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Subject: Fourth Quarter 2020 Progress Report
Northrop Grumman
Operable Unit 2, NYSDEC Site ID # 1-30-003A
Bethpage, New York
Our Ref: 30063142.RPT14
Date: January 8, 2021

Dear Jason,

In accordance with Appendix "A", Section XIII of Administrative Order on Consent (AOC) Index # W1-118-14-12, this letter reports Operable Unit 2 (OU2) activities performed by Northrop Grumman during the Fourth Quarter of 2020 (October through December 2020). Activities planned for the First Quarter of 2021 (January through March 2021) are also described, as applicable.

Please note that, as no analytical data was validated/received as final during the current period beyond what is planned to be included in upcoming Fourth Quarter routine reports for OU2 (e.g., quarterly/annual report, as specified in the Groundwater Monitoring Plan), this Progress Report does not include sample analytical data.

As this is an ongoing remediation project, Northrop Grumman submits these Progress Reports on a quarterly frequency and the next report will be submitted following the close of March 2021.

OU2 ACTIVITIES CONDUCTED DURING FOURTH QUARTER 2020

OU2 On-Site Containment (ONCT) System

- Continued Operation, Maintenance, and Monitoring (OM&M) of the OU2 ONCT system.
- Completed routine Fourth Quarter 2020 ONCT system sampling.
- Notable shutdown events (generally shutdowns of 3 hours or greater, excluding brief or short-term maintenance events) during this period are summarized below. In each instance, the system was fully restored following any needed assessments and repairs:
 - The Tower 96 System shut down briefly on 10/1/2020 due to overheated air compressor which tripped the circuit breaker. The system was restarted the same day.

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- The Tower 102 System shut down on 10/5/2020 and was offline until 10/8/2020 due to a blower bearing failure, bearing replacement and subsequent blower balancing. The system was restarted without incident following repairs.
- The Tower 96 System was shut down on 10/21/2020 to accommodate the replacement of a new air compressor. The system was restarted the same day.
- The Tower 96 System shut down on 11/10/2020 and was offline until 11/13/2020 due to a bearing failure at the exterior blower and associated maintenance. The bearing was replaced, the blower was balanced, and the system was restarted following completion of repairs.
- Well 18 of the Tower 102 System experienced several brief and intermittent shutdown events on 11/12/2020 due to SCADA communication issue and associated troubleshooting.
- The Tower 102 System shut down on 11/23/2020 at due to a malfunction of the effluent actuator in carbon bed A. The system was restarted the same day.
- The Tower 102 System was shut down on 12/10/2020 to 12/11/2020 to accommodate the replacement of pneumatic cylinders on the vapor-phase granular activated carbon (VPGAC) steam piping.
- The Tower 102 System shut down on 12/17/2020 due to a broken air line associated with the compressor. The system was restarted the same day.
- The Tower 102 System was shut down on 12/23/2020 to replace the temporary actuator flange on carbon bed “A” effluent duct. The system was restarted the same day.

Regional Groundwater Monitoring & Outpost Well Monitoring

- Initiated and completed routine Fourth Quarter 2020 OU2 groundwater monitoring activities, including collection of semi-annual water levels and sampling of routine monitoring wells.
- Prepared and submitted the Third Quarter 2020 and Fourth Quarter 2020 sampling event data (Form 1 packages) to NYSDEC.

Northrop Grumman Cooperation with Navy

- Coordinated with Navy and completed semi-annual water level measurements associated with select wells in Navy’s routine monitoring program.
- Coordinated with Navy and completed Fourth Quarter 2020 sampling of additional outpost wells (BPOW5 and BPOW6 clusters) and select plume monitoring wells, as highlighted on Figure 1.
- Prepared and submitted the Third Quarter 2020 sampling event data for Navy-owned wells (Form 1 packages and associated data report packages) to Navy for distribution.

Other

- Prepared and submitted the Third Quarter 2020 OU2 OM&M Report.
- Prepared and submitted the Third Quarter 2020 AOC Quarterly Progress Report.

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OU2 ACTIVITIES SCHEDULED FOR FIRST QUARTER 2021

OU2 ONCT System

- Continue OM&M of the OU2 ONCT system.
- Conduct routine First Quarter 2021 ONCT system sampling.

Regional Groundwater Monitoring & Outpost Well Monitoring

- Conduct First Quarter 2021 sampling of wells in Northrop Grumman's routine monitoring program (GM-21D2 and BPOW2 well cluster).

Northrop Grumman Cooperation with Navy

- Coordinate with Navy and conduct the First Quarter 2021 sampling of additional outpost wells (BPOW5 and BPOW6 clusters).

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Other

- Prepare and submit the First Quarter 2021 AOC Quarterly Progress Report.
- Prepare and submit the 2020 Annual OU2 OM&M Report (including Fourth Quarter 2020 monitoring and operational results).

Sincerely,
Arcadis of New York, Inc.



