GeoInsight®
Environmental Strategy & Engineering

November 4, 2020 GeoInsight Project 11120-000

Thomas RisCassi
Remediation Division – Bureau of Water Protection and Land Reuse
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

Re: Summary of Document Review and Test Pit Investigation Activities
Proposed Solar Array Development Area
127 Forest Road
North Branford, Connecticut

Mr. RisCassi:

GeoInsight, Inc. (GeoInsight) has prepared this report to summarize our review of historical documentation and limited investigation at the 127 Forest Road property in North Branford, Connecticut (the Site). GeoInsight has prepared this report at the request of Citrine Power, LLC (Citrine). The purpose of these activities was to evaluate whether solid waste disposal activities occurred within a specific area of the Site proposed for development as a solar array. This area encompasses approximately 10 acres and is referred to as the "Study Area" in this report. A plan showing the Study Area and Site is shown on Figure 1 and the proposed solar array layout and investigation locations is shown on Figure 2.

BACKGROUND

The Site is composed of 25.72 acres and is located on the west side of Forest Road (Route 22). The approximately 10-acre Study Area is situated in the eastern portion of the Site adjacent to Forest Road. Per the Town of North Branford's Tax Assessor's records, the Site is identified as Map 36, Lot 16. The Site is currently owned by What TF, LLC. The Study Area is currently undeveloped and utilized as a corn field. As shown on Figure 1, the Study Area is irregularly shaped and is bound to the south and west by agricultural land, to the east by Forest Road, and to the north by undeveloped and residential properties. As discussed in this letter report, the Study Area is visually, geographically, and historically distinct from the 15.72 acres that comprise the balance of the Site.

Historically, the Study Area has been used for agricultural purposes since at least 1934. According to documents reviewed, Notices of Violation (NOVs) were issued by the Connecticut Department of Energy and Environmental Protection (CTDEEP) to Mr. Joseph Spezzano on April 21, 2004 (NOVWSWDS04047) and April 18, 2006 (NOVWSWDS06031), and to WHAT

TF, LLC on May 29, 2012 (NOVWSWDS12056). The NOVs pertained to unauthorized disposal of solid waste at the Site. The solid wastes reportedly included stockpiles of scrap tires, leaves, soil, land clearing debris, brush and wood piles, street sweepings, and catch basin cleanings. According to a figure prepared by Loureiro Engineering Associates, Inc. (LEA) for WHAT TF, LLC in July 2016, the stockpiles are primarily located in the rear, western portion of the Site [a.k.a. Neubig's Way (Rear)], outside of the Study Area. A copy of the LEA figure is included in Attachment A. The approximate size of the alleged unpermitted solid waste disposal area was approximately 1,800 feet long by 200-300 feet wide and ran east to west from the east side of the Farm River to a stream that runs north to south through the Site. As shown on Figure 1, the stream is approximately 1,100 feet to the west of the Study Area.

REVIEW OF HISTORICAL DOCUMENTATION

GeoInsight conducted a review of pertinent documents pertaining to the 127 Forest Road and associated parcels in North Branford, Connecticut. The documents included Town of North Branford property records, historical Sanborn® Fire Insurance Maps, historical topographic maps, historical aerial photographs, available public document sources, and reports and correspondence prepared for the Site by the DEEP and others. Summaries of this information are provided below. The purpose was to evaluate historical use of a portion of the 127 Forest Road property (the Study Area) which is proposed for development as a solar farm.

Historical Topographic Maps

GeoInsight reviewed seven historical topographic maps dated 1892, 1921, 1954, 1967, 1972, 1984, and 2012 acquired from Environmental Data Resources, Inc. (EDR) to evaluate historical topographic characteristics of the Site and Study Area. Copies of the topographic maps are included in Attachment B. Key information from the topographic map review include:

- The Site appeared primarily undeveloped between 1892 and 2012.
- On the 1892 and 1921 maps, the elevation of the Site was approximately 100 feet AMSL and appeared to be relatively flat and sloped slightly downward to the south.
- On the 1954 through 2012 maps, the elevation of the Site slopes from east to west and the center of the Site was approximately 100 feet AMSL.

