






SUBJECT: Award of bid number 22-066C to BSI Equipment, LLC, for the contract amount of \$711,159.50 to purchase a Waste Shredder.

AGENDA OF: February 15, 2022

ASSEMBLY ACTION:
Adopted with Tew opposed
2-15-22


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	Digitally signed by Terry Dolan Date: 2022.02.02 16:45:51 -09'00'
	Finance Director		
	Borough Attorney		
	Borough Clerk	<i>MB 2/15/22</i>	

ATTACHMENT (S) : Fiscal Note: Yes X No _____
 Quote (1p)
 SWD Equipment Request (5p)

SUMMARY STATEMENT: The Public Works Department has a need for a waste shredder to be housed at the Central Landfill. The shredder 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 North Carolina Sheriffs' Association contract 22-06-0426, the borough requested, received and deemed acceptable a quote from BSI Equipment, LLC.

Delivery is expected within 270 days 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 22-066C** to **BSI EQUIPMENT, LLC** for the contract amount of **SEVEN HUNDRED ELEVEN THOUSAND ONE HUNDRED FIFTY-NINE DOLLARS AND 50/100 CENTS (\$711,159.50)** to purchase a **WASTE SHREDDER**.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: February 15, 2022

SUBJECT: Award of bid number 22-066C to BSI Equipment, LLC, for the contract amount of \$711,159.50 to purchase a Waste Shredder.

ORIGINATOR: Purchasing

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT <input checked="" type="radio"/> YES <input type="radio"/> NO
AMOUNT REQUESTED <u>711,159.50</u>	FUNDING SOURCE <u>ARPA Funds</u>
FROM ACCOUNT # <u>475.000.000 4XX.XXX</u>	PROJECT # <u>47534</u>
TO ACCOUNT :	PROJECT #
VERIFIED BY: <u>Mmmmmmm</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>711.2</u>					
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REVENUE						
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FUNDING: (Thousands of Dollars)

General Fund						
State/Federal Funds						
Other	<u>711.2</u>					
TOTAL	<u>711.2</u>					

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

PREPARED BY: _____ PHONE: _____
 DEPARTMENT: Chapennet DATE: _____
 APPROVED BY: _____ DATE: 2/3/2022



Quote Date: 01/31/2022
 Prepared By: Jim Lackey
 Cell: (907) 841-9999
 Email: jilackey@bsiequipment.com

2009 Spar Avenue Anchorage, AK 99501

QUOTE FOR: Matanuska-Susitna Borough
 CONTACT: Terry Berger
 PHONE: (907) 907-861-7620 / Cell (907) 354-0243
 EMAIL: terry.berger@matsugov.us

QUOTE
 QUOTE VALID THROUGH
 02/18/2022

New 2022 Edge Innovate VS420 Waste Shredder

Edge VS420 - Itemized Pricing

Description	List Price	Contract Discount	Sale Price
Edge VS420	\$604,979.00	-\$36,298.74	\$568,680.26
Hydraulic Hopper Extensions	\$6,236.81	-\$374.21	\$5,862.60
Hydraulically Adjustable Magnet	\$18,210.10	-\$1,092.61	\$17,117.50
Reversible Fan	\$8,752.09	-\$525.13	\$8,226.96
Auto Greasing System	\$6,634.32	-\$398.06	\$6,236.26
Dust Suppression Bar	\$1,130.85	-\$67.85	\$1,063.00
Dust Suppression System	\$3,810.62	-\$228.64	\$3,581.98
Spare Support Beam 2m	\$7,059.24	-\$423.55	\$6,635.69
Spare set of Bolt on Teeth 2m	\$3,529.62	-\$211.78	\$3,317.84
Tire Shredding Shafts with Heavy Duty Combs	\$33,884.37	-\$2,033.06	\$31,851.30
High Hook Teeth	\$2,010.86	-\$120.65	\$1,890.20
Diesel Fired Heater	\$6,935.88	-\$416.15	\$6,519.72
Caterpillar Platinum Extended Engine Warranty 60 Months or 7500 Hours			\$21,895.00
Caterpillar Extended After Treatment Warranty DPF & SCR 60 Months or 7500 Hours			\$9,187.50
		Contract Price:	\$692,065.83
		HMC Surcharge (includes NCSA)	\$13,841.31
		Shipping Increase & Fuel Surcharge: Ireland to Tacoma, WA	\$2,650.00
		Shipping Increase & Fuel Surcharge: Tacoma, WA to Anchorage, AK	\$2,602.36
Estimated Delivery ARO = 270 Days		Contract Price:	\$711,159.50

AM 22-004

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 22-004

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

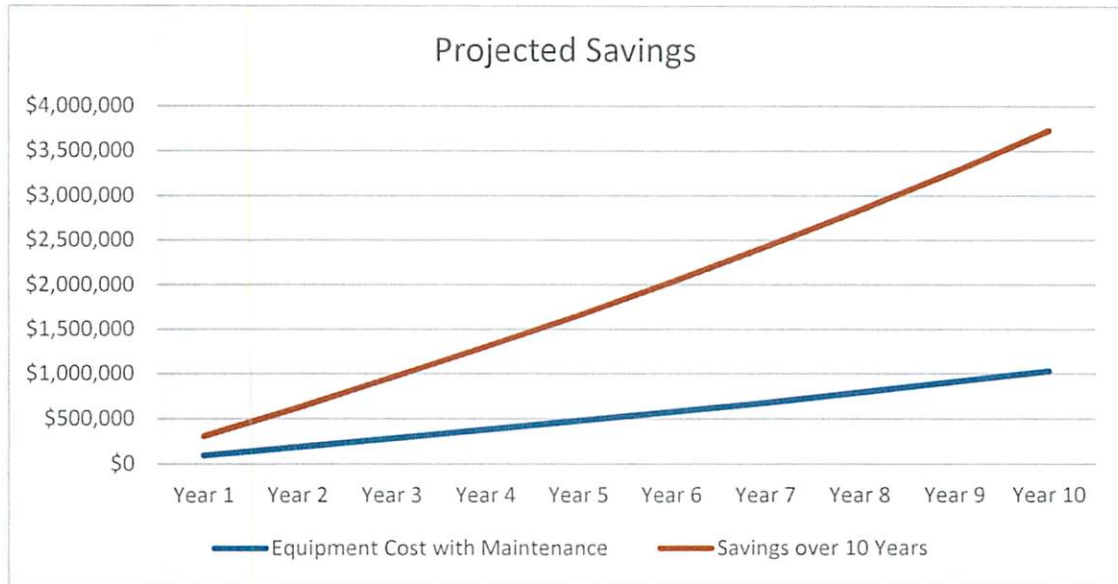
Currently, landfill staff averages 8 hours per week pushing brush to reduce the area required for collection and storage of Beetle Kill Brush. Most of these hours are in the summer, but with proper planning they can be spread throughout the year and better used to shred brush instead of pushing material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