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Subject: DELIVERAB:E: OU3 Park Soil Work Plan Addendum
Date: Friday, December 17, 2021 2:53:57 PM
Attachments: [image001.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image002.png](#)
[Proposed Soil Sampling Figure and Table_121721.pdf](#)

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Good afternoon all-

On behalf of Northrop Grumman, Arcadis is providing the attached table and figure comprising the work plan addendum for delineation of VOCs in soil at the Park. As discussed, the tennis courts and skate park will need to be closed until work is being completed in these areas, including permanent restoration of the boring locations. The material and equipment staging location plan (for the support truck and crane) and lift plan will be provided in separate emails.

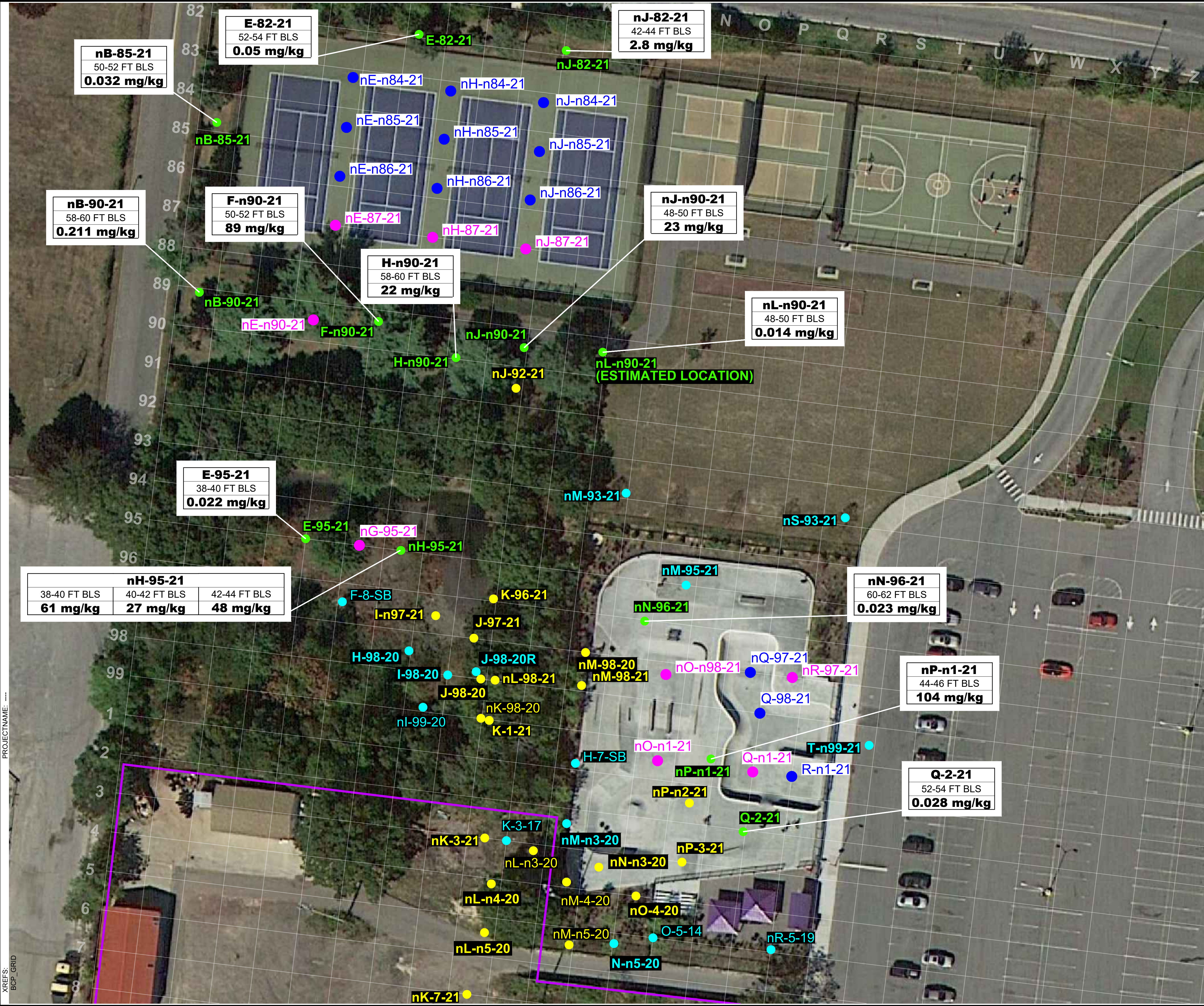
The work is scheduled to commence on 12/22; the 2-week schedule is provided below:

1. 12/22 – Survey of proposed locations
2. 12/23 – Utility location
3. 12/24 – No work due to Town holiday
4. 12/27 and 12/28 – Site preparation in the recharge basin (minor brush clearing and stone placement)
5. 12/29 – Mobilization of drilling rig and set up of work zone within tennis court area and core drilling through pavement at the first location (nJ-87-21).
6. 12/30 – No work, due to lab closure on 12/31 due to holiday
7. 12/31 – No work due to Town holiday
8. 1/3/22 – Initiate drilling/sampling at the first boring location

Any questions, please let me know.