Historical Aerial Photographs

GeoInsight reviewed 15 historical aerial photographs, dated 1934, 1949, 1951, 1959, 1966, 1970, 1972, 1980, 1986, 1991, 1995, 2005, 2008, 2012, and 2016 acquired from EDR, and seven aerial photographs dated 1934, 1986, 1990, 1995, 2004, 2006, and 2008 acquired from the University of Connecticut (UConn) MAGIC website to evaluate historical use of the Study Area. Copies of the aerial photographs are included in Attachment B. The Study Area is outlined in red on the aerial photographs. Key information obtained from the aerial photograph review include:

- Between 1934 and 1991, the western portion of the Study Area was wooded, and remainder of Site appeared to be used for agricultural purposes. A roadway was apparent between the western portion of the Site to Forest Road.
- On the 1986 aerial photograph, an apparent water body was present in the western portion of the Site and northwestern portion of the Study Area. The topsoil appears to have been removed in this portion of the Study Area exposing the shallow water table.
- On the 1990, 1991, and 1995 aerial photographs, apparent topsoil disturbance and possible soil stockpiles were noted in the north-central portions of the Study Area. The eastern portion of the Study Area appears to be used for agricultural purposes.
- Between 2004 and 2016, the Site was either undeveloped or appeared to be an agricultural area, consistent with the present day layout and use.

CTDEEP Databases and EDR Report Review

GeoInsight reviewed publicly available information and acquired an EDR database report to help identify potential other issues regarding the Site and Study Area. Key information from the database review include:

- An "OpenData" website was accessed on October 14, 2020, which included waste generation records from between 1987 and 2008. Manifests were not on file for the Site.
- The CTDEEP Document Online Search portal was accessed on October 14, 2020, which includes a collection of documents submitted to CTDEEP that were electronically produced or digitally scanned. Documents and reports for the Site were not identified.
- The Site was not listed on the CTDEEP "List of Contaminated or Potentially Contaminated Sites."
- The Site was not listed in the EDR database report.

LEA Groundwater Assessment

GeoInsight reviewed a "Groundwater Assessment" report, dated November 16, 2018 and prepared by LEA. The report summarized an investigation of groundwater conditions in the northwestern portion of the Site. In March and August 2018, ten temporary groundwater monitoring wells were installed at the Site and three other properties (209 and 363 Totoket Road and Neubig's Way Rear). The monitoring wells were installed outside of the Study Area and in the proximity of the alleged waste stockpiles referenced in the open NOVs issued by the CTDEEP. Volatile organic compounds (VOCs) were not detected in the groundwater samples. One or more metals were detected in each groundwater sample with arsenic exceeding the SWPC but not the GWPC at MW-07.

GeoInsight also reviewed a letter dated February 7, 2019 prepared by the CTDEEP which provided comments on the LEA report. The CTDEEP recommended that additional groundwater sampling be conducted to further evaluate groundwater conditions at the Site. GeoInsight understands that this work was recently completed by LEA and the results are forthcoming.

TEST PIT INVESTIGATION ACTIVITIES

GeoInsight conducted a geotechnical investigation within the proposed 10-acre solar array layout [Study Area] on October 27, 2020. As part of the geotechnical work, GeoInsight also evaluated subsurface soils for the potential presence of solid waste debris or evidence of historical landfilling. The test pits were placed in locations across the Study Area, including in areas where the topsoil disturbances were observed in the 1986 through 1995 aerial photographs. The investigation included the excavation of 10 test pits using a mid-size excavator operated by Butler Construction, Co. of Portland, Connecticut. The test pits were excavated to depths ranging between 5.5 and 12.5 feet below ground surface [bgs], depending upon the depth of the water table. The locations of the test pits are shown on Figure 1. The test pit excavation logs are included in Attachment C.

