



THE FORMER NAVY/GRUMMAN SITE **BETHPAGE RESTORATION ADVISORY BOARD** SEEKS NEW MEMBERS!



If you are interested in serving on the Bethpage RAB, please complete a membership request form. Upon submission, forms will be reviewed and approved by a selection panel who reviews the applicants' commitment level, and ensures members represent interests of community. Use the [QR code to access the NAVFAC website](#) for more information and the link to the form.

WHAT IS A RESTORATION ADVISORY BOARD (RAB)?

A RAB is a collective forum of residents, government agencies, tribes, and installation decision makers that discuss, and identify the best way to restore the environment at a site formerly owned by the Department of Defense (DOD).

RAB members should be a cross-section of the local community who embody diverse community interests. This ensures equitable representation and that information reaches all residents.

WHERE & WHEN?

Typically there are two annual meetings for the Bethpage RAB held in April and November. All meetings are announced and held at a location within the community; some meetings may be held virtually.

All residents are encouraged to attend RAB meetings which are open to the public. The public is also encouraged to contact official RAB members with questions or concerns throughout the cleanup process.

A RAB is not a decision-making body, however, members do provide input to installation decision makers and have direct access to environmental agencies overseeing the cleanup. They also share community questions, concerns, and ideas with those agencies involved in the cleanup.

WHY IS A RAB IMPORTANT?

The Navy encourages community involvement throughout the entire environmental restoration process. Residents, who understand their community, and volunteer to represent it, provide meaningful input regarding the cleanup activities within their community. While the public can comment on the DOD's efforts, RABs are a focused and interactive opportunity to participate in the process.



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COMMUNITY OUTREACH

Operable Unit (OU) 2 Treatment System Overview

NWIRP Bethpage Background

The primary mission of the **Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage** was to research, design, build and test military aircraft in support of our national defense

The facility operated from 1943 to 1996



The Navy’s 2003 Record of Decision (ROD) and 2021 Explanation of Significant Differences (ESD) identified actions needed to protect human health and the environment from contaminated groundwater, including:

- Legal Restrictions on Groundwater Use
- Groundwater Monitoring and Hotspot Treatment
- Groundwater Treatment at Leading Edge of Plume
- Treatment of Volatile Organic Compounds (VOCs) and 1,4-Dioxane
- Public Water Supply Protection Program

OU2 Groundwater Remediation

Navy’s OU2 Groundwater Cleanup Program consists of:

- GM38 Area Hotspot Groundwater Treatment System
- RE108 Area Hotspot Groundwater Treatment System
 - Phase I (Recovery Wells RW4 and RE137)
 - Phase II (Recovery Wells RW5, RW6, and RW7)
- Phase III Southern State Parkway Groundwater Intercept System (Recovery Wells RW8, RW9, RW10, and RW11)

