract amount of \$306,725.00 to purchase a CAT 323 Excavator.

ORIGINATOR: Purchasing

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT <input checked="" type="radio"/> YES <input type="radio"/> NO
AMOUNT REQUESTED <u>306,725</u>	FUNDING SOURCE <u>ARRA Funds</u>
FROM ACCOUNT # <u>475.000.00 4XX.XXX</u>	PROJECT # <u>47534</u>
TO ACCOUNT :	PROJECT #
VERIFIED BY: <u>[Signature]</u>	CERTIFIED BY:
DATE: <u>2/3/22</u>	DATE:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						

CAPITAL	<u>306.7</u>					
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REVENUE						
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FUNDING: (Thousands of Dollars)

General Fund						
State/Federal Funds						
Other	<u>306.7</u>					
TOTAL	<u>306.7</u>					

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

PREPARED BY: _____ PHONE: _____
 DEPARTMENT: Chugach Division DATE: 2/3/2022
 APPROVED BY: [Signature] DATE: 2/3/2022



December 21, 2021

MATANUSKA-SUSITNA BOROUGH

350 E DAHLIA AVE
PALMER, Alaska 99645-6411

Attention: Terry Berger

RE: Quote 224022-01 – SOURCEWELL / CAT CONTRACT PRICING - CONTRACT # 032119-CAT, MSB MEMBER # 100542

We would like to thank you for your interest in our company and our products, and are pleased to quote the following for your consideration.

One (1) New Caterpillar Model: 323 Hydraulic Excavator with all standard equipment in addition to the specifications listed below:

STOCK NUMBER: TBD - NEW

SERIAL NUMBER: TBD - NEW

YEAR: 2022

SMU: NEW

AM 22-003

STANDARD EQUIPMENT

POWERTRAIN - C7.1 diesel engine, single turbo, Tier 4 Final emissions - Electric fuel priming pump - Reversible electric cooling fans - Two-stage fuel filtration system with water separator and indicator - Sealed double element air filter with integrated pre-cleaner - Biodiesel capable

UNDERCARRIAGE - Grease lubricated track link - Tie down points on base frame

HYDRAULICS - Electronic main control valve - Auto warm up - Tandem type electronic main pump - Boom and stick regeneration circuits - Automatic two speed travel - Boom and stick drift reduction valve - Element type main hydraulic filter -

ELECTRICAL - Maintenance free battery - Centralized electrical disconnect switch - CAT product link - After engine shut down programmable time delay LED working lights

OPERATOR ENVIRONMENT - Sound-suppressed ROPS cab w/viscous mounts - Increased rear window size as emergency exit - 2 inch orange seat belt - Tilt up left side console - Automatic bi-level air conditioner with pressurized function - Washable floor mat - Roller front sunscreen - Beacon ready - 2 x 12V DC outlet and USB port - Dome and lower LED interior lights, coat hook, cup holder, console storage, rear storage with net, and overhead storage with net - Openable tempered front upper windshield w/ assist device and removable tempered lower windshield with in cab storage bracket - Air suspension deluxe seat w/ headrest, 2 step seat heater, console height adjustment w/o tools, arm rest height and angle adjustment - Upper radial wiper - Openable polycarbonate hatch for 2P windshield

SAFETY AND SECURITY - RH hand rail and hand hold - Service platform with anti-skid plate and countersunk bolts - Hydraulic lock out lever neutralizes all controls - Ground level accessible secondary engine shutoff switch in cab - Warning horn -

OTHER STANDARD EQUIPMENT - Side entry to service platform - Grouped location for engine oil and fuel filters - Ground level 2nd dipstick for engine oil - Sampling ports for scheduled oil Sampling (S.O.S)