Art Zahradnik
Project Manager

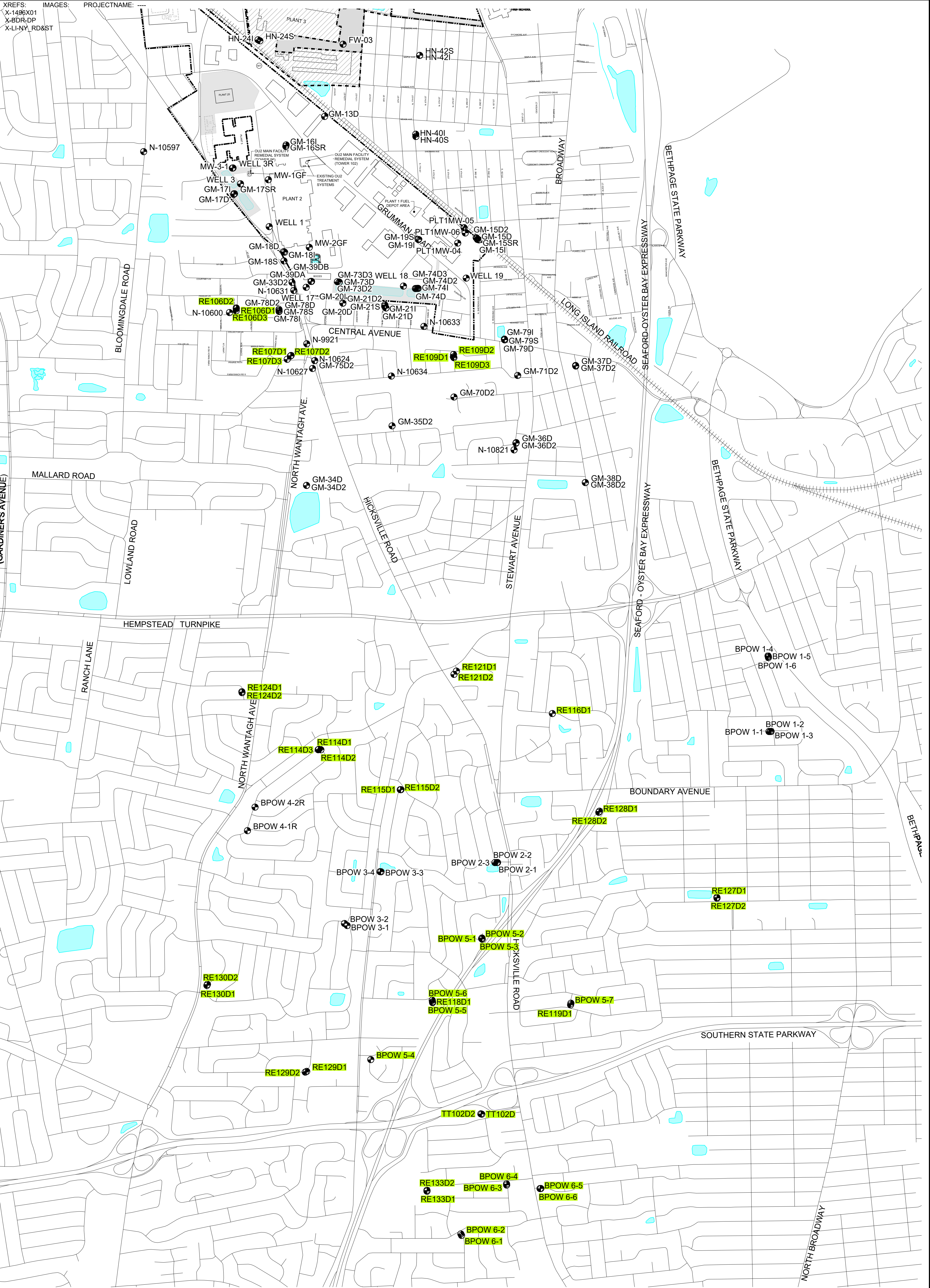
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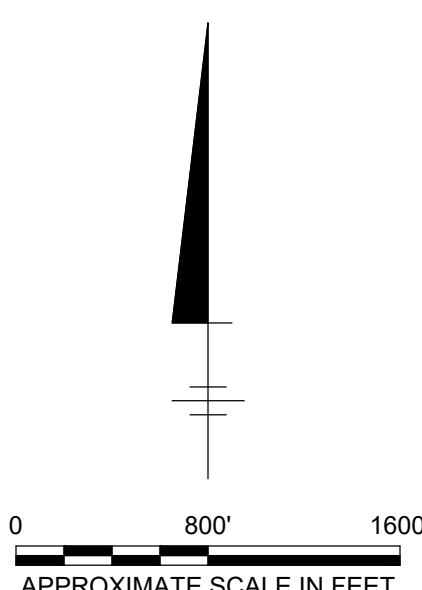
Enclosure

FIGURES





- LEGEND:**
- PROPERTY BOUNDARY OF THE FORMER GRUMMAN AEROSPACE SITE
 - PROPERTY BOUNDARY OF THE FORMER NAVY SITE
 - +++++ LONG ISLAND RAILROAD
 - DENOTES NORTHROP GRUMMAN OWNED PROPERTY (AS OF 2009)
 - DENOTES NAVY OWNED PROPERTY (AS OF 2014)
 - RECHARGE BASIN
 - WELL LOCATION
 - GREEN HIGHLIGHT INDICATES WELLS SAMPLED BY ARCADIS ON BEHALF OF NAVY



NORTHROP GRUMMAN SYSTEMS CORPORATION
 BETHPAGE, NEW YORK

WELL LOCATION MAP

ARCADIS Design & Consultancy
 for natural and built assets

FIGURE
1