GM38 Area Hotspot Groundwater Treatment System

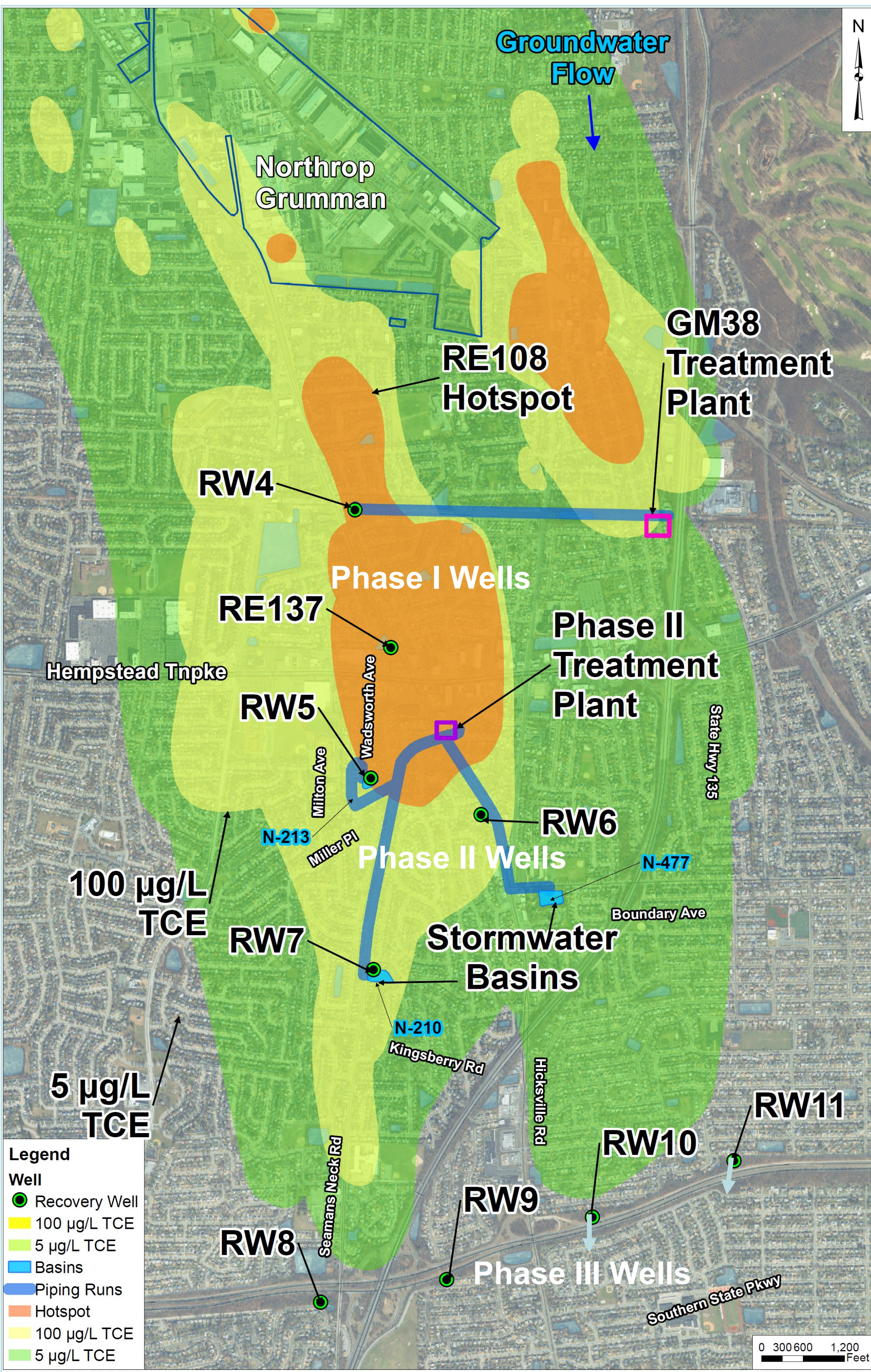
- Operated by the Navy since 2009 to remove VOCs in groundwater to achieve drinking water standards
- Recovery well used to extract groundwater, VOCs and 1,4-Dioxane are then removed by air stripping, advanced oxidation process (AOP) technology, and carbon filters prior to recharge to aquifer via basin
- Six billion gallons of groundwater with over 10,000 pounds of VOCs have been captured and treated
- Treats water from the GM38 Area and RE108 Area (RW4)
- Planned expansion to treat RE137 Groundwater

Recovery Well RW4

- Started operation in April 2021
- Over 400 million gallons of groundwater and 1,800 pounds of VOCs have been recovered from the aquifer

RE137 Area Hotspot Interim Groundwater Treatment System

- Started operation in May 2022
- VOCs and 1,4-Dioxane are removed from the groundwater by AOP technology and carbon filters prior to recharge through basin
- Over 120 million gallons of groundwater containing 1,000 pounds of VOCs have been captured and treated
- Planned transport of extracted groundwater to GM38 Area Hotspot Treatment System for long term operation



Hot Spots are areas with greater than 1,000 parts per billion (ppb) trichloroethene (TCE), which is the primary Volatile Organic Compound (VOC) contaminant in the OU2 Groundwater