MACHINE SPECIFICATIONS

323	580-3212
5.4T / 11,900lb Counterweight, HD Base Frame	
323 HEX	490-7666
HD SWING FRAME	507-4824
COUNTERWEIGHT, 5.4MT (11,900lb)	575-2661
HD SWING BEARING	577-2734
HD UNDERCARRIAGE W/ SEVERE DUTY ROLLER	573-5698
DELUXE CAB	546-0101
STRAIGHT TRAVEL PEDAL	490-7715
BLUETOOTH RECEIVER	524-8272
10" MONITOR,	511-9428
TRAVEL ALARM	516-2545
HD TRAVEL MOTOR GUARD	488-9288
SWIVEL GUARD	134-8875
18'8" HD REACH BOOM	577-5865
9'6" HD REACH STICK	490-7676
B1 BUCKET LINKAGE W/ LIFTING EYE	492-8537
31" HD TRIPLE GROUSER TRACK SHOES	526-6475
SEGMENTED TRACK GUIDE GUARD	346-7148
COMBINED CIRCUIT AUXILIARY HYDRAULIC PACKAGE W/ STRAIGHT TRAVEL PEDAL	580-8003
BATTERIES, 4	506-5014
360 VISIBILITY CAMERA	578-1166
WIPER, RADIAL W/LOWER	484-8022
RADIO, W/BLUETOOTH	502-7166
GRADE W/ 2D ASSIST & PAYLOAD	516-0550
PROD LINK, PLE683/PLE783 RADIO	580-5994
MIRRORS	580-8628
HD BOTTOM GUARD	576-9412
ETHER STARTING AID	511-5861
REAR SUN SCREEN	488-6450
10" GRADE MONITOR	554-3627
STORAGE TRAY	576-9463
RADIATOR SCREEN	491-8272
RAD COMPARTMENT HANDHOLDS	508-9617
QUICK DRAINS READY	511-7398
QUICK COUPLER HYDRAULIC CONTROL	517-4758
CAT PIN GRAB COUPLER	455-3909
-58F ANTIFREEZE	0P-2407
42" HD BUCKET W/ 5 TEETH	TBD
72" CLEAN OUT BUCKET WITH BOLT ON CUTTING EDGE	TBD
HYDRAULIC THUMB GROUP	533-0877

AM 22-003

NEW 2022 CAT 323 EXCAVATOR LIST PRICE	\$333,989.00
2021 SOURCEWELL CONTRACT DISCOUNT – 15% OFF LIST PRICE	-\$50,098.00
CAT-NC MACHINERY 323 ADDITIONAL DISCOUNT PROGRAM WRITTEN FOR MSB LANDFILL	-\$11,950.00
SUBTOTAL	\$271,941.00

NON-CAT PRICE LIST ITEMS

FREIGHT FROM FACTORY, FOB MAT-SU BOROUGH LANDFILL	\$16,100.00
NEW MACHINE PREP, PDI, INSTALL TWO BUCKETS, THUMB, PIN GRABBER COUPLER, AUX HYDRAULICS TO STICK	\$9,300.00
1 PAPER SET PARTS AND SERVICE MANUALS	\$1,100.00
1 DAY OF ON-SITE OPERATOR TRAINING	\$0.00
7 YEAR / 5000 HOUR CAT PREMIER WARRANTY	\$8,284.00
TOTAL	\$306,725.00

WARRANTY

Standard Warranty: 1 YEAR CAT NEW MACHINE WARRANTY - TECH TRAVEL TIME AND MILEAGE NOT INCLUDED

Extended Warranty: 7 YEAR / 5000 HOUR CAT PREMIER WARRANTY - TECH TRAVEL TIME AND MILEAGE NOT INCLUDED

F.O.B/TERMS: MSB Landfill, AK

Accepted by _____ on _____

Signature

We wish to thank you for the opportunity of quoting your equipment needs. This quotation is valid for 30 days, after which time we reserve the right to re-quote. If there are any questions, please do not hesitate to contact me.

Sincerely,

Steven Fisher
Machine Sales Representative
Cell: 907-748-7540
sfisher@ncmachinery.com

AM 22-003

Solid Waste Division
1201 N 49th State St
Palmer, AK 99645
www.matsugov.us

January 31, 2022

Equipment Request

Executive Summary

This report is generated to define why the purchase of a Brush and Tire Shredder and Excavator can improve costs for the landfill and develop a first of its kind Tire Reuse and Recycling Program saving Solid Waste more than \$2.7 million over 10 years with equipment purchased with American Recovery Program Funds.

