

RESOLUTION NO. 2022-68

RESOLUTION AUTHORIZING THE VILLAGE OF CALEDONIA TO MODIFY THE BUDGET FOR ADDITIONAL COSTS ASSOCIATED WITH THE REFURBISHMENT OF THE PIERCE 2007 DASH AERIAL FIRE TRUCK

WHEREAS, the Village Board had set aside Capital Improvement funds in 2021 for the purchase of a new Fire truck.

WHEREAS, at this time the Pierce 2007 Dash Aerial fire truck would not pass certification so the Village Board approved a plan to utilize the previously budgeted funds for a new engine to refurbish the 2007 Aerial truck and extend the use life of the vehicle by 10 – 15 years.

WHEREAS, the advance payment of the refurbishment was made in July of 2021 in the amount of \$617,120. The actual disassembly of the vehicle did not commence until January of 2022, due to manufacturing and supply chain issues.

WHEREAS, upon inspection and testing of the vehicle during the disassembly process, it was determined that additional repairs and replacement of items would be need totalling \$60,995.

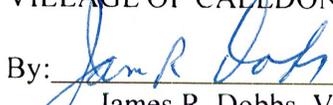
WHEREAS, to facilitate this refurbishment, the Village will reallocate a portion of funds in the 2022 budget previously approved and available for the purchase and installation of the EVPs in the amount of \$10,089. In addition budgetary transfers in the amount of \$34,000 and \$10,398 shall be made from the General Fund Contingency Account and the Attorney Fees accounts respectively. These reallocated funds totalling \$54,487 will need to be added to the 2022 Capital Project fund for these required repairs.

WHEREAS, the Village Finance Committee has reviewed this request and recommends that the Village Board authorize the use of said funds as described above.

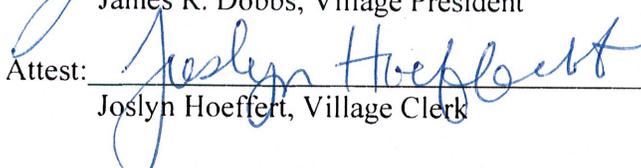
NOW, THEREFORE, BE IT RESOLVED by the Caledonia Village Board reallocate \$54,487 in budgeted funds towards the additional costs and approve that the required funds totalling \$60,995, shall be taken from the 2022 Capital Project Fund.

Adopted by the Village Board of the Village of Caledonia, Racine County, Wisconsin, this 11 day of July 2022.

VILLAGE OF CALEDONIA

By: 

James R. Dobbs, Village President

Attest: 

Joslyn Hoeffert, Village Clerk

VILLAGE OF CALEDONIA

FISCAL NOTE: ADDITIONAL DEFECTS IDENTIFIED DURING INSPECTION AND TESTING OF THE CFD, PIERCE 2007 DASH AERIAL

FISCAL YEAR: 2022

ACCOUNT NAME	ACCOUNT NUMBER	CURRENT BUDGET	YEAR TO DATE EXPENDITURES	CURRENT BALANCE	BUDGET MODIFICATION	BUDGET AFTER MODIFICATION	REMAINING BUDGET BALANCE
DEPARTMENT: CAPITAL PROJECTS / FIRE DEPARTMENT							
Emergency Vehicle Traffic Signal Preemption	400-35-65030	\$ 10,089	\$ -	\$ 10,089	\$ (10,089)	\$ -	\$ -
General Fund: Contingency	100-90-65100	\$ 34,000	\$ -	\$ 34,000	\$ (34,000)	\$ -	\$ -
General Fund: Attorney Fees	100-90-61110	\$ 45,000	\$ 8,245	\$ 36,755	\$ (10,398)	\$ 34,602	\$ 26,357
Fire Department; Vehicles (2021 Capital Budget)	400-35-65040	\$ 6,508	\$ -	\$ 6,508	\$ 54,487	\$ 60,995	\$ 60,995
		<u>\$ 95,597</u>	<u>\$ 8,245</u>	<u>\$ 87,352</u>	<u>\$ -</u>	<u>\$ 95,597</u>	<u>\$ 87,352</u>

Note to Committee:

The Pierce 2007 Dash Aerial was dropped off on January 25, 2022 and while in the inspection and testing process during the disassembly of the unit, additional items were discovered to be in need of repair or replacement. Please see the attached punch-list of those items.

