

# **Combined Sewer Overflow Facility Head End Site**

## **Construction Update**

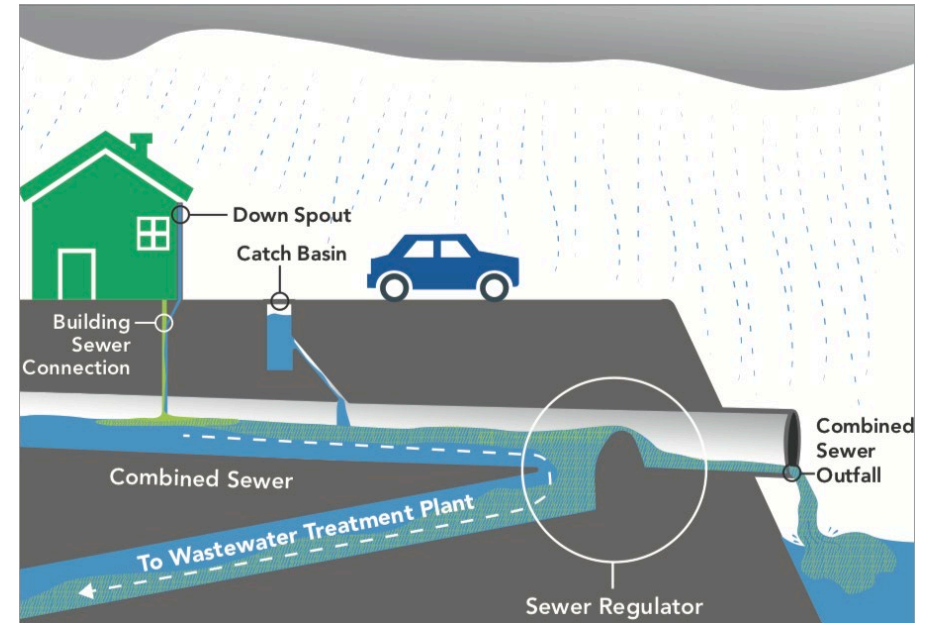
**Deputy Commissioner Beth DeFalco**  
**Ken Moriarty, P.E., Executive Director Wastewater**  
**Kevin Clarke, P.E., Portfolio Manager**  
**Alicia West, Chief of Staff Public Affairs**

**December 10, 2024**



# Overview

- As a part of the U.S. EPA Superfund program, DEP is constructing giant underground tanks that will **capture and store up to 12 million gallons of combined sewage** that would otherwise overflow into the Gowanus Canal during a rainstorm.
- When the facility is completed, the canal will be cleaner and healthier, and the top of the tanks will provide 3.6-acres of public open space for the community.



When the sewer system is overwhelmed during a rainstorm, it can result in overflows into local waterways or combined sewer overflows (CSOs)