AM 22-003

REQUISITION ANALYSIS AND JUSTIFICATION

SUMMARY

An analysis was completed by the Solid Waste Division to purchase an Excavator and Shredder using existing funds from the American Recovery Program (ARP), and approved by the Alaska Department of Environmental Conservation (ADEC). The net cost savings after expense to Central Landfill is \$2.7 million dollars over the next 10 years with savings beginning in year one with no additional costs for equipment.

In the 2020 Landfill Development Plan, it was determined that best practice was to collect gas and recirculate leachate in MSW Cell 4 by laying pipe with every lift. A lift is completed approximately every 12 months. By laying pipe with this excavator and existing landfill staff, the landfill will incur a savings of \$150,000 annually in labor cost verses paying a contractor for this service. Laying the leachate recirculation pipe will reduce the volume of leachate by approx. 50% annually or approximately 1,500,000 gallons with volume increasing annually. The cost to self-haul this leachate is approximately \$.04 cents per gallon, saving an additional \$60,000 in year 1 (or \$960,000 over 10 years) by reducing the need to haul the leachate away.

The excavator will have multiple other purposes besides laying pipe and feeding the shredder. It will be used to perform general work around the landfill that will create savings in equipment rental costs and repair costs for roads, extract gravel and daily cover from future cells, and many other purposes.

The shredder is designed to shred brush collected from the Beetle Kill Collection program and tires from the Construction & Demolition (C&D) cell. Central Landfill collects over 1,800 tons of beetle kill brush and approx. 20,000 cubic yards of tires annually. Shredding brush with this equipment will save \$100,000 per year in contractor payments. Additionally, the only available shredding contractor is in high demand, has difficulty scheduling service for Central Landfill and has a wait time of 6 to 10 months to provide services.

In addition to brush, the shredder will also be used for shredding tires. Tires will be removed from the C&D cell, shredded and reused, saving unquantifiable development costs by extending the life of the C&D Cell by as much as 10 years. This creates the first of its kind "Tire Reuse Program" in the Matsu Borough (second overall in Alaska), making the Matsu Borough Solid Waste Division an innovator when it comes to environmentally and cost friendly recycling programs.

REQUISITION ANALYSIS AND JUSTIFICATION

BACKGROUND

Nationally, 14.3% of tires are buried in landfills. The Matsu Borough buries 100% of tires collected because there is no other option for reuse or recycling in the Matsu Valley. Central Landfill collects approximately 80,000 tires or about 20,000 cubic yards of tires annually. Using the Excavator and Shredder equipment, tires can be diverted and shredded from the C&D cell. The material will be re-used as underlayment for the gas collection and leachate recirculation lines that are installed annually within MSW Cell 4. Reusing tires will save approximately 20,000 cubic yards of space each year in the C&D cell, extending the life of the cell by as much as 10 years. In addition, this will create the first of its kind "Tire Reuse Program" in the Matsu Valley.

Brush shredding is currently contracted out to Alaska Land Clearing (ALC). Central Landfill collected 1,800 tons of brush in FY21. The cost to shred the brush at Central Landfill for FY21 was \$82,800, approx. \$40,000 more than in FY20. It is anticipated that this cost will go up to \$95,000 in FY22 due to the increased volume of material and with the expectation that the contractor's per hour rate will increase year over year.

In May of 2021, ALC was contacted to come and shred brush. They were unable to schedule Central Landfill in their system. ALC has since been contacted regularly by Central Landfill staff to shred material. In January 2022, ALC was finally able to place Central Landfill on their schedule and shred the brush material.