Regards,
Dave

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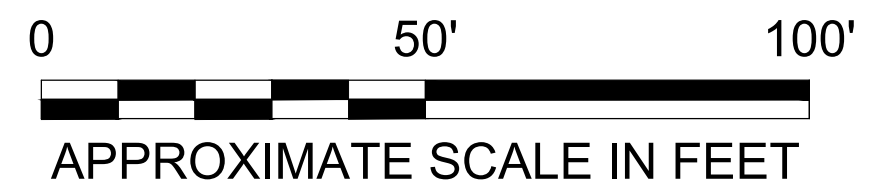


LEGEND:

- LIMIT OF PARK - BALL FIELD
- TVOC TOTAL VOLATILE ORGANIC COMPOUND
- mg/kg MILLIGRAMS PER KILOGRAM
- HISTORICAL SOIL BORING LOCATION WITH TVOC CONCENTRATION LESS THAN 10 mg/kg
- HISTORICAL SOIL BORING LOCATION WITH TVOC CONCENTRATION GREATER THAN 10 mg/kg
- COMPLETED SOIL BORING LOCATION
- PROPOSED SOIL BORING LOCATION
- CONTINGENCY SOIL BORING LOCATION

NOTES:

1. BORINGS nI-99-20, nK-98-20, nL-n3-20, nM-4-20, nM-n5-20, AND nR-5-19 WERE SURVEYED BY A LICENSED LAND SURVEYOR.
2. BORINGS K-3-17 AND O-5-14 WERE FIELD LOCATED USING A HAND-HELD GLOBAL POSITIONING SYSTEM (GPS) UNIT.
3. BORINGS H-7-SB AND F-8-SB ARE APPROXIMATE AND ARE BASED ON FIELD MEASUREMENTS.
4. COORDINATES REFER TO NEW YORK STATE PLANE COORDINATE SYSTEM, LONG ISLAND ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).
5. THE LOCATIONS OF THE 2021 COMPLETED SOIL BORINGS WILL BE SURVEYED BY A LICENSED LAND SURVEYOR.
6. BORINGS K-96-21, nL-98-21, AND K-1-21 WERE DRILLED AS ANGLE BORINGS.
7. DATA SHOWN REPRESENTS TVOC CONCENTRATIONS GREATER THAN 10 mg/kg OR THE HIGHEST TVOC CONCENTRATION.
8. ADDITIONAL CONTINGENCY SOIL BORINGS MAY BE DRILLED DEPENDING ON RESULTS FROM PROPOSED SOIL BORINGS.



REVISION DATE: 17 December 2021

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LOCATION OF SOIL BORINGS AND PROPOSED SOIL BORINGS

Soil Boring ID	Proposed Soil Sampling Intervals (ft bls) ⁽¹⁾	Number of Samples (2-foot sample interval)
Proposed Soil Borings		
nE-87-21	36 to 64	14
nH-87-21	36 to 64	14
nJ-87-21	36 to 64	14
nE-n90-21	38 to 62	12
nG-95-21	34 to 48	7
nR-97-21	34 to 58	12
nO-n98-21	32 to 56 ⁽³⁾	12
nO-n1-21	28 to 52 ⁽³⁾	12
Q-n1-21	28 to 52 ⁽³⁾	12
Contingency Soil Borings ⁽²⁾		
nE-n86-21	36 to 64 ⁽⁴⁾	14
nH-n86-21	36 to 64 ⁽⁴⁾	14
nJ-n86-21	36 to 64 ⁽⁴⁾	14
nE-n85-21	36 to 64 ⁽⁵⁾	14
nH-n85-21	36 to 64 ⁽⁵⁾	14
nJ-n85-21	36 to 64 ⁽⁵⁾	14
nE-n84-21	36 to 64 ⁽⁶⁾	14
nH-n84-21	36 to 64 ⁽⁶⁾	14
nJ-n84-21	36 to 64 ⁽⁶⁾	14
R-n1-21	28 to 52 ^(3,7)	12
Q-98-21	28 to 52 ^(3,8)	12
nQ-97-21	28 to 52 ^(3,9)	12

Notes and Abbreviations

⁽¹⁾ Proposed soil sampling intervals based on the data collected from nearby soil borings where TVOC concentrations are greater than 10 mg/kg and based on presence of LPZ.

⁽²⁾ Additional contingency soil borings may be drilled depending on results from proposed soil borings.

⁽³⁾ Final soil sampling intervals will be determined following field elevation survey.

⁽⁴⁾ Contingency soil borings will be drilled if TVOC concentrations in soil samples collected from nearby soil borings nE-87-21, nH-87-21 and nJ-87-21 are greater than 10 mg/kg.

⁽⁵⁾ Contingency soil borings will be drilled if TVOC concentrations in soil samples collected from nearby soil borings nE-n86-21, nH-n86-21 and nJ-n86-21 are greater than 10 mg/kg.

⁽⁶⁾ Contingency soil borings will be drilled if TVOC concentrations in soil samples collected from nearby soil borings nE-n85-21, nH-n85-21 and nJ-n85-21 are greater than 10 mg/kg.

⁽⁷⁾ Contingency soil boring will be drilled if TVOC concentrations in soil samples collected from nearby soil boring Q-n1-21 are greater than 10 mg/kg.

⁽⁸⁾ Contingency soil boring will be drilled if TVOC concentrations in soil samples collected from nearby soil boring nR-97-21 are less than 10 mg/kg.

⁽⁹⁾ Contingency soil boring will not be drilled if TVOC concentrations in soil samples collected from both soil borings nO-n98-21 and nR-97-21 are less than 10 mg/kg.

ft bls feet below land surface.

LPZ low permeability zone

TVOC total volatile organic compound