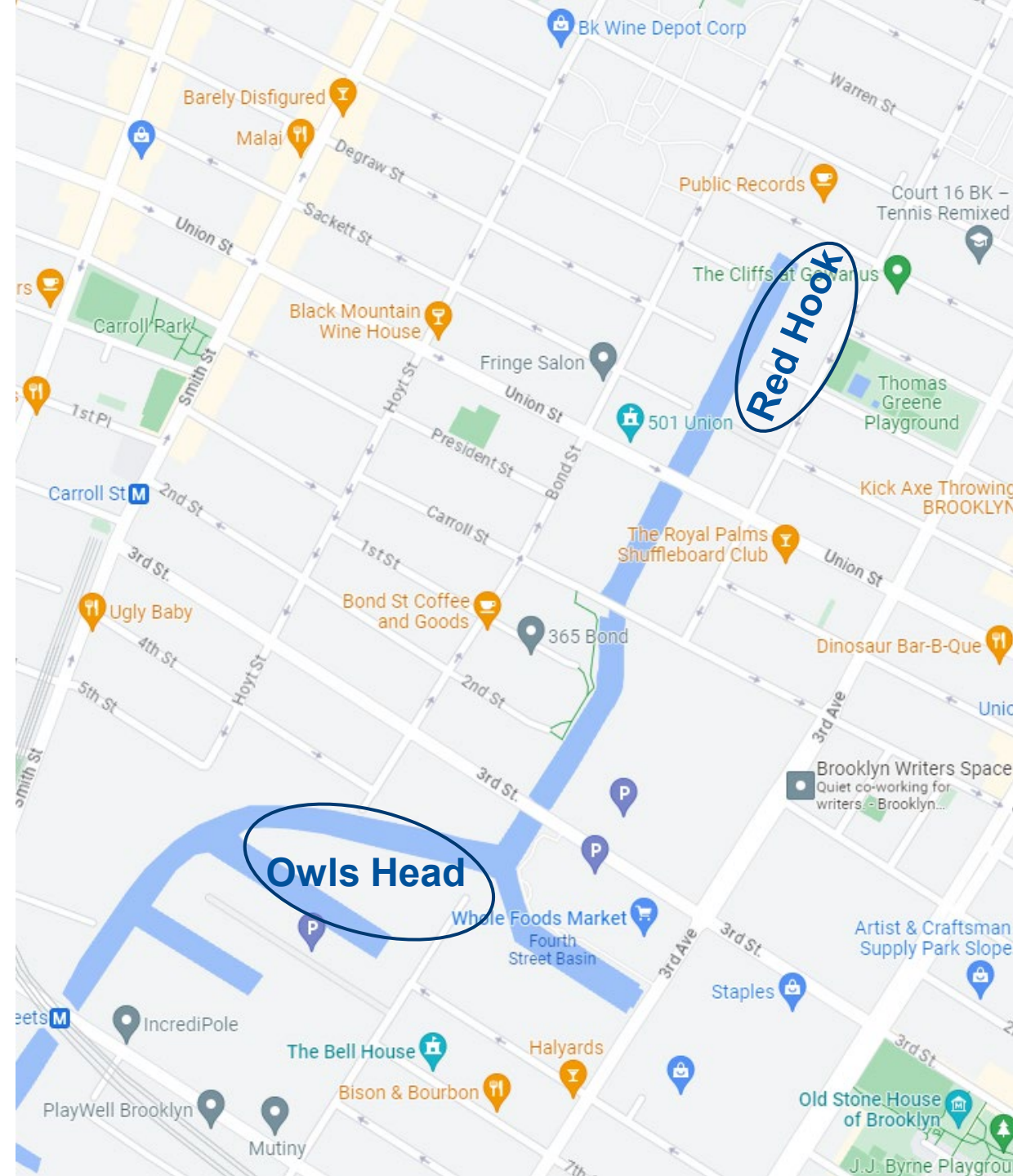
# Gowanus Canal CSO Facilities

## Red Hook (a.k.a. Head End) Site:

- 8-million-gallon underground tank
- DEP headhouse
- 1.6 acres of public open space

