



## Committee of the Whole

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**Meeting Date:** June 22, 2021

**Submitted by:** Chris Traini, County Engineer

**Subject:** 5 Year Machinery Replacement Program

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### **BACKGROUND:**

Each year staff reviews the equipment replacement schedule and brings forward a proposed Machinery Replacement Program for approval by County Council.

### **ANALYSIS:**

Approval of the Machinery Replacement Program does not commit the County to replace any given piece of equipment in any year. Instead, it is intended to give Council a picture of equipment purchase and replacement needs over a 5-year period. When developing the schedule, staff tried to avoid peaks and valleys in the replacement program while still meeting the equipment needs of the department. Cost estimates are also updated in the plan on an annual basis.

This year's equipment replacement schedule is based on the total 5-year expenditures of \$4,150,000, or an average expenditure of \$830,000 per year. The amount budgeted for equipment replacement is in accordance with sound asset management practices as described below.

A number of changes have been made to the prices and scheduling of equipment replacements. The 2021 5-year Machinery Replacement Program had a projected expenditure of \$4,017,000.<sup>00</sup> over 5 years. The revised 2022 5-year Machinery Replacement Program has a projected expenditure of \$4,122,000.<sup>00</sup> over the next 5 years. Any budgeted excess is deposited into reserves in case of an emergency equipment replacement or major unexpected repair.

The current practice would be to tender out the vehicles scheduled for replacement in 2022 in the fall of 2021. This has several cost savings advantages as traditionally the County has received very competitive pricing by tendering in the fall. The most important advantage is that the replacement equipment will be ready for the construction and winter maintenance seasons in the following year due to the typically long turnaround time between ordering and the delivery of the equipment.

Dealers have traditionally offered substantial savings in the fall since that is the typically the end of the year and they aggressively attempt to sell the remainder of the current year models to meet their sales targets. County staff are reviewing and revising our methods and procedures for the purchase of small trucks in order to better maximize savings to the County as well as keeping a competitive and fair procurement process.

The equipment scheduled for replacement is at a point where any further use would risk the possibility of a major repair and seriously affect any resale value at auction. The additional costs involved with keeping this equipment operational beyond its recommended service life would have an impact on the maintenance budget. The cost of repairs is not the only concern, as the time lost while the machinery is inoperable could be critical during the winter maintenance season or during an emergency.

#### **ALIGNMENT WITH STRATEGIC FOCUS:**

This report aligns with the following Strategic Focus, Goals, or Objectives:

<b>Strategic Focus</b>	<b>Goals</b>	<b>Objectives</b>
Connecting Through Infrastructure	Ensure communities are built on a sustainable foundation that is connected and thriving	<ul style="list-style-type: none"><li>• Commit to a sound asset management strategy to maintain and fund critical infrastructure</li></ul>

#### **RECOMMENDATION:**

THAT the 5-year Machinery Replacement Program be approved, and that the equipment scheduled for replacement in 2022 be tendered in the fall of 2021.

**FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2022- 2026**

<b>EQUIP</b>	<b>ITEM DESCRIPTION (LOADERS, BACKHOES, MOWERS)</b>	<b>YEAR LAST REPLACED</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>REMARKS</b>
L-1	TRACTOR/LOADER	2015						2027
L-2	TRACTOR/LOADER	2014			125,000			
L-3	TRACTOR/LOADER	2012		125,000				
L-4	TRACTOR/LOADER	2015						2027
L-6	3 YD LOADER	2007						ASSES ANNUALLY
L-7	FORKLIFT	2002						ASSESS ANNUALLY
L-8	4 YD LOADER	2014						2028
L-9	4 YD LOADER	2000						ASSESS ANNUALLY
L-10	MINI-EXCAVATOR	2016						2030
L-11	TRACTOR BACKHOE	2018						2030
L-12	EXCAVATOR	2002						ASSESS ANNUALLY
L-13	TRACTOR/LOADER	2003						ASSESS ANNUALLY
L-14	TRACTOR/LOADER	2005						ASSESS ANNUALLY
L-15	TRACTOR/LOADER	2004						ASSESS ANNUALLY
M-1	MULTIDISC MOWER	2017		18,000				
M-2	MULTIDISC MOWER	2017		18,000				
M-3	MULTIDISC MOWER	2017		18,000				
M-4	MULTIDISC MOWER	2017		18,000				

### **FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2022- 2026**

<b>EQUIP</b>	<b>ITEM DESCRIPTION (TRUCKS)</b>	<b>YEAR LAST REPLACED</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>REMARKS</b>
T-1	86,000 LB TRIAXLE COMBINATION BODY	2016						2027
T-2	82,000 LB TRIAXLE COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-3	3/4 TON PICK-UP	2019			55,000			
T-4	68,000 LB TANDEM COMBINATION BODY	2013			300,000			
T-5	68,000 LB TANDEM COMBINATION BODY	2019						2029
T-6	86,000 LB TRIAXLE COMBINATION BODY	2016					340,000	
T-7	86,000 LB TRIAXLE COMBINATION BODY	2017						2027
T-8	86,000 LB TRIAXLE COMBINATION BODY	2017						2027
T-11	82,000 LB TRIAXLE COMBINATION BODY	2012	340,000					
T-12	82,000 LB TRIAXLE COMBINATION BODY	2008						SPARE CYCLE THROUGH
T-13	68,000 LB TANDEM COMBINATION BODY	2014			300,000			
T-14	86,000 LB TRIAXLE COMBINATION BODY	2021						2031
T-15	½ TON WINDOW VAN	2014					40,000	
T-16	68,000 LB TANDEM COMBINATION BODY	2015					300,000	
T-17	68,000 LB TANDEM COMBINATION BODY	2013		300,000				
T-18	82,000 LB TRIAXLE COMBINATION BODY	2007						SPARE CYCLE THROUGH
T-19	82,000 LB TRIAXLE COMBINATION BODY	2008						SPARE CYCLE THROUGH
T-20	3/4 TON PICK-UP	2020		55,000			55,000	
T-21	3/4 TON CREW CAB PICKUP	2021						2028
T-22	3/4 TON CREW CAB PICK-UP	2021						2028

**FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2022- 2026**

<b>EQUIP</b>	<b>ITEM DESCRIPTION (TRUCKS)</b>	<b>YEAR LAST REPLACED</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>REMARKS</b>
T-24	68,000 LB TANDEM COMBINATION BODY	2021						
T-25	68,000 LB TANDEM COMBINATION BODY	2015				300,000		
T-26	68,000 LB TANDEM COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-27	3/4 TON CREW CAB PICKUP	2014	65,000					
T-28	3/4 TON CREW CAB PICKUP	2014	65,000					
T-29	82,000 LB TRIAXLE COMBINATION BODY	2007						SPARE CYCLE THROUGH
T-30	68,000 LB TANDEM COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-31	½ TON PICK-UP	2021						2027
T-32	½ TON PICK-UP	2015	40,000					
T-33	¾ TON PICK-UP	2020					40,000	
T-34	½ TON PICK-UP	2019			40,000			
T-35	PICKUP	2012						SPARE CYCLE THROUGH
T-36	82,000 LB TRIAXLE COMBINATION BODY	2010						SPARE CYCLE THROUGH
T-37	68,000 LB TANDEM COMBINATION BODY	2011		300,000				
T-38	½ TON PICKUP	2019					40,000	
T-39	68,000 LB TANDEM COMBINATION BODY	2011	300,000					
T-42	¾ TON PICKUP	2012						SPARE CYCLE THROUGH
T-43	¾ TON PICKUP	2016						SPARE CYCLE THROUGH
T-44	¾ TON PICKUP	2014						SPARE CYCLE THROUGH
T-45	¾ TON PICKUP	2018						SPARE CYCLE THROUGH
T-46	¾ TON PICKUP	2016						SPARE CYCLE THROUGH
T-49	½ TON WINDOW VAN	2002						SPARE CYCLE THROUGH
T-50	¾ TON PICKUP	2015						SPARE CYCLE THROUGH
T-53	½ TON PICKUP	2014						SPARE CYCLE THROUGH
T-62	½ TON PICKUP	2017						SPARE CYCLE THROUGH
T-63	½ TON PICKUP	2015						SPARE CYCLE THROUGH

**FIVE YEAR MACHINERY REPLACEMENT PROGRAM 2022- 2026**

<b>EQUIP</b>	<b>ITEM DESCRIPTION (GRADERS AND ATTACHMENTS)</b>	<b>YEAR LAST REPLACED</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>REMARKS</b>
G-1	GRADER 730A	2005						2027
G-2	GRADER 940A	2009						2029
G-3	GRADER 740 A	1993						ASSESS ANNUALLY

<b>EQUIP</b>	<b>ITEM DESCRIPTION (MISCELLANEOUS)</b>	<b>YEAR LAST REPLACED</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>REMARKS</b>
T-40	HIGHWAY MARKER	2006				500,000		
	51 TON RGN TRAILER	2021						
	WALING DUMP PUP TRAILER	1998						PURCHASED IN 2003
	RAVEN DUMP PUP TRAILER	1977						PURCHASED IN 2005
	GRAVEL STACKER 80 FOOT	2018						2028
	SHOULDERING MACHINE	2008						2028
	3,000 GALLON TANK AND PUMP (SLIDE IN UNIT)	2004						
	3,000 GALLON TANK AND PUMP (SLIDE IN UNIT)	2008						
	185 CFM AIR COMPRESSOR	1997				25,000		
	185 CFM AIR COMPRESSOR	2014						
	TAR KETTLE	2003						
	CANADA BACKHOE TRAILER	2012						
T-23	FLOAT TRUCK	2004						SPARE CYCLE THROUGH
T-60	VACUUM TRUCK	2019						2031
T-10	UTILITY TRUCK	2019						2029

<b>EQUIP</b>	<b>ITEM DESCRIPTION</b>	<b>YEAR LAST REPLACED</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>REMARKS</b>
<b>TOTALS</b>			810,000	852,000	820,000	825,000	815,000	