The Pierce 2007 Dash Aerial would not be recertified in its current state, so the decision was made to refurbish the unit, which would extend the life of the unit by an estimated 10 - 15 years. The advance payment of the refurbishment was made on 7/13/2021 in the amount of \$617,120.00.



Midwest Regional Refurbishment Center

816 Commercial Avenue
 Weyauwega, WI 54983
 Phone 920-867-2142
 Fax 920-867-2624

Date: 05/11/22

To: Caledonia Fire Department

From: Brian Bessette

Subject: Incoming Inspections.

Chief,

The following is a list of additional defects identified during our incoming inspections and testing of the Caledonia Fire Department, Pierce 2007 Dash Aerial, #19216TR, F7499

The list includes items that are not already included in the original scope of work.

I have provided an estimate for each item listed below. Please review the list and identify which items, if any, you would like us to repair by marking a YES in the yes/no box and send back to me with your written approval.

*The aerial items will need to be repaired to achieve a 3rd party UL aerial certification.

**The chassis item is required for testing and operation of apparatus.

Item	Description	Cost	Yes / No
1.**	Engine water pump leaking anti-freeze. Replace R23535017 water pump, seal and hose.	\$ 1,627.00	Yes
2	Rear axle, brake dust covers missing. Install eight (8) missing rear axle dust covers.	\$ 724.00	No
3	Rear suspension air bag leveling valves are corroded. Replace height control kit.	\$ 343.00	Yes
4	Exhaust insulation blankets are worn. Replace all exhaust insulation blankets.	\$ 687.00	No

5	Air intake filter is dirty. Replace air cleaner filter.	\$ 221.00	No
6	Rear axles need fluid and filter changed. Replace fluid and filter for rear axle.	\$ 499.00	Yes
7	Engine cooler cracked. Coolant hoses are worn. Replace engine cooler, hoses, and clamps.	\$ 582.00	Yes
8	Charge air cooler hoses are worn. Replace all four (4) charge air cooler hoses and clamps.	\$ 402.00	Yes
9	Fuel cooler froze and cracked. Replace fuel cooler.	\$ 301.00	Yes
10	Input and output shaft seal for pump transmission are leaking. Replace input and output shaft seals for pump transmission. Install proper fluid.	\$ 1,391.00	No – Included in #15
11	Oil cooling tube that runs through pump transmission is leaking water into pump transmission. Replace oil cooling tube in pump transmission.	\$ 194.00	Yes
12	Aerial discharge drain not functioning correct. Replace aerial discharge swing handle drain valve.	\$ 119.00	Yes
13	Pump master drain will not open. Replace pump master drain and cable. Master drain is included in #15 (Pump Overhaul). #15 Yes this item is No.	\$ 633.00	No – Included in #15
14	The following valves are leaking. Rebuild the following valves and test for proper function. <ul style="list-style-type: none"> • Tank to pump valve is leaking from stem and pass. • #1 Driver's side discharge valve is leaking pass. • # 2 Passenger's side discharge valve is leaking at stem. • Driver's side pony valve leaks pass. • Passenger's side pony valve leaks pass. 	\$ 1,896.00	Yes