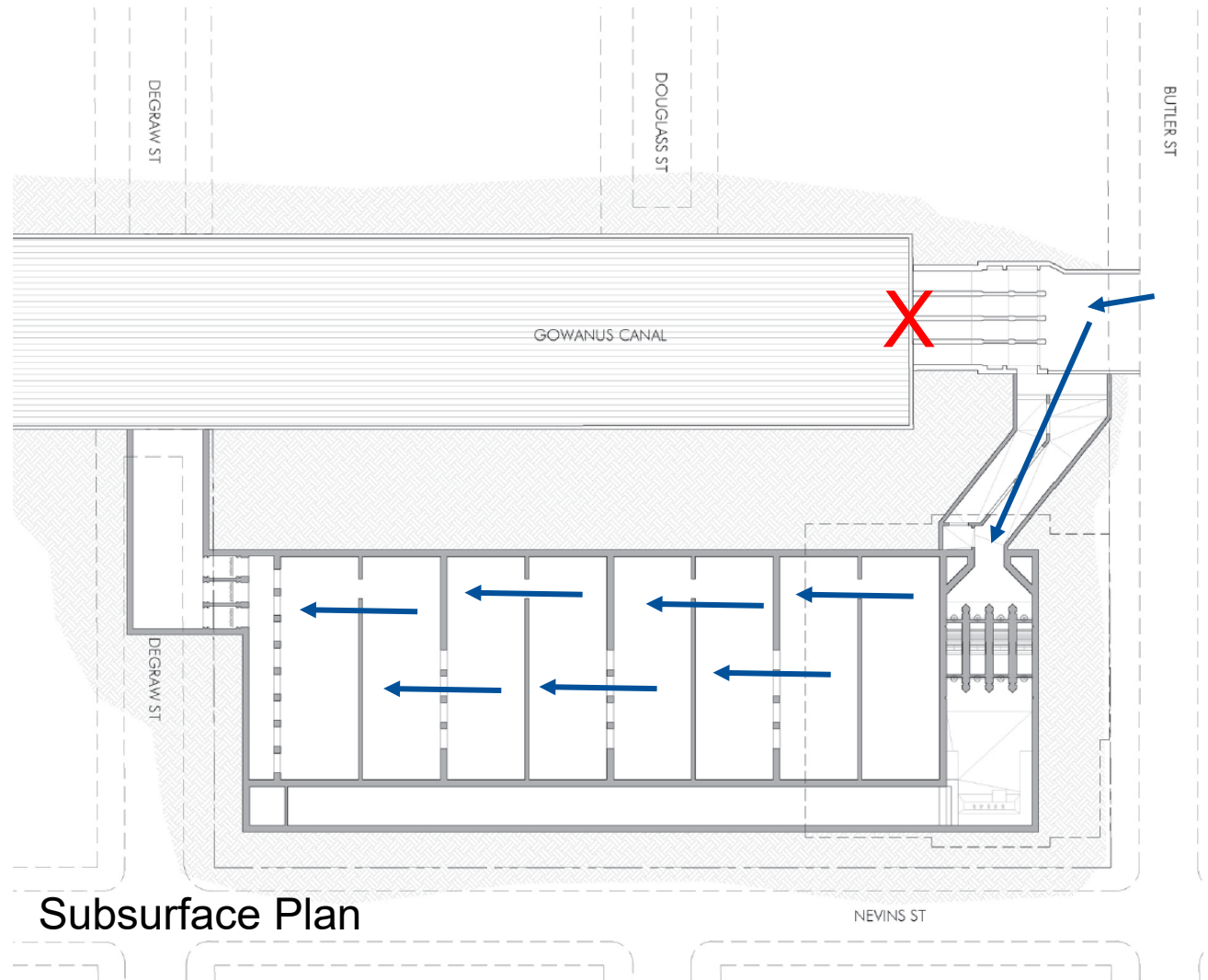
## Owls Head Site:

- 4-million-gallon underground tank
- DEP headhouse
- DSNY & partners facilities
- 2 acres of public open space



