

Northrop Grumman Bethpage Environmental Remedies Update

Virtual Meeting and Community Update

Ed HannonProject Director
June 3, 2021



Agenda

- Groundwater treatment system piping route and installation timeline
- Street-by-street review
- Traffic plan
- Examples of previous piping work
- Treatment system facility and process
- Building construction timeline
- Soil sampling at Bethpage Park
- Questions via Zoom chat and telephone



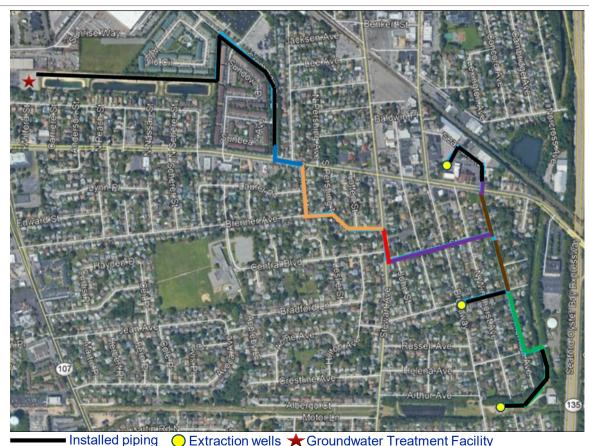
Piping Route

Utility corridor work is complete.

Residential street access request approved on May 19.

Contractors will be present at the work location from 7 a.m. to 5 p.m., Monday through Friday, excluding holidays.

Construction will take place 7:30 a.m. to 4:30 p.m. Schedule is weather dependent





Work along the Utility Corridor





Piping was installed ahead of schedule

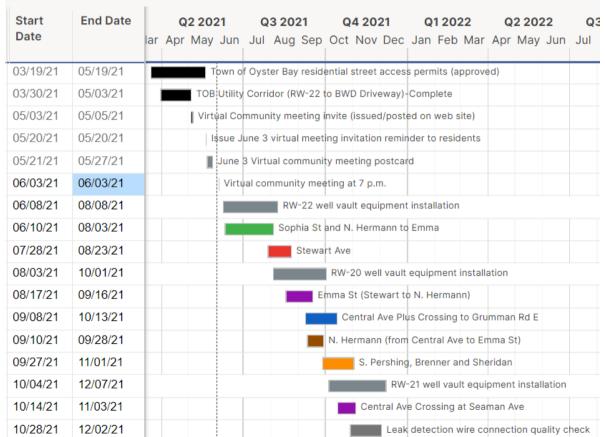
Gravel replaced

Well vault area was landscaped

Boulders protect well vault hatch from possible vehicle damage



Piping/Well Vault Equipment Installation Timeline



Committed to safety and efficiency



Sophia Street and N. Hermann (to Emma)



- Install 12" diameter pipe heading west on Sophia then north on N. Hermann Ave to William and 16" diameter pipe heading north on N. Hermann to Emma from 6/10 to 8/3
- 50 to 60 feet of pipeline installed per day (weather permitting)
 - Week 1 and 2 Mobilization and Site preparation
 - Weeks 2 to 6 Piping installation
 - Weeks 7 and 8 Site restoration



Stewart Avenue



- Install 24" diameter pipe heading south on Stewart Ave from 7/28 to 8/23
- 30 to 40 feet of pipeline installed per day (weather permitting)
 - Week 1 Mobilization and site preparation
 - Week 2 and 3 Piping installation
 - Week 4 Site restoration



Emma Street (Stewart Ave to North Hermann)



- Install 24" diameter pipe heading east on Emma St from 8/17 to 9/16
- 40 to 60 feet of pipeline installed per day (weather permitting)
 - Week 1 Site preparation
 - Weeks 2 to 4 Piping installation
 - Week 5 Site restoration



N. Hermann (from Emma to Central)

- Install 12" diameter pipe heading north on N. Hermann Ave from 9/10 to 9/28
- 40 to 60 feet of pipeline installed per day (weather permitting)
 - Week 1 Site preparation
 - Week 2 Piping installation
 - Week 3 Site restoration





S. Pershing, Brenner and Sheridan

- Install 24" diameter pipe generally heading west and north from 9/27 to 11/1
- 40 to 60 feet of pipeline installed per day (weather permitting)
 - Week 1 Mobilization and site preparation
 - Weeks 2 to 5 Piping installation
 - Week 6 Site restoration





Central Avenue (Crossing at Grumman Rd E)



- Install 24" diameter pipe heading west on Central Avenue to connect at Grumman Rd East from 9/8 to 10/13
- 20 to 30 feet of pipeline installed per day (weather permitting)
 - Week 1 Mobilization and site preparation
 - Weeks 2 to 4 Piping installation
 - Weeks 5 and 6 Site restoration



Central Avenue (Crossing at Seaman Avenue)

- Install 12" diameter pipe crossing Central Ave from 10/14 to 11/3
- 20 to 30 feet of pipeline per day (weather permitting)
 - Week 1 Mobilization and site preparation
 - Week 2 Piping installation
 - Week 3 Site restoration





Traffic Plan

- Provide notification to residents (web site, postcard, opt-in email) at least one week prior to each closure and attempt to accommodate special needs
- Traffic control signs and flag persons on site will inform drivers about construction activities
- When pipeline is being installed in front of a driveway, the driveway will not be accessible during the day, but will re-open by 4:30 p.m. each workday and on the weekends
- Work in front of driveways (during work hours) will be conducted over a three workday period. Metal plates will be installed over the excavated area at the end of each day
- Flag persons will direct traffic during working hours, as necessary