PERSONNEL REQUIREMENTS

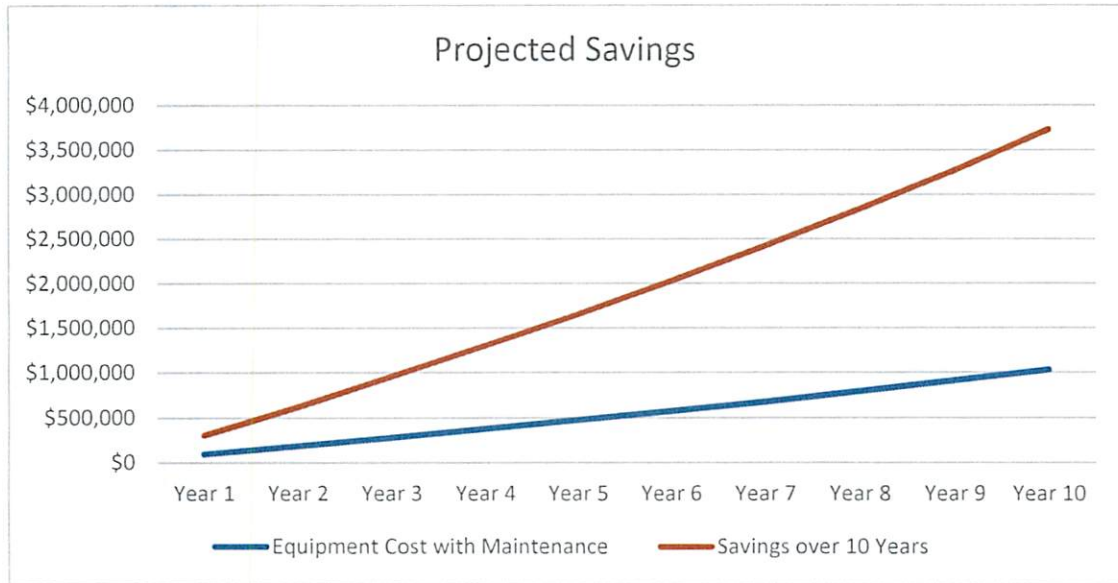
Currently, landfill staff averages 8 hours per week pushing brush to reduce the area required for collection and storage of Beetle Kill Brush. Most of these hours are in the summer, but with proper planning they can be spread throughout the year and better used to shred brush instead of pushing material out of the way.

Laying pipe happens over an approximate 1 week window in the summer. Existing staff will be able to install piping. This means that no additional personnel will be required to perform these functions with the current volumes.

EQUIPMENT COST

MSW Cell 4 was allocated a loan from the Department of Environmental Conservation. This already approved loan would be used to purchase this equipment. The savings generated from purchasing this equipment will save more than \$300,000 annually from contract labor costs.

REQUISITION ANALYSIS AND JUSTIFICATION



	Maintenance and Fuel Shredder	Maintenance and Fuel Excavator	Brush Contract Savings	Gas Line Installation Savings	Leachate Hauling Savings	Equipment Cost with Maintenance	Savings over 10 Years
Year 1	\$52,000	\$39,908	\$95,000	\$150,000	\$60,000	\$91,908	\$305,000
Year 2	\$53,300	\$39,908	\$97,375	\$155,000	\$60,000	\$185,116	\$617,375
Year 3	\$54,633	\$39,908	\$99,809	\$160,000	\$80,000	\$279,657	\$957,184
Year 4	\$55,998	\$39,908	\$102,305	\$160,000	\$80,000	\$375,563	\$1,299,489
Year 5	\$57,398	\$39,908	\$104,862	\$165,000	\$80,000	\$472,869	\$1,649,351
Year 6	\$58,833	\$39,908	\$107,484	\$170,000	\$100,000	\$571,610	\$2,026,835
Year 7	\$60,304	\$39,908	\$110,171	\$175,000	\$110,000	\$671,822	\$2,422,006
Year 8	\$61,812	\$55,000	\$112,925	\$180,000	\$120,000	\$788,634	\$2,834,931
Year 9	\$63,357	\$55,000	\$115,748	\$190,000	\$130,000	\$906,991	\$3,270,679
Year 10	\$64,941	\$55,000	\$118,642	\$200,000	\$140,000	\$1,026,932	\$3,729,321

Total Savings

\$2,702,389.42

CONCLUSION

SUMMARY

The Solid Waste Division has taken a careful look at the financial impact of purchasing this equipment. The Return On Investment (ROI) speaks for itself with cost savings produced beginning in year one. This purchase also provides an opportunity for the landfill to create new diversion program by shredding tires collected in the C&D Cell. This program extends life to the C&D Cell deferring future costs to develop a new cell.

Solid Waste recommends to approve this purchase.