# Red Hook Facility Operation

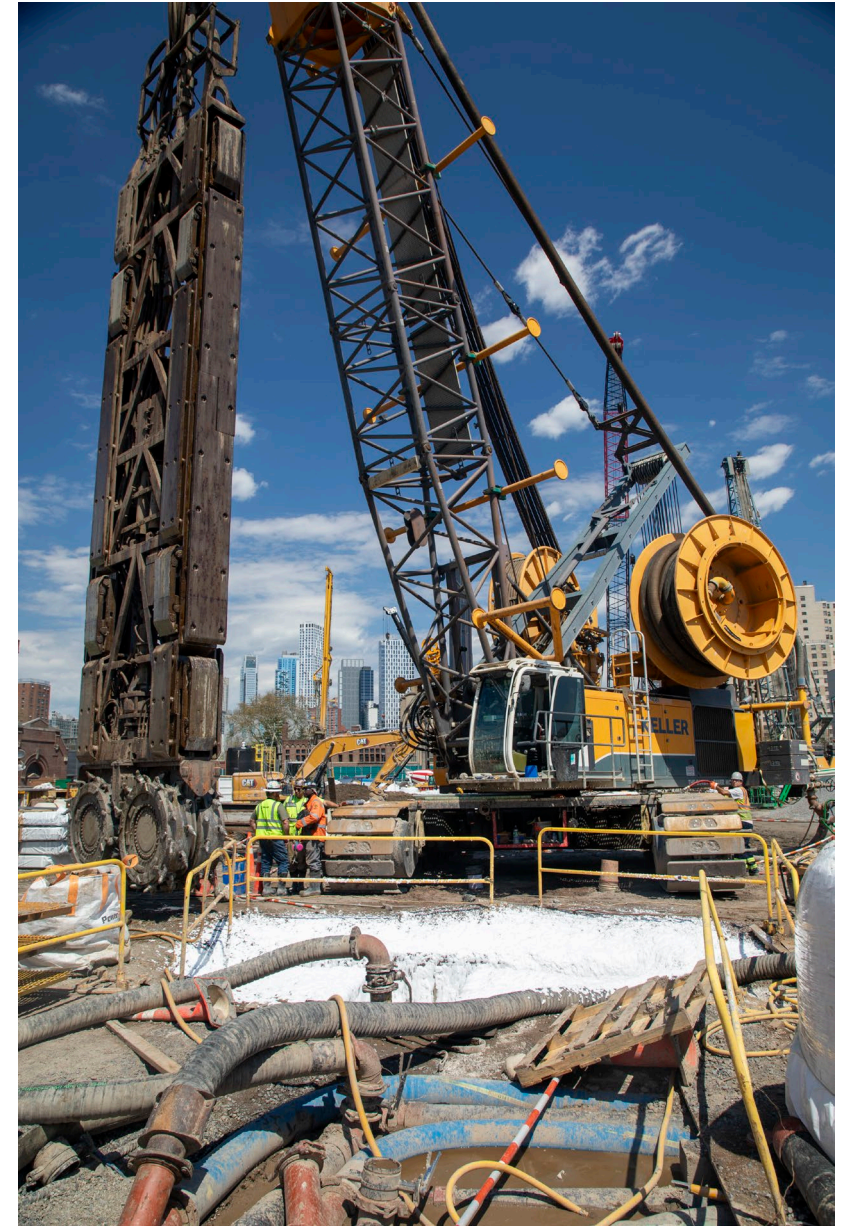
- Combined sewage and rainwater are rerouted into the giant underground tank (156 feet W x 425 feet L x 50 feet D).
- Combined sewage and rainwater are held in the tank until the storm passes then it is pumped back into the sewer system and sent to treatment.
- Tank holds up to 8 million gallons for any given storm.





