Beacon Hill Water Storage Tank Replacement Project
Presentation Outline

- Project Update and Meeting Purpose
- Recap
  - Previous Meetings and Communications
  - Existing Tank - Location and Need for Replacement
  - Proposed Tank - Design and Benefits
- Contractor (Caldwell Tanks Inc.) Experience
- Construction Schedule
- Impacts during Construction
- Mitigation Measures for Impacts
- Questions
- Contact Person for any future questions
Project Update

- Existing Beacon Hill Water Storage at the end of its useful life
- PWWD will be replacing this tank with a new state-of-the-art, pedesphere style tank
- Most cost-effective option for our community
- PWWD awarded the contract to Caldwell Tanks, Inc
- Currently reviewing shop drawing submittals
Meeting Purpose

- Review Caldwell Tank’s detailed construction schedule
- Discuss significant activities in each phase of construction
- Review construction impacts and mitigation measures
- Discuss any questions about the project
- Provide PWWD contact information for any future questions or concerns
Previous Meetings and Correspondence

- Met with Elected Officials
- Hosted Public Meeting at Library
- Hosted meeting at PWWD for neighbors
- Learned: Community understands the need to replace the tank and has some specific requests:
  - Mitigate construction impacts including traffic, dust and noise
  - Ensure dialog is proactive and continuous throughout the whole process
  - Provide landscape beautification upon project completion
Beacon Hill Water Storage Tank Location
Recap - Existing Beacon Hill Tank
Recap - Existing Beacon Hill Tank

- Serves nearly half of the District’s 30,000 residents and 9,350 households and businesses

- Built in the 1930’s – 80+ years later it is at the end of its useful life

- Capacity of 250,000 gallons

- Riveted steel, multi-leg style tank with conical roof

- Current tank does not meet new hurricane wind and seismic load safety standards

- The most recent condition assessment of the tank revealed the start of coating system failure and corrosion could impact future water system operations
Recap - Proposed Beacon Hill Tank

- Pedesphere Style- Design keeps pressure in system longer, which benefits firefighting operations during emergencies

- Capacity and overflow height would be the same; 250,000 gallons and 94 feet, respectively

- Requires less maintenance and is easier to repair due to reduced surface area and welded construction elements

- Designed to meet new hurricane wind and seismic load safety standards

- New tank will include a light on the roof in order to satisfy FAA regulations
Contractor- Caldwell Tanks Inc.

- Has been constructing potable water storage tanks in the United States since 1887

- Most recent and successfully completed project on Long Island was for the Manhasset-Lakeville Water District (MLWD)

- The MLWD tank was placed into operation this past February
Anticipated Construction Schedule

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Start Date</th>
<th>Finish Date</th>
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<tr>
<td>1</td>
<td>508,900 Gallon Pedosphere Tank</td>
<td>Thu 6/23/17</td>
<td>Thu 6/30/17</td>
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Note – Subject to change due to unforeseen conditions
Construction Schedule

- Shop Drawing Reviews (April 2017 – June 2017)
- Tank Shop Fabrication (July 2017 – Sept. 2017)
- Initial Site Work (August 2017)
  - Includes tree removal and erosion and sediment control
- Existing Tank Demolition (Sept. 2017)
- Foundation Construction (Mid Oct. – Mid Nov. 2017)
- Field Tank Construction (Mid Nov. 2017 – Early Feb. 2018)
  - Includes steel deliveries, steel placement and welding
Construction Schedule

- Exterior Piping (Mid Feb. 2018 – Mid March 2018)
- Field Tank Painting (Mid March 2018 – Late April 2018)
- Tank Interior Insulation (Mid April 2018 – Late April 2018)
- Electrical, Controls and Sample Station Work (Late April 2018 – Mid May 2018)
- Tank Sterilization and Testing (Late April 2018 – Late May 2018)
- Substantial Completion (Late May 2018)
- Final Contract Site Work and Fencing (Late May 2018 – Late June 2018)
- Site Landscaping (Fall 2018)
Significant Activities

- Duration of on-site work contract work is approximately 12 months, with landscape beautification to follow

- Initial Site Work
  - Cutting and removing trees and bushes
  - Grading and soil removal
  - Installing stabilized construction entrance to minimize the tracking of soil from off site and silt fence to prevent the transport of sediment laden water during storm events

- Demolition Phase
  - Tank will be cut into small sections for removal and disposal
  - Excavation and demolition of existing tank foundation
  - Tractor trailers and dump trucks will be used to remove sections of the tank and foundation from the site
  - Large crane on site for approximately one week
Significant Activities

- Foundation Construction
  - Prior to concrete placement, workers will install form work and reinforcing steel for approximately 2 weeks
  - Pumper truck and approximately 15 concrete trucks required
  - No more than 2 concrete trucks on site at one time
  - When one truck finishes, another takes its place
Significant Activities

- Field Tank Construction
  - Includes steel deliveries by tractor trailer
  - Large crane initially on site to set the access tube
  - Access tube used as a crane to hoist and place remaining steel sections along with small crane
  - Welding of steel sections
Significant Activities

• Field Tank Painting
  • Erection of containment structure around tank for sandblast material and paint overspray
  • Manlifts and scaffolding for worker access
  • Initial sandblasting to prepare surface for paint
  • Deliveries of sandblasting media and paint products

• On-site Storage
  • Contractor required to use off-site location for stockpiling and storing excess equipment (no material to be stored on Longview Road)
  • Tool trailer, generator trailer and small crane will be on-site throughout construction
Maintenance and Protection of Traffic

- Contractor to provide Maintenance and Protection of Traffic Plan
  - Flaggers, Signage, Barricade Placement

- Community Precautions
  - Stay Alert & Drive Slowly
Potential Road Closures
Site Security

- Work site will be monitored by a security firm with live video surveillance
- If an unauthorized person or suspicious activity is detected, the security firm will contact Caldwell
- Caldwell will call the police to respond as required
Construction and Community Impact Mitigation

- Committed to minimizing the impact/inconvenience on the community and surrounding residents

- Work hours limited to only Monday through Friday, 8:00 am through 4:00 pm. Weekend and holiday work will **not** be permitted

- Coordinated an off-site staging area for excess materials and equipment

- Coordinated with the neighboring Sands Point water department to use their tank to supply water while construction occurs at the Beacon Hill site
Our Pledge to the Community

- We will always be available to discuss any portion of this project with you.

- You will have access to a point person before, during and after construction.

- Any resident with special needs affected by construction or road closures is encouraged to reach out to us so we can appropriately address your needs/concerns.

- Continued beautification and landscaping projects at the Beacon Hill tank site to improve its aesthetic presence within the community will be completed.

- We will work to do whatever we can to make this project as convenient and seamless as possible.
Questions?

- We are happy to answer any questions you may have at this time.

- If additional questions come up after you leave today, please contact us at:
  - Telephone – (516) 767-0171
  - Email - info@pwwd.org