Operable Unit (OU) 2 RE108 Area Hotspot Treatment System Phase II

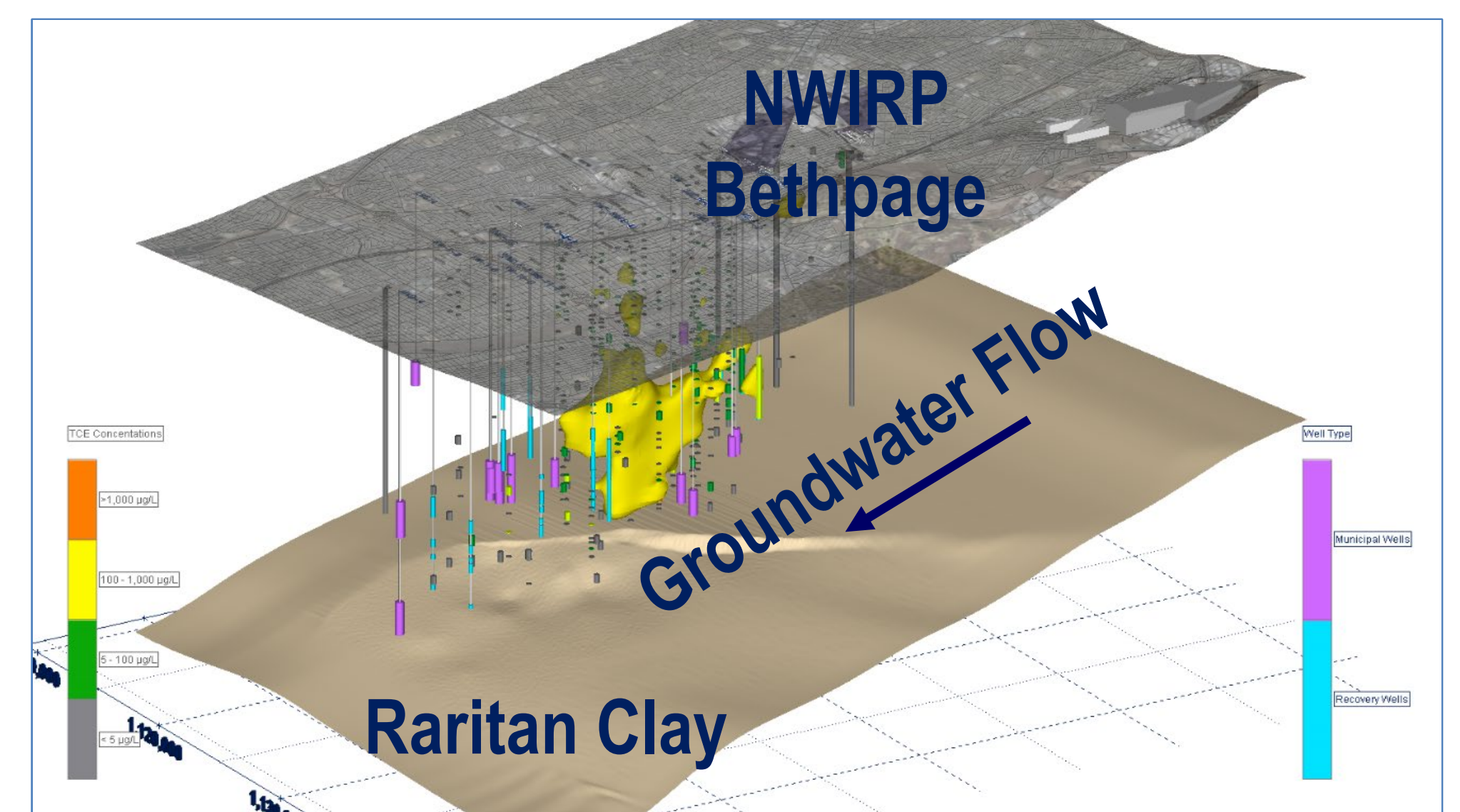
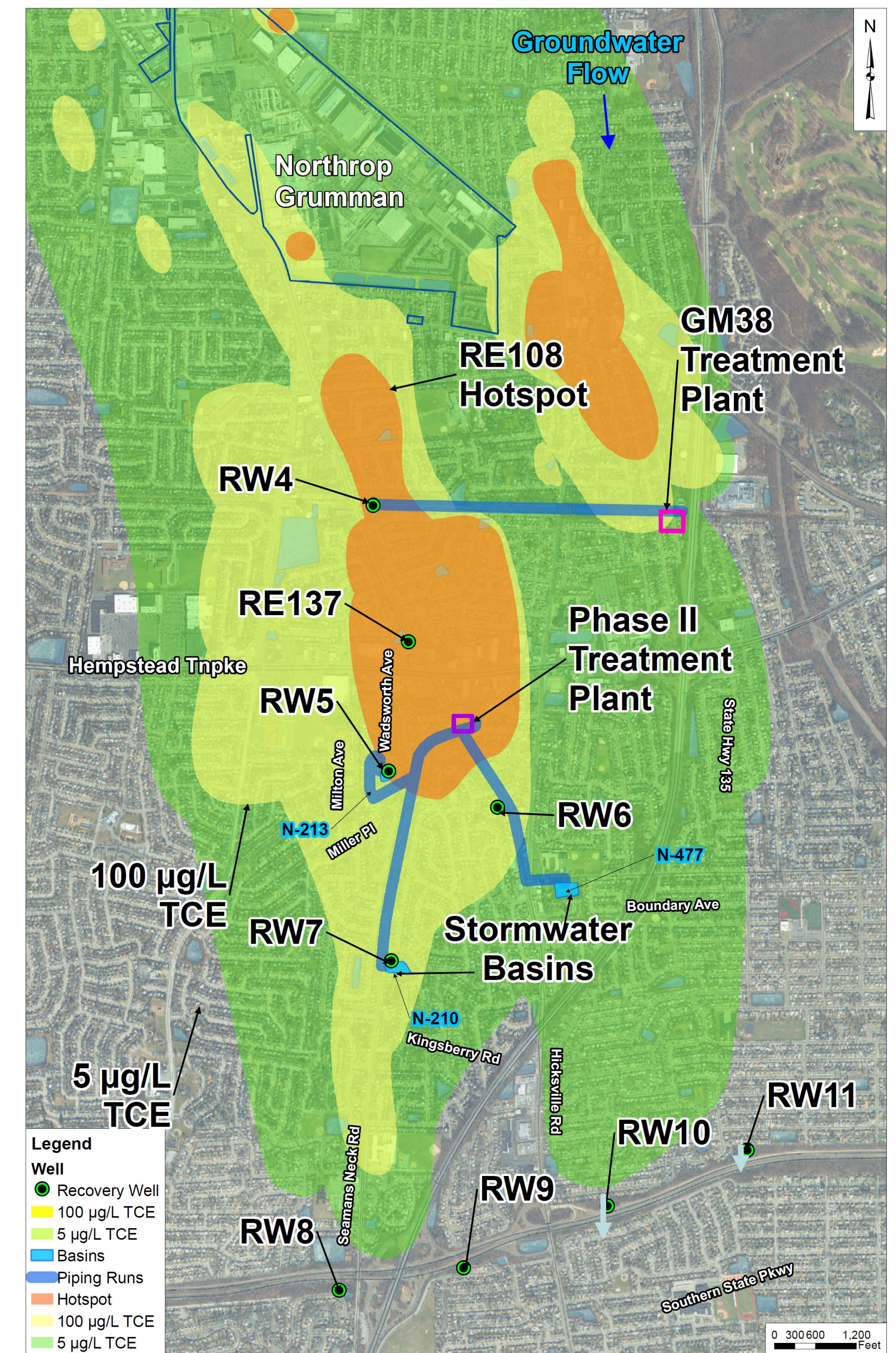
Overview