GeoInsight evaluated soils during the test pit investigation activities for evidence of environmental impacts. This included screening soils for VOCs using a photo-ionization detector (PID) calibrated to an isobutylene standard. Elevated PID readings, above background concentrations, were not detected with the PID at the test pit locations. Stained soils or indications of solid waste disposal were not observed at the test pit locations. Photographs of the test pit excavation activities are attached.

The test pit results indicated that a layer of reworked topsoil and fill, likely present from to the agricultural and tilling activities, was observed between 0 and 7 feet bgs. The reworked topsoil/fill material consisted of brown fine to medium-grained sand with some silt. Trace amounts of woody materials and construction and demolition (C&D) debris [e.g., asphalt, brick, and concrete fragments] were sporadically observed mixed with the sand and silt in the 0 to 2 foot interval at five test pit locations, including TP-1, TP-3, TP-5, TP-6, and TP-9. These trace fragments were observed to range in size from 0.5 to 2 centimeters. Soils below the reworked topsoil/fill interval typically consisted of a reddish-brown fine to medium sand with some to little cobbles and gravel, and trace silt to the bottom of the test pits. The water table was observed at shallow depths in the test pits, ranging from 5 to 12 feet bgs.

Based on the historical photograph review, the Study Area portion of the Site has been used for agricultural purposes since prior to 1934. Sections of the northwest and northeast portions of the Study Area appear to have been removed between approximately 1986 and 1995, possibly for the purpose of topsoil farming. In the 1986 photograph, portions of the northwest corner appear to have been removed to depths up to 5 feet bgs. Standing water is observed in the 1986 aerial images, which correlates to the observed groundwater levels at TP-1. In the 1995 photograph, portions of the northeastern corner also appear to have been removed. Based on stratum descriptions for TP-4, the disturbed area in this northeast corner appeared to range to depths up to 5 feet bgs. The backfilled material was observed to be fine to medium-grained sand and silt. The field observations were consistent with conditions expected based upon the review of the aerial photographs in these areas. As discussed above, trace amounts of construction and demolition debris were observed randomly in the shallow reworked/native topsoil at several test pit locations.

CONCLUSIONS

GeoInsight conducted a review of pertinent documentation to evaluate the historical use of the Site and proposed solar array development "Study Area." In addition, GeoInsight oversaw the excavation of 10 test pits within the proposal solar array area to evaluate for the presence of fill material or evidence of solid waste landfilling activities.

In summary, the portion of the 127 Forest Road property that is proposed for development as a solar array has primarily been used for agricultural purposes since prior to 1934. Evidence of topsoil removal between 1986 and 1995 was observed on historical aerial photographs. Based upon the results of the test pit excavation activities, these areas were likely filled with topsoil from on-site or sand and silt from an off-site source. The observance of trace amounts of small fragments of construction and demolition debris (e.g., asphalt, brick, and concrete) in shallow soil was random and not widespread throughout the Study Area. Evidence of landfilling operations was not encountered at the ten test pit locations within the approximately 10-acre solar array development area. Based on these results, GeoInsight concludes that solid waste disposal activities were not conducted within the proposed solar array development area.

Thank you for your continued assistance with this matter. If you have any questions, feel free to contact me at (860) 894-1022.

Sincerely,
GEOINSIGHT, INC.

Jeff W. King, PG, LEP
Senior Hydrogeologist/Senior Associate

Attachments

Copy: Cela Sinay-Bernie, Citrine Power, LLC

\\geocto\cto_projects\11120 - Citrine Power, 127 Forest Rd., Northford, CT\Correspondence\CTDEEP Correspondence\Investigation Summary Letter, Nov. 4, 2020.docx

PHOTOGRAPHS

SITE PHOTOGRAPHS
127 FOREST ROAD
NORTH BRANFORD, CONNECTICUT

Photo # 1: View of Test Pit 1, facing south.

Photo # 2: View of Test Pit 1, facing west.

Photo # 3: View of Test Pit 2, facing southwest.

Photo # 4: View of Test Pit 3, facing southwest. Top three feet.

SITE PHOTOGRAPHS
127 FOREST ROAD
NORTH BRANFORD, CONNECTICUT

Photo # 5: View of Test Pit 4, facing southwest.