# Completed: Underground Perimeter Wall

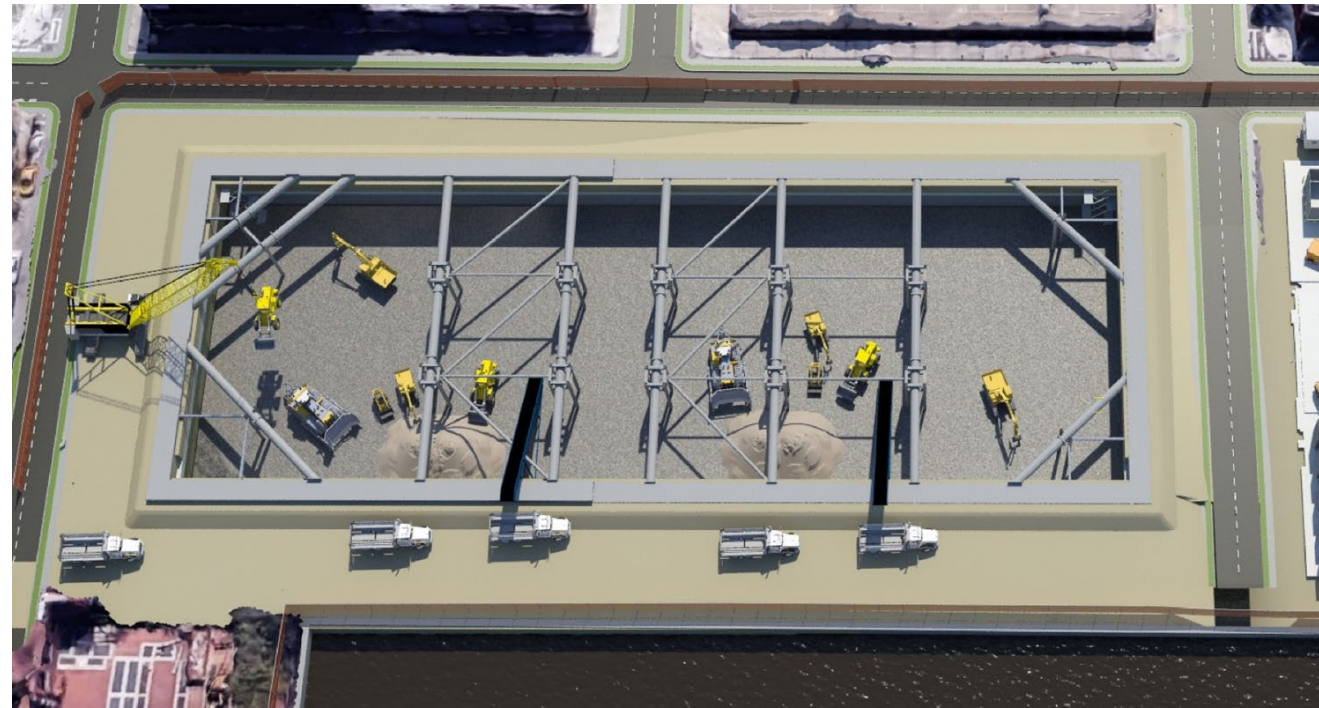
- From October 2023 to July 2024, DEP built the underground perimeter wall that will support the removal of soil necessary to build the tank.
- Like many areas in Gowanus, the tank site does have historic contamination from manufactured gas plants.
- This excavation was very deep – **200 feet down** – and encountered contaminated soil that resulted in odors.