Purpose:

- Extract and treat OU2 groundwater containing VOCs at concentration greater than 1000 ppb (from the 2003 ROD) and includes Phase I recovery wells RW4 and RE137, and Phase II Wells RW5A/B and RW6A/B
- Extract and treat OU2 groundwater containing VOCs at concentration greater than 150 ppb (added from the 2021 ESD) and includes Phase II Extension recovery wells RW7A/B
- Some recovery wells (e.g., RW5A/B) are screened at two depths to allow better capture of plume

Treatment System Summary:

- Six wells (RW5A/B, RW6A/B, and RW7A/B) extract up to three million gallons of groundwater per day
- Double wall piping used to convey groundwater to a central treatment plant – Union Avenue
- Treatment consists of:
 - Air Stripping with vapor phase granular activated carbon
 - AOP using hydrogen peroxide and UV light
 - Liquid phase granular activated carbon
- System is designed to achieve drinking water standards for VOCs and 1,4-Dioxane
- Groundwater is discharged to two stormwater basins to support the aquifer



Construction Status

Schedule:

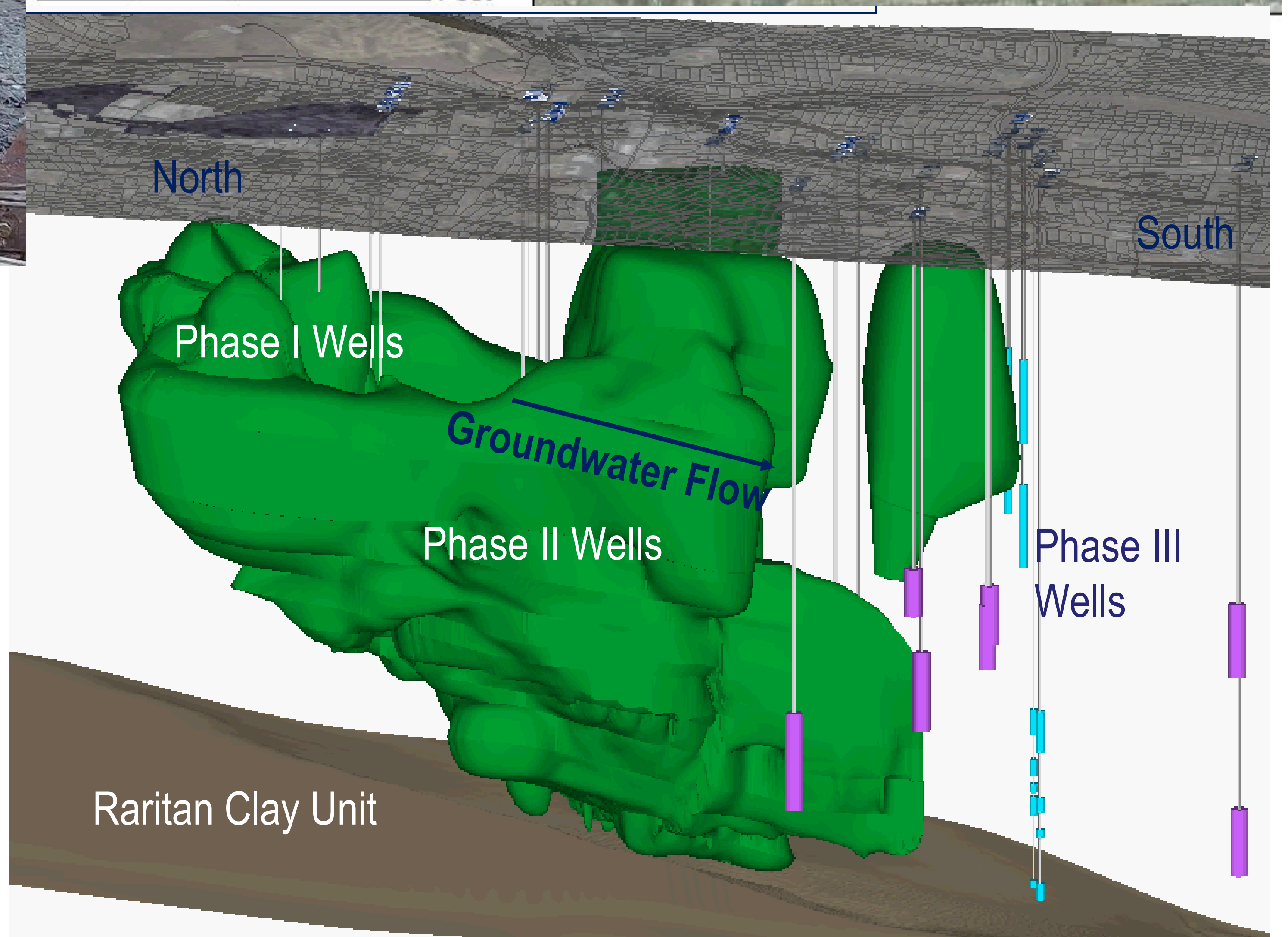
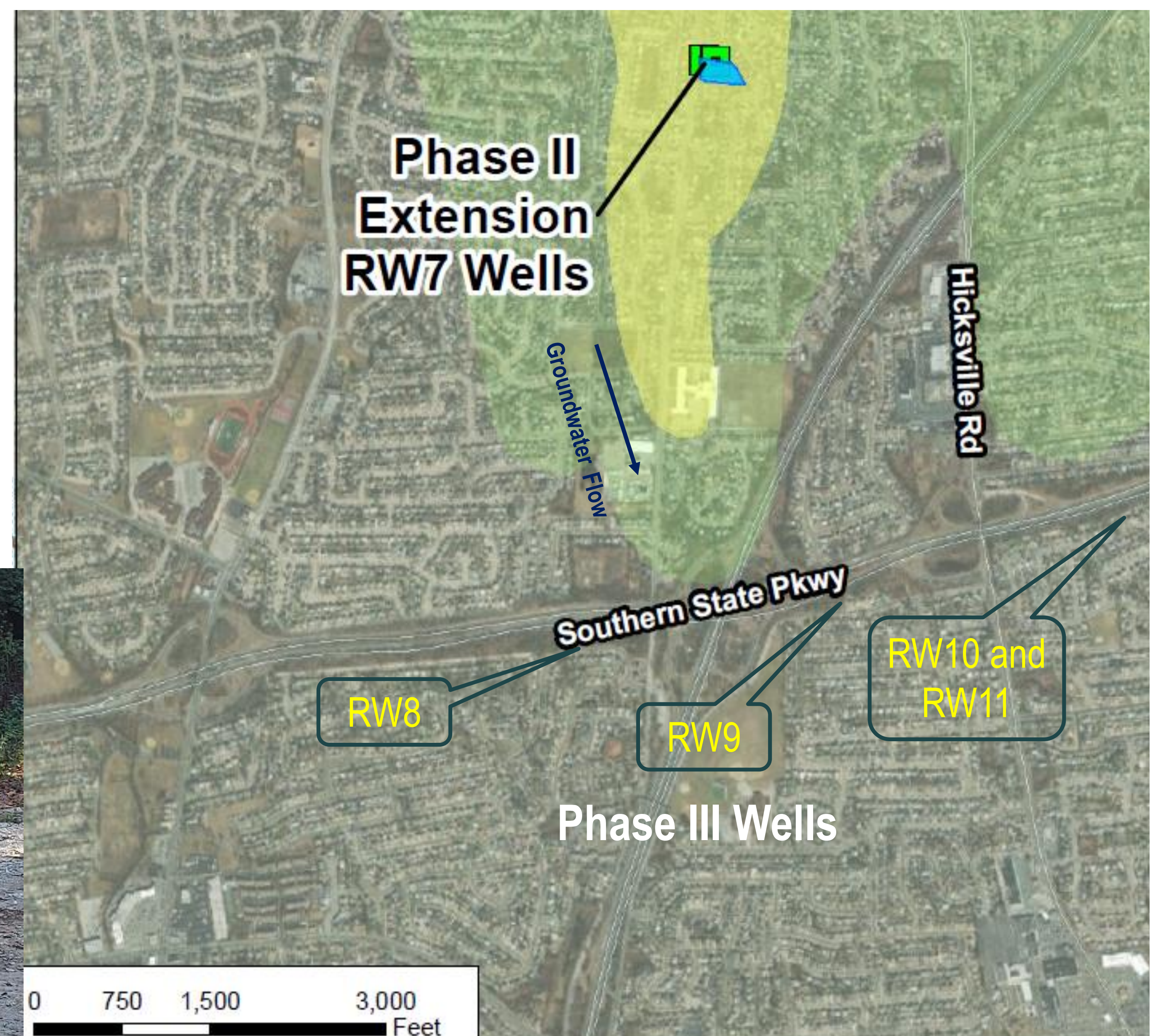
- Construction started Spring 2022
- Currently 75 percent complete
- Anticipated system startup is Summer 2023



Operable Unit (OU) 2 Phase III Treatment System and Public Water Supply Protection

Overview

- Location based on extensive monitoring of plume migration and space available
- Phase III-A - RW8 and RW9 target deep groundwater that is not captured by Recovery Well RW7 – Initial focus on deep groundwater
- Phase III-B – Potential for RW10 and/or RW11 wells to the east, with a possibility of a separate treatment plant – shallow groundwater



PUBLIC WATER SUPPLY PROTECTION

Wellhead Treatment Systems Funded by U.S. Government

Navy works with NYSDEC, water districts, and NG to use groundwater monitoring results to predict potential impacts to public water supply wells and install wellhead treatment systems to remove VOCs down to concentrations, meeting drinking water standards

Bethpage Water District (BWD)

- Plant 5 - 1996
- Plant 6 - upgrades, 2011
- Plant 6 - O&M, ongoing
- Plant 6 - replacement, 2020

South Farmingdale Water District (SFWD)

- Plant 1 - 2011
- Plant 3 - 2013
- Plant 3 - O&M, ongoing

Liberty Utilities Seamans Neck Rd

- Interim system, 2012
- Full scale system, 2015
- O&M, ongoing