



London's Springbank Reservoir Complex



Aaron Rozentals, P.Eng, GDPA

November 12, 2025



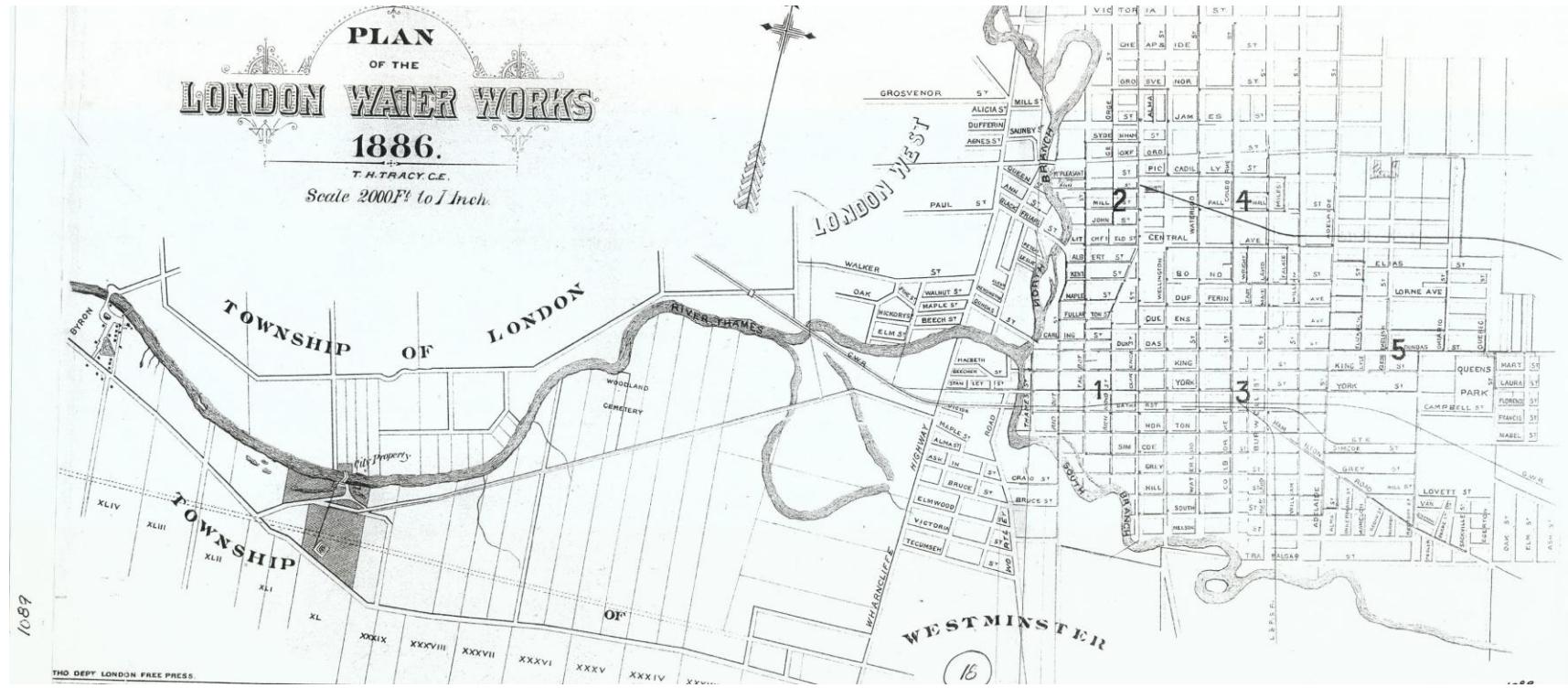
Complex Overview





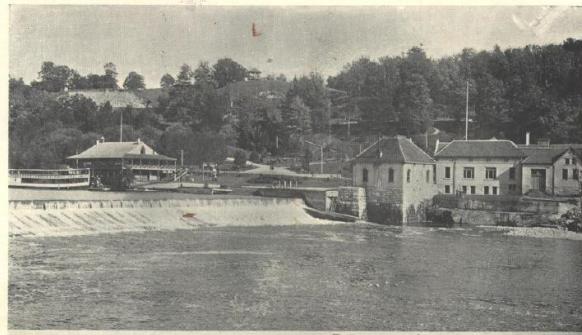
The Beginning

- 150 years – 1878 - 2028





The Beginning + Original #2



THE WATERWORKS AND SPRINGBANK PARK.