Construction of underground  
perimeter wall

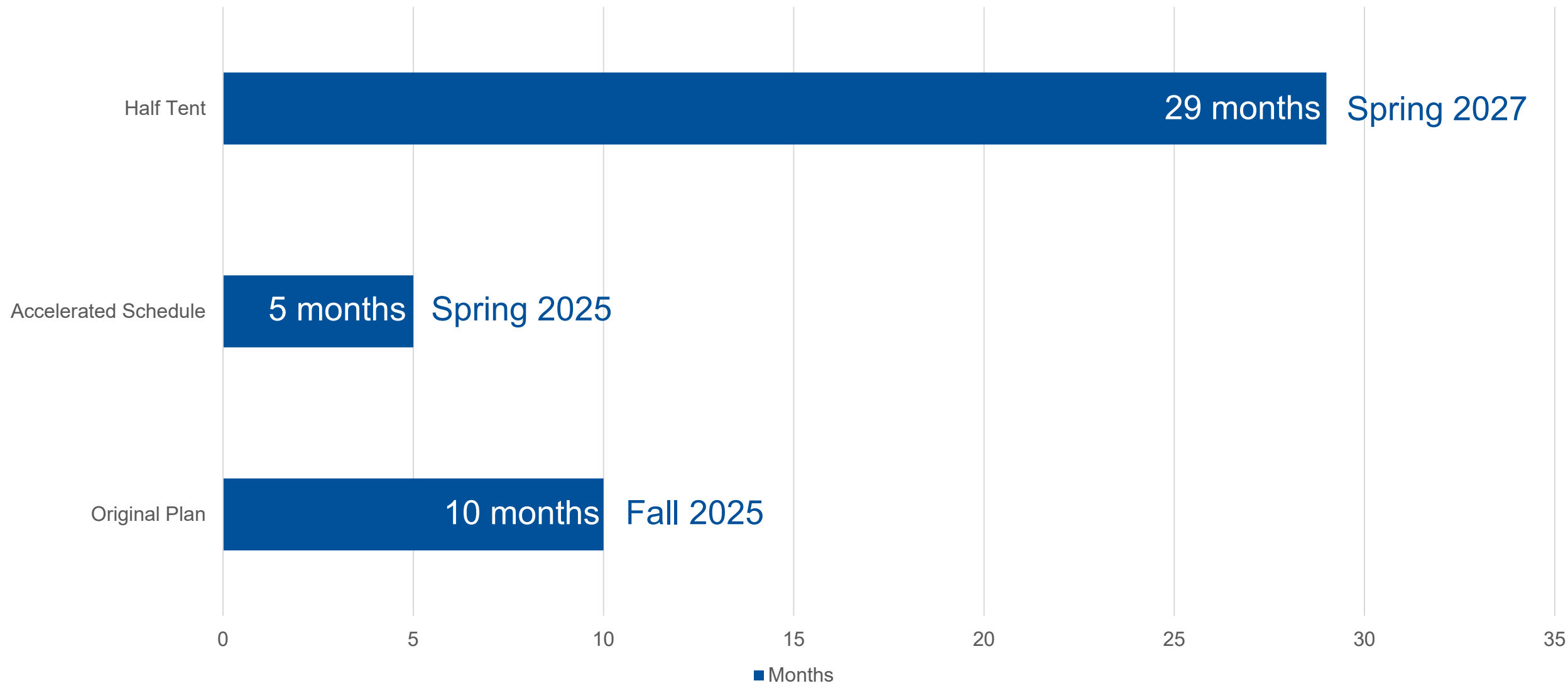
# Accelerated Plan for Next Phase of Work

- DEP is expediting this phase of work to **reduce the timeline** from 10 months to **5 months to shorten community impacts**.
- Work will begin on the excavation within the perimeter wall.
- Excavation will be much **shallower** (40-60 feet) than for the perimeter wall.
- Based on extensive soil sampling, DEP expects to encounter **less contaminated soil**.
- Work during cooler fall/winter months means the potential for odors will be lower.