Photo # 6: View of Test Pit 5, facing southeast.

Photo # 7: View of Test Pit 6, facing northwest.

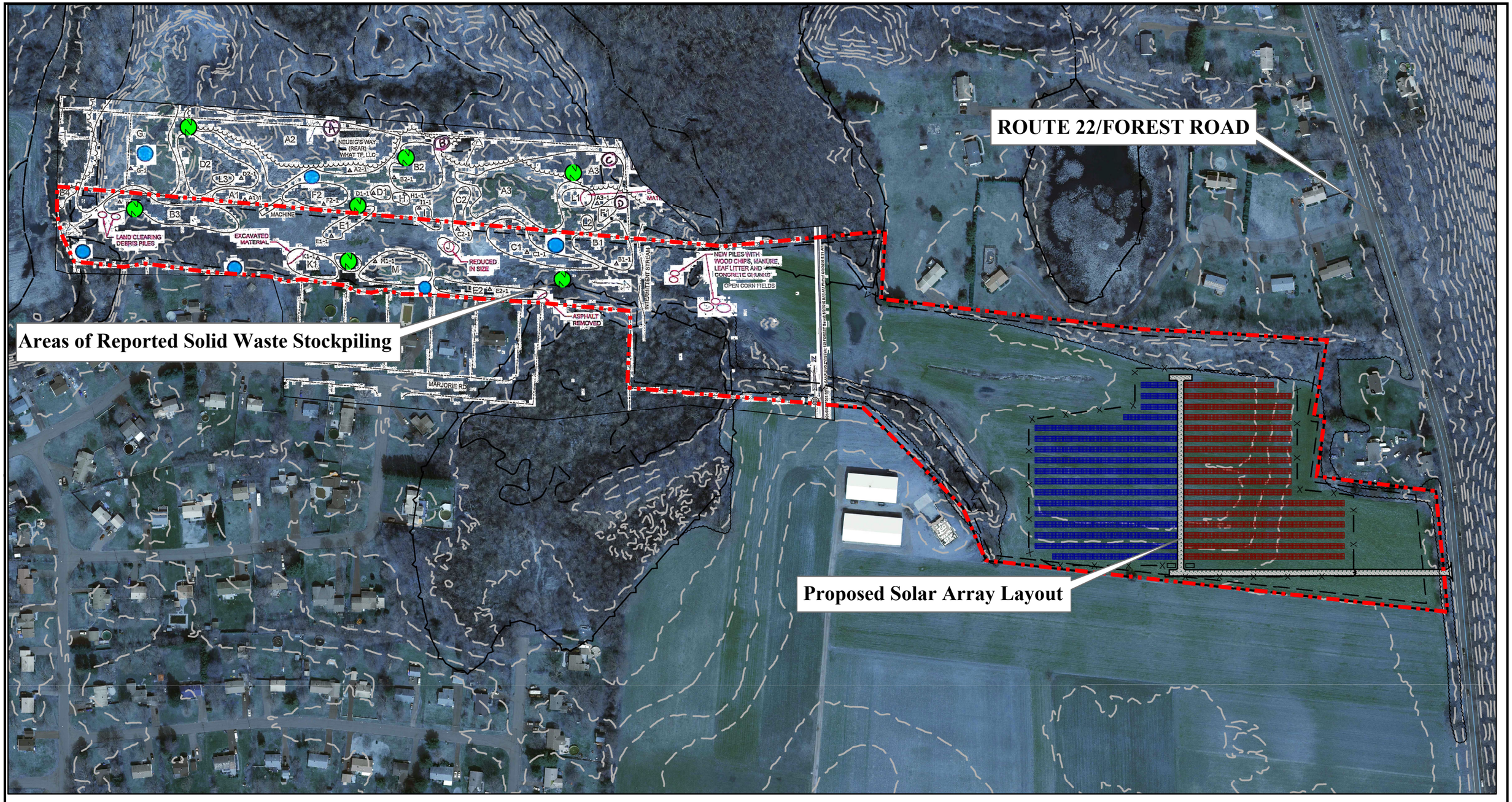
Photo # 8: View of the Test Pit 7, facing northwest.