15	<p>RPM's for 150 PSI test were 122 RPM's higher than original 3rd party test. Tank flow test failed. Tank flow was 228 gallons in 55 second.</p> <p><u>PUMP OVERHAUL, HALE</u> The pump drive unit and drivelines will be removed. The pump body will be split, and the impeller assembly will be removed for bench service. The pump sections will be carefully cleaned and inspected for abnormal wear on the stripping edges or other damage. Any damage to the center case will be identified in writing and forward to the fire department with a parts and labor estimate if replacement is needed.</p> <p>An entirely new impeller assembly will be installed, to include new impellers, wear rings, impeller shaft and seals/gaskets. Standard packing is included. The pump body will be reassembled following the manufacturers tightening sequence and fastener torque specifications. The pump drive unit and driveline will be reinstalled. The driveline and drive unit will be serviced, including oil change in the drive unit, and greasing of the U-joints.</p> <p>The pump main drain valve will be replaced with new.</p> <p>The pump will be dynamically tested for leaks and to ensure the performance meets the manufacturers flow and pressure standards. Per original quote, Underwriters Laboratory pump certification will be provided when the work is complete.</p>	\$ 15,707.00	Yes
16.	<p>#1 Cross-lay swivel is leaking.</p> <p>Replace #1 cross-lay swivel.</p>	\$ 296.00	Yes
17.	<p>Rear brakes are less than 25%.</p> <p>Replace rear axles brake drums, brake shoes, and associated hardware for front and rear tandem axles. Qty of four (4) hubs.</p>	\$ 5,828.00	Yes
18.	<p>Front brakes are less than 25%.</p> <p>Replace rotors, pads, and outer seals for front axle.</p>	\$ 1,525.00	Yes
19.	<p>Air conditioning only blowing warm air.</p> <p>Charge air conditioning system with freon to OEM specification and test for leaks.</p> <p>No additional work will be performed without prior</p>	\$ 453.00	Yes

	approval from Caledonia Fire Department.		
20.	Pump panel tachometer is 200 RPM's than engine. Compared to engine software reading. Replace tachometer at pump panels	\$ 180.00	Yes
21.	Cab tachometer, missing rubber cover for reset button. Replace cab tachometer.	\$ 188.00	Yes
22.	The following electrical items are not functioning properly. Repair the following items. <ul style="list-style-type: none"> • Pump engaged light at pump panel. • Engine compartment light under cab. • Cab panel dimmer switch. • Ok to engage hi-idle indicator • Lower rear warning switch is wrong. Switch is latching and should be momentary. • Cradle light not functioning. 	\$ 407.00	Yes
23.	Two (2) of the four (4) batteries failed battery test. <ul style="list-style-type: none"> • Driver's side front battery. Tested 917CCA rated @ 950CCA Passed • Driver's side rear battery. Tested 357CCA rated @ 950CCA Failed. • Passenger's side front battery. Tested 827CCA rated @ 950CCA Passed. • Passenger's side rear battery. Tested 689CCA rated @ 950CA. Failed. Replace all four (4) and batteries and battery jumper cables on top of batteries.	\$ 923.00	No
24.	Overhead console is broken around mounting screws. Replace plastic overhead console.	\$ 866.00	No
25.	Front and rear low air alarms do not activate, with low air. Replace front and rear low air pressure switches. Test for proper function.	\$ 289.00	Yes
26.	Two (2) lights in lightbar not functioning. Replace driver's side lightbar corner light. Replace passenger's lightbar corner light.	\$ 582.00	Yes

27.	Four (4) footswitches are corroded. Replace one (1) footswitch on driver's side cab floor and three (3) footswitches on passenger's side cab floor.	\$ 309.00	Yes
28.	Pump house compartment heater is not functioning. Wires coming out of heater are burnt up. Replace pump house compartment heater.	\$ 531.00	Yes
29.	Generator has no output voltage. Display read to change filter. Send generator to Elite Power Solutions for inspection and repair quote.	\$ 575.00	No – See attachment item 2
30.	Cover spring broken on shoreline inlet cover. Replace red Kussmaul shoreline inlet cover.	\$ 126.00	Yes
31.	Passenger's side cab mudflap is ripped. Passenger's side rear mudflap is distorted from diesel fuel. Replace driver's and passenger's side cab and body mudflaps with Pierce logo.	\$ 434.00	Yes
32.	Chrome tow hooks, under front bumper extension are rusted. Replace driver's and passenger's side front bumper extension chrome tow hooks.	\$ 140.00	No
33.	The following areas of body are cracked or corroded. Cracked areas will be welded. Corroded areas will be cut out and patches welded. All areas will be metal finished and painted to match. <ul style="list-style-type: none"> • Crack driver's side in front of rear catwalk. • Crack passenger's side in front of rear catwalk. • D2 compartment floor is corroded with holes. • D5 compartment floor is corroded with holes. • P2 compartment floor is corroded with holes. • P5 compartment floor is corroded with holes. 	\$ 1,612.00	Yes
34.	Latches and rubber seal for eight (8) air bottle doors are corroded or missing. Replace eight (8) air bottle door lift and turn latches, rubber seal and door stop.	\$ 416.00	Yes