Example of Work Along Grumman Road East



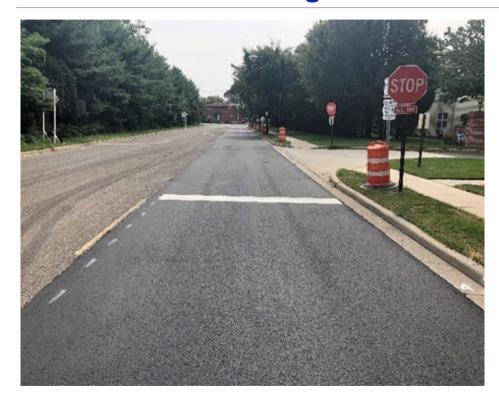




- Establish traffic controls with intermittent lane closure
- Segment of asphalt is cut and trench is excavated working around existing underground utilities
- Pipeline is shaped and fused in 40' to 60' lengths and installed
- Metal plates are temporarily placed over trench at the end of the workday
- Trench is backfilled and permanent asphalt is applied



Finished Work Along Grumman Rd East and Seaman Ave



Grumman Road East



Seaman Avenue



Groundwater Treatment Facility

The building is 126 x 119 feet and 35 feet high at the peak of the roof. The state-of-the-art design approved by the NYSDEC

Once the building shell is constructed, we will begin interior construction, including installing the treatment system equipment and connecting water, electric, gas, communications, and sanitary sewer

Work is expected to take approximately 12 months (weather permitting)

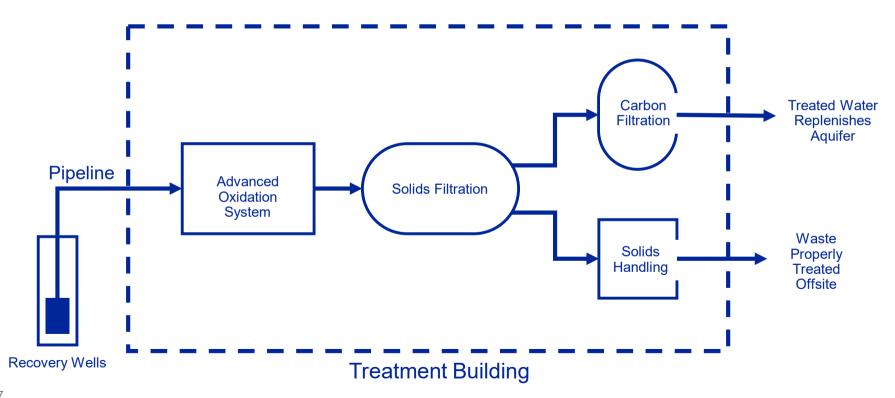


Artist's rendering of RW-21 Groundwater Treatment Facility (looking southeast)

The Town of Hempstead Planning Department and The Nassau County Fire Marshal have approved our project plan



RW-21 Treatment Process





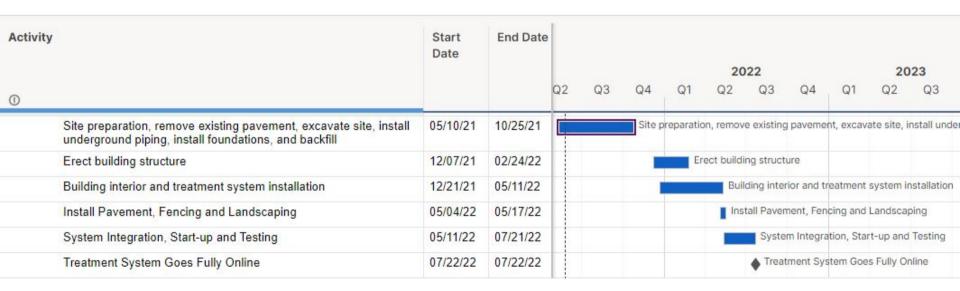
Treatment System Process



- The pipeline carries extracted water from our three recovery wells to the treatment system
- The system treats the water to NY State drinking water standards
- The aquifer is replenished via our basins



Treatment System Construction Timeline



*Timeline is weather permitting and material availability/market conditions



Example of construction process









Project Controls in Place

- Equipment and Materials
- Odors and Dust
- Noise
- Quality and Safety
- Traffic
- Vibration





Building after completion

Facility will operate 24/7

Routine system
maintenance and
monitoring will be
conducted in accordance
with a NYSDECapproved Site
Management Plan

Treating up to 2.7 million gallons a day









Park Soil Thermal Remedy System

The system has performed exceptionally well

Data shared regularly with NYSDEC, NYSDOH and Town of Oyster Bay

We are awaiting approval from NYSDEC to remove ballfield elements





Ongoing Park Soil Sampling

Sampling (in yellow starred area) began March 8 and will be completed in the next eight weeks

Results will be shared with NYSDEC, NYSDOH and Town of Oyster Bay

Data and science will drive our recommended remedy





Our Continued Commitment

Northrop Grumman continues to work closely with the NYSDEC, the U.S. Navy and other federal, state, and local government regulatory authorities, to address environmental conditions in the area.

We remain committed to pursuing scientifically sound, targeted and effective remedial approaches that protect the health and well-being of the community and avoid unnecessary disruption.

For ongoing updates, visit our project web site www.northropgrumman.com/bethpage

Opt-in email to Dianne.baumert-Moyik@ngc.com

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