SITE PHOTOGRAPHS
127 FOREST ROAD
NORTH BRANFORD, CONNECTICUT

Photo # 9: View of Test Pit 9, facing west.

Photo # 10: View of site after test pit exploration, facing northwest.

FIGURES



Site boundaries and features are approximate and should not be used for design.

0 225 450
APPROX. SCALE IN FEET

SOURCE:
CTDEEP GIS DATA

N

TITLE: AERIAL SITE LAYOUT			
PROJECT: 127 FOREST ROAD NORTH BRANFORD, CONNECTICUT			
CLIENT: CITRINE POWER, LLC			
DESIGNED: APB	DRAWN: APB	CHECKED: JWK	APPROVED: JWK
SCALE: 1"= 80'	DATE: 11/03/20	FILE NO.: 11120-M002	PROJECT NO.: 11120-000
			FIGURE NO.: 1

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Date: 11/3/2020
Document Path: H:\ArcMap\11120 - Citrine Power\11120M002 - Aerial Site Layout.mxd

PROPERTY BOUNDARY

TEST PIT LOCATIONS

STUDY AREA BOUNDARY

Site boundaries and features are approximate and should not be used for design.

0 25 50 100 150 200 Feet

SOURCE: CTDEEP GIS DATA

N

TITLE: SITE PLAN WITH TEST PIT LOCATIONS			
PROJECT: 127 FOREST ROAD NORTH BRANFORD, CONNECTICUT			
CLIENT: CITRINE POWER, LLC			
DESIGNED: AHF	**DRAWN:** AHF	**CHECKED:** JWK	**APPROVED:** JWK
SCALE: 1"= 80'	**DATE:** 10/27/20	**FILE NO.:** 11120-M01	**PROJECT NO.:** 11120-000

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FIGURE NO.: 2

Date: 11/2/2020
Document Path: H:\ArcMap\11120 - Citrine Power\11120M001 - Site Plan with Test Pits.mxd

ATTACHMENT A

HISTORICAL REPORT DOCUMENTS

Loureiro
Engineering • Construction • EH&S • Energy
Waste • Facility Services • Laboratory

November 16, 2018

What TF, LLC
516 Totoket Road
North Branford, CT 06472

Attn: Mr. Mark DeLungo

RE: Groundwater Assessment
209 Totoket Road, 363 Totoket Road, 127 Forest Road, Neubig's Way (Rear)
North Branford, CT

Dear Mr. DiLungo:

Loureiro Engineering Associates, Inc. (Loureiro) has prepared this summary letter to summarize the findings of the groundwater assessment conducted at the properties identified as 209 Totoket Road, 363 Totoket Road, 127 Forest Road, and Neubig's Way (Rear) located in North Branford, Connecticut (hereinafter referred to as "the Site"). The scope of work outlined below was intended to provide an initial assessment of groundwater conditions at downgradient of the waste materials stored at the Sites, and was not intended to be a comprehensive characterization of groundwater conditions at the Sites.

In March and August 2018, Loureiro installed and developed ten temporary groundwater monitoring wells (MW-1 through MW-10) at the Sites, at the locations shown on Figure 1 (attached). Following installation, the monitoring wells were developed through use of a surge block and over-pumping to remove entrained sediments and increase connectivity with the shallow aquifer. A relative elevation and location survey of the installed monitoring wells was completed using GPS technologies following installation in an attempt to establish apparent groundwater flow direction at the Sites. However, due to the limited groundwater elevation data and the spatial disparity of the groundwater monitoring wells, we were unable to develop a groundwater contour map. The monitoring wells were placed at locations anticipated to be downgradient of the waste materials stored at the Sites, based on proximity of the nearby water bodies and/or wetlands, and the topography of the Sites and surrounding areas. The anticipated groundwater flow directions are shown on Figure 1.