35.	<p>Handrail stanchions and handrails are corroded. Replace nine (9) handrails on cab, body, and aerial access step.</p> <p><u>HANDRAILS</u> All existing body and cab handrails will be replaced with new NFPA 1901 compliant non-slip 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface.</p> <p>Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.</p> <p>Drain holes will be provided in the bottom of all vertically mounted handrails.</p>	\$ 1,879.00	Yes
36.	<p>The following items are worn and should be replaced</p> <ul style="list-style-type: none"> • Four (4) folding step anti-skid inserts. • Two (2) stainless steel pike pole tube scuff plates. 	\$ 293.00	Yes
37.	<p>Solenoid for primer motor is broken.</p> <p>Replace primer motor solenoid.</p>	\$ 145.00	Yes
38.	<p>Aerial alternating current junction box for aerial is cracked.</p> <p>Replace alternating current electrical box and strain reliefs for aerial.</p>	\$ 166.00	Yes
39.	<p>Muffler straps are corroded.</p> <p>Replace front and rear muffler straps.</p>	\$ 133.00	Yes
40.	<p>Data cable from front electrical distribution box is worn from rubbing on frame.</p> <p>Replace chassis data assembly cable.</p>	\$ 259.00	Yes
41.	<p>Cab pivot bushings are worn.</p> <p>Replace driver's and passenger's side cab pivot pins, bushings, and retainers.</p>	\$ 179.00	Yes
42.	<p>Drive shaft for aerial PTO u-joint worn.</p> <p>Replace two U-joint for aerial PTO shaft.</p>	\$ 103.00	Yes
43.	<p>Fuel tank is corroded.</p> <p>Replace fuel tank, sending units install new stainless-steel straps.</p>	\$ 1,006.00	No – See attachment item 2

44.	Radiator upper tank gasket is deteriorated. Replace gaskets for upper radiator tank.	\$ 224.00	Yes
45.	Boots are tearing on rear suspension shocks. Mounts for rear shocks are bent. Replace four (4) rear suspension shocks and mounting brackets.	\$ 1,092.00	Yes
46.	Rubber bushings for rear suspension transverse torque rods are worn. Replace front and rear, rear suspension transverse torque rods.	\$ 363.00	Yes
47.	Air bags top and bottom metal plates for rear suspension are corroded. Replace four (4) air bags for rear suspension. Driver's and passenger's side front and rear.	\$ 1,671.00	Yes
48.	ABS speed sensor for rear axle are damaged. Replace driver's and passenger's side rear axle speed sensors.	\$ 252.00	Yes
49.	Drive line U-joints should be replaced. Replace u-joints for the three (3) main drive shafts.	\$ 1,086.00	Yes
50.	Vogel auto-lube system is leaking grease. Replace manifolds and tubing for Vogel auto-lube system. Retest for proper operation.	\$ 2,594.00	Yes
51.	Rubber stops for adjustable slide out shelf in compartments P4 and D2 are worn. Replace slides for adjustable shelf in compartments P4 and D2.	\$ 561.00	Yes
52.	Rear power distribution box is corroded with lock broken. Replace rear electrical power distribution box.	\$ 646.00	Yes
53.	Connector for rear camera cable is corroded. Will not be able to reconnect. Replace rear camera.	\$ 531.00	Yes
54.*	Aerial overload is not operating. Replace aerial overload transducer and recalibrate.	\$ 1,631.00	Yes

