

Allee Solar Irrigation System

On May 14th 2022 Trees for Woolwich planted 97 trees to form an “allee” around the stormwater ponds on either side of the stonedust paths at the Elmira Nature Reserve.



To ensure the success of this planting, the trees need 10 gallons of water per week (almost 1000 gallons, or 4 totes full per week.) Watering at this level has to be done for 2 years.



An automated solar powered irrigation system was installed. The system pumps water from the stormwater pond and distributes it to all 97 trees through about 4000' of irrigation hose.



The system consists of a solar panel, a battery and a 12 volt pump which is rated at 3.5 gallons per minute. A timer runs the pump for 40 minutes every day around noon.



To reach every tree, on both sides of the path and around the ponds, the system required trenching across the path in 4 places, with steel pipe installed to protect the hose in key crossings. These were buried 6-8 inches below the surface of the path.

The water is delivered to each tree through “drippers” which inject water directly to the soil where the tree is planted providing water at the rate of 2 gallons per hour. (Watering for 5 hours per week will provide the required 10 gallons)



A Trees for Woolwich Project