Schematic of tank excavation with bracing

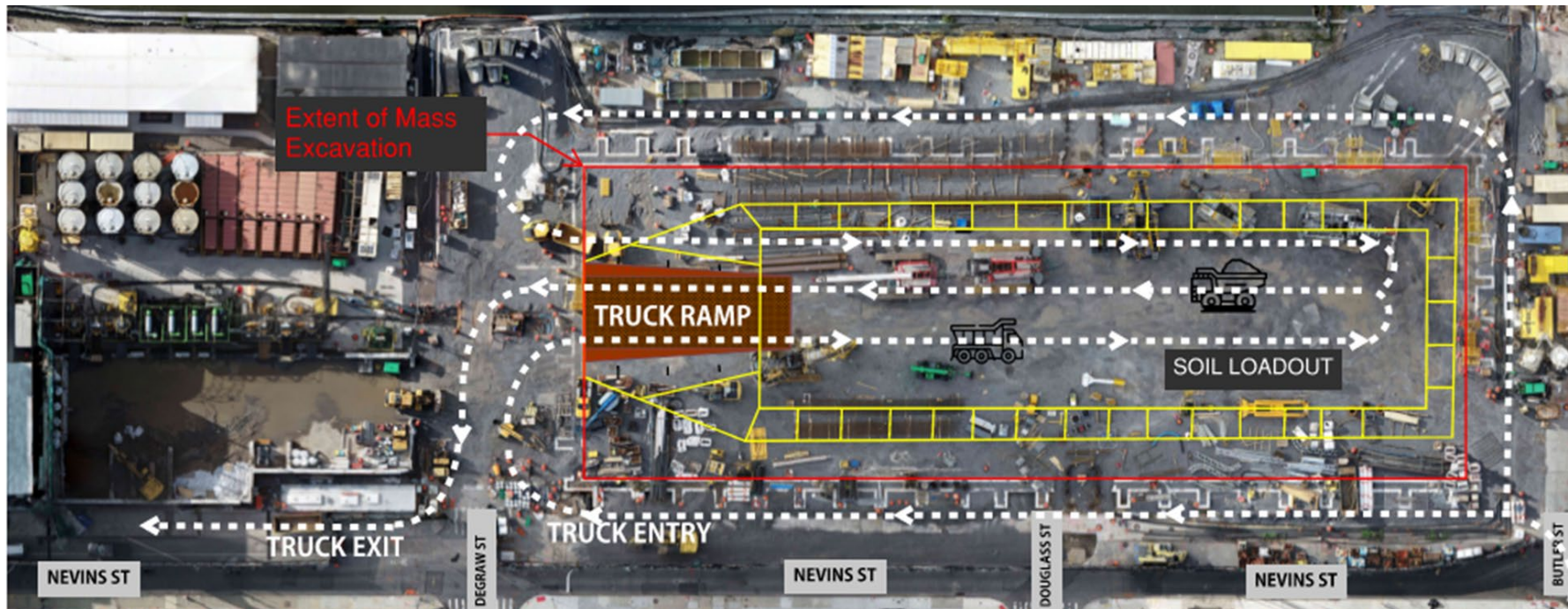
# Timeline Comparison





# Excavation & Trucking

- Excavating from the north side (Butler Street) to the south side (Degraw Street) of site
- Removing 1,500 tons of soil per day by truck
- Trucks will be covered before leaving the site
- Work hours on site are from 6 AM to 6 PM
- Weekend work typically limited to equipment maintenance and operation of dewatering/treatment system
- Advanced notice will be provided if evening/weekend work is required





# Reducing Odors

- **ODOR BLOCK SHELL:** Spraying excavated soil with non-toxic mineral membrane to contain any odors (instead of white foam)
- **TARPS:** Tarping over soils
- **MISTERS:** A misting system, including an *unscented* water-based non-toxic odor neutralizing spray
- **VAPOR VACUUM:** Hood placed over work area during excavation of “hot spots” to capture and treat vapors
- **INSPECTIONS:** Frequent, routine odor inspections