55.	Lens for three (3) front warning light on front of basket are cracked and faded. Replace three (3) Whelen, super 500 LED lights on front of aerial basket.	\$ 325.00	Yes
56.	Outrigger extension and jack cylinder pads are worn. Replace eight (8) outrigger extension and sixteen (16) jack cylinder pads for the outriggers.	\$ 302.00	Yes
57.	Steel wear blocks, welded to top of outriggers are worn. Cut off and weld new wear blocks to top of all four (4) outriggers.	\$ 806.00	Yes
58.	Ladder cable carrier track is loose from wearing. Replace two (2) cable carrier tracks for aerial ladder.	\$ 1,318.00	Yes
59.	Turntable handrails had to be cut off due to corrosion. Install new pins and latest style knurled handrail extrusion.	\$ 2,689.00	Yes
60.	Base section heal pin bushing are worn. Replace base section heal pin bushing.	\$ 644.00	Yes
61.	Customer mentioned that pump packing nut maybe cross threaded. The collar is corroded causing the nut to turn hard. Separate pump transmission from pump. Clean collar and install Hale pump packing kit. Test and adjust packings.	\$ 2,266.00	No – Included in #15
62.	Customer inquired when truck was dropped off about new outrigger pans. Install four (4) new stainless steel outrigger pans.	\$ 825.00	Yes
63.	Rear substructure for body wall is corroded. Replace rear body wall substructure.	\$ 2,467.00	Yes

Customer's Approval Signature: _____

Date: _____

Total \$ 58,030 (Hr. dated 5/11/22)

+ Total \$ 2,965 (Hr. dated 6/13/22)

Grand
Total \$60,995



Midwest Regional Refurbishment Center

816 Commercial Avenue
 Weyauwega, WI 54983
 Phone 920-867-2142
 Fax 920-867-2624

Date: 06/13/22

To: Caledonia Fire Department

From: Brian Bessette

Subject: Incoming Inspections.

Chief,

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I have provided an estimate for each item listed below. Please review the list and identify which items, if any, you would like us to repair by marking a YES in the yes/no box and send back to me with your written approval.

Item	Description	Cost	Yes / No
1.	This quote is to do maintenance and service to a Smart Power HR-10 hydraulic generator. This generator came out of Truck # 7499. Serial # is 07020-00. Upon arrival this unit was put on the test stand and using the customers pump was load tested. It was verified that this unit does make power. Pump tested ok but does have a leaking load sense line that will be replaced. Splines look ok on the pump shaft. An observation I made is that this unit had an oil in it I have never seen before. It was extremely bright yellow and smelled like it had a vegetable or plant base to it. Smelled like linseed oil. I have never encountered oil like this before, but I would recommend that they not use it in the future it seems to have sticky/gummy consistency and doesn't seem to have any detergent properties. The reservoir and lines will be cleaned out during the rebuild process. I will	2,575.00	Yes

	<p>drain the pump case as well, and an AW-46 hydraulic oil will be used for testing. After initial load testing the generator was completely torn down. Due to oil coming out the reservoir cap this generators component are coated in a sticky substance and will need to be cleaned up before components can be re-painted. The rotor and stator were inspected. The winding will get a protective varnish coat on them and new bearings before re assembly. Due to the hydraulic motor being 15 years old even though it works I am recommending that it gets replaced. Should it fail in the field it is very difficult to replace. While the system is all tore apart it is a good time to replace it.</p> <p>The following components will be replaced.</p> <ul style="list-style-type: none"> • Hydraulic oil filter • Rotor bearings • Pressure switch • 1 lcc gear motors with checks • Manganaloy motor drive coupling • Pump load sense hydraulic lines <p>Unit will be disassembled, cleaned painted, repaired and tested.</p>		
2.	<p>Fuel tank is corroded.</p> <p>Repaint fuel and install new senders.</p>	\$ 390.00	Yes

Customer's Approval Signature: _____

Date: _____

Total = \$2,965.00