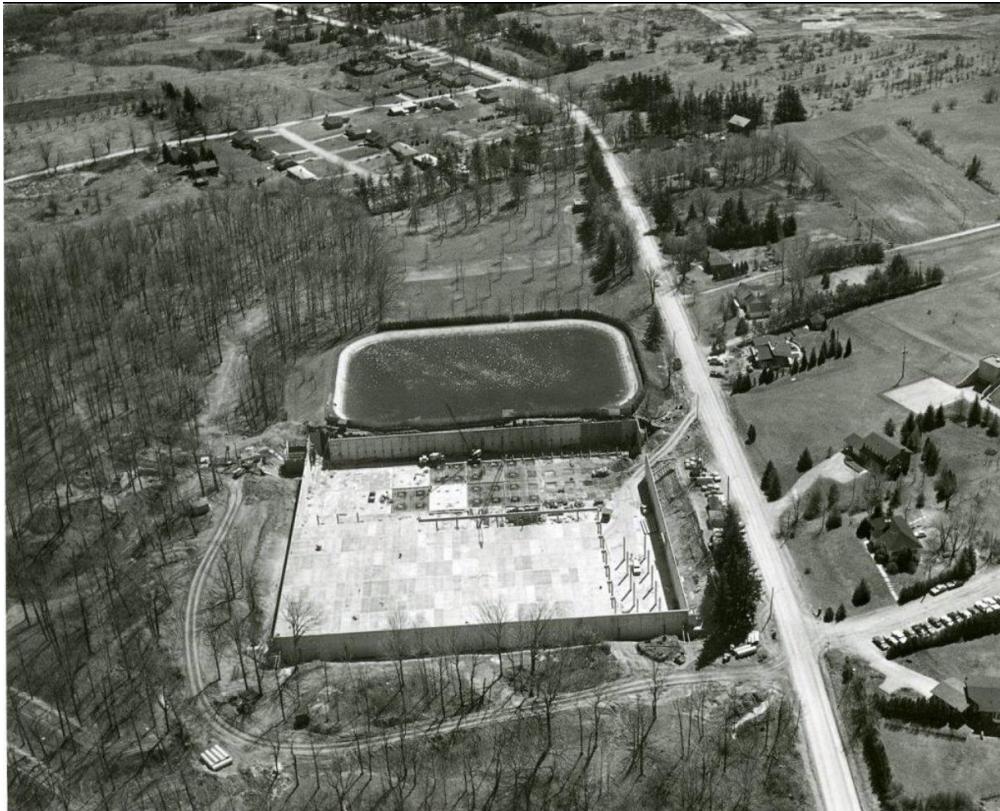


Reservoir #3 Construction (1960's)



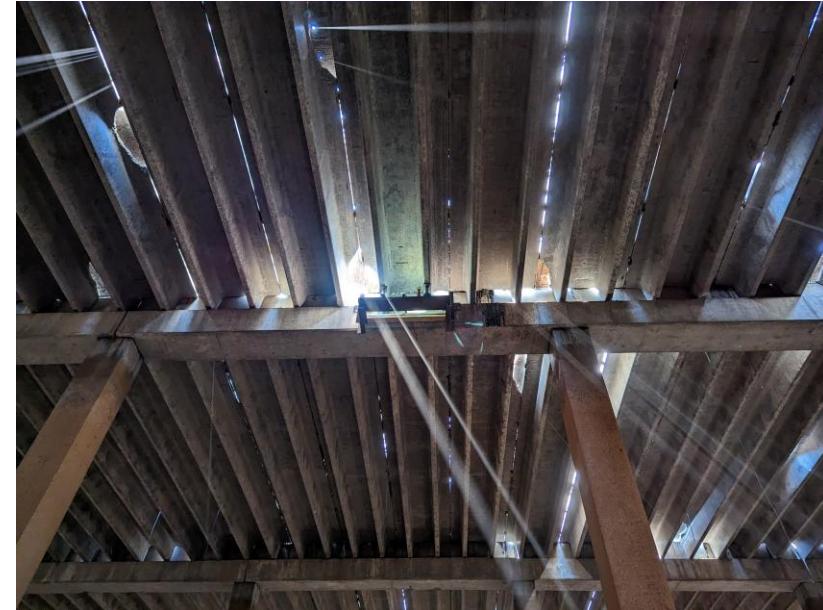


Reservoir #1 Reconstruction (1970's)





Reservoir 1 & 3 Rehab (2022-2023)





Reservoir Rehab Budget

- Budget was set at \$3M based on 2018 inspection and estimate
- Low bid tender was \$9.3M
 - \$7.5M additional budget required incl consulting
- COVID hangover
- Excess soils
- More significant repairs needed.
- More robust 'Concrete Topping' was used



Concrete Topping

- Innovative approach to waterproofing
- Increased cost of approx. \$3M over both reservoirs
- 70-75 year life vs 20-25 year for HDPE
- Net lifecycle savings of \$6M





Concrete Topping





Internal Repairs





Springbank #2 Reconstruction + Expansion



- Construction from Spring 2024 to late 2026
- 88 ML of floating storage
- Approx 15,000 m³ of concrete
- \$44M Construction
- \$5.3M Consulting



Design Challenges

- SAR Species
 - 3 different species of SAR trees
- Soil Management
- Ensuring good quality construction



Design Innovations

- Tapered walls
- Geocell “green wall” for exposed walls
- Self mixing – No baffles or mechanical mixers
- Very tight contractor pre-qualification



Old Reservoir #2



Demolition



Site Prep



Construction



Geocell Green Wall



Construction



Column Construction





Questions?