Odor block shell



"OdorBoss" misting

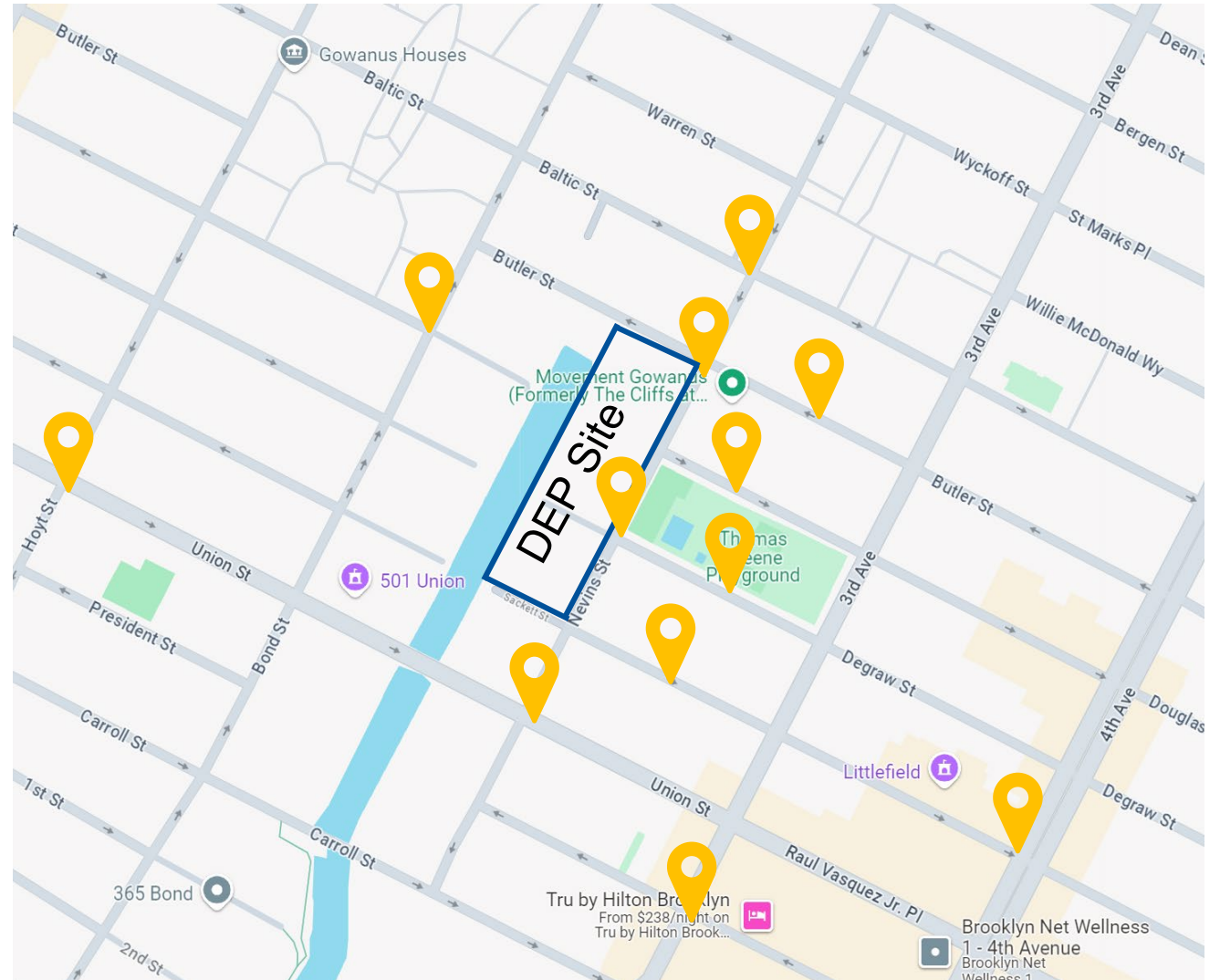
# Community Air Monitoring

- The air monitors measures document and provide real time alerts.
- 8 air monitor stations are located around the project footprint.
- Each station continuously monitors concentration of particulate matter (PM10) and Volatile Organic Compounds (VOC).
- As soon as alerts are received, we investigate and address the situation.



# Air Monitoring & Sampling

- In addition to the community air monitoring program that has real-time alerts for air quality, DEP has conducted additional air sampling since February 2024.
- **EPA concluded naphthalene concentrations were below a health-based level of concern.**
- **24/7 air monitoring and air sampling programs are in place for the next phase of work.**





# Odor Complaint Protocol

- Odor complaints investigated as soon as possible and will include EPA oversight staff
- Complaints received during non-work hours investigated at the beginning of the next work shift
- Responses provided within 24 hours of completion of investigation
- If found to be site-related, work practices adjusted until odor dissipates.
- If found to be related to another site, state and local governing bodies notified

# Community Outreach

- Two-week lookaheads will be issued weekly to provide notification of upcoming work and afterhours/weekend activities (if applicable)
- Complaints may be submitted to 311 *or* the Construction Community Liaison **Valentina Mascaro** at **GowanusCCL@johnson-asberry.com** / **934-216-0209**
- Air sampling data is available on DEP's website:  
<https://www.nyc.gov/site/dep/water/gowanus-canal.page>





# Completed Project



Renderings of completed tank with headhouse and 1.6-acre public waterfront open space