In March and September, Loureiro collected groundwater samples from the ten monitoring wells using low-flow sampling methods, and submitted the samples to Tunxis Laboratories, LLC for analysis for volatile organic compounds (VOCs) by Environmental Protection Agency Method 8260, and/or total Resource Conversation and Recovery Act 8 metals.

The laboratory analytical results indicate that VOCs were not detected in any samples at concentrations above laboratory reporting limits. One or more metals were detected in each of the groundwater samples, including barium, arsenic, cadmium, and/or selenium. Arsenic was detected at a concentration of 0.0074 milligrams per liter (mg/L) in the groundwater sample collected from monitoring well MW-07, which is below the Connecticut Department of Energy and Environmental Protection (CT DEEP) Groundwater Protection Criteria (GWPC) of 0.050 mg/L, but exceeds the CT DEEP Surface Water Protection Criteria (SWPC) of 0.004 mg/L, as defined in the Remediation Standard Regulations (RSRs). The concentrations

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of metals detected in all of the groundwater samples collected from the Site were below the GWPC. The laboratory analytical data is attached as Table 1.

Please feel free to contact me should you have any questions regarding the information provided

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Kyle Zalaski, E.I.T
Senior Project Engineer

Attachments

TABLE 1
GROUNDWATER SAMPLE ANALYTICAL RESULTS

					Location ID	EQUIPMENT BLANK	MW-01	MW-02	MW-03	MW-03 (Duplicate)	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	TRIP BLANK
					Sample ID	1382621	1379047	1379048	1382619	1382620	1382618	1382612	1382616	1382617	1382613	1382615	1382614	1382627
					Sample Date	9/1/2018	3/29/2018	3/29/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018
					Sample Type	EB	N	N	N	FD	N	N	N	N	N	N	N	TB
					Sample Class	EB	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	TB
Constituents	Fraction Class	Units	CT 2013 GWPC-GA	CT 2013 SWPC in GW														
SW6010C																		
Barium	T	mg/L	1		< 0.010	NA	NA	0.141	0.140	0.186	0.368	0.099	0.319	0.664	0.336	0.621		
Chromium, Total	T	mg/L	0.05		< 0.005	NA	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
SW6020B																		
Arsenic	T	mg/L	0.05	0.004	< 0.0010	NA	NA	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0074	< 0.0010	< 0.0010	0.0023		
Cadmium	T	mg/L	0.005	0.006	< 0.0001	NA	NA	0.0001	0.0001	< 0.0001	0.0004	< 0.0001	< 0.0001	< 0.0001	0.0003	0.0001		
Lead	T	mg/L	0.015	0.013	< 0.0010	NA	NA	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		
Selenium	T	mg/L	0.05	0.05	< 0.001	NA	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002		
Silver	T	mg/L	0.036	0.012	< 0.0005	NA	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		
SW7470A																		
Mercury	T	mg/L	0.002	0.0004	< 0.0002	NA	NA	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002		
SW8260C																		
1,1,1,2-Tetrachloroethane	N	ug/L	**1**		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5	
1,1,1-Trichloroethane	N	ug/L	200	62000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,1,2,2-Tetrachloroethane	N	ug/L	**0.5**	110	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5	
1,1,2-Trichloro-1,2,2-trifluoroethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,1,2-Trichloroethane	N	ug/L	5	1260	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,1-Dichloroethane	N	ug/L	70		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,1-Dichloroethylene	N	ug/L	7	96	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,1-Dichloropropene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2,3-Trichlorobenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2,3-Trichloropropane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2,4-Trichlorobenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2,4-Trimethylbenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2-Dibromo-3-chloropropane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2-Dichlorobenzene	N	ug/L	600	170000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,2-Dichloroethane	N	ug/L	**1**	2970	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5	
1,2-Dichloropropane	N	ug/L	5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	
1,3,5-Trimethylbenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	

An Employee Owned Company
100 Northwest Drive
Plainville, CT 06062

TABLE 1
GROUNDWATER SAMPLE ANALYTICAL RESULTS

					Location ID	EQUIPMENT BLANK	MW-01	MW-02	MW-03	MW-03 (Duplicate)	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	TