# Electric Grass Cutting Equipment Pilot Project

Clean Air Partnership February 10, 2022



### **Overview**

- 1. Project Scope
- 2. Procurement
- 3. Challenges
- 4. Next Steps



## **Purpose**

- Aligns with the Councilapproved Climate Change Action Plan
- Benefits include:
  - Reduced carbon emissions
  - Increased safety for employees
  - No fuel required
  - Reduced noise

City of Mississauga

#### Corporate Policy & Procedure



Policy Title: Corporate Green Fleet and Equipment Policy







## **Project Scope**



- The pilot includes a fully enclosed trailer that housed:
  - two riding lawn mowers
  - a push mower
  - several leaf blowers and trimmers
- All equipment is fully battery operated.
- Pilot tested at one location throughout summer of 2021

#### **Procurement**

- Full public request for tender process
- Procurement closed in late 2019
- Two bids received
  - Greenworks successful bidder



## Infrastructure Challenges

- High capital cost
- Time consuming to plan and develop site infrastructure
- Originally planned to use two locations for the pilot, only one location operational to date

## **Trimmers Challenges**

- Limited Battery-life
  - 2.5 Amp equipment limited to 20 minutes of use at full capacity
  - Greenworks Response: Increased to 4
     Amp for longer run times (60% increase in run time)





## **Zero-Turn Mowers Challenges**

- Steering is Jerky
  - Greenworks Response: Dampened steering and made it less responsive which has smoothed out the old jerky levers
- Limited battery-life
  - Greenworks Response: Increased battery size -14 acres per charge
  - Plan to release a long run unit in spring of 2022 - 21 acres per charge



## **Next Steps**



 Continuation of pilot with plans to collect data for greater analysis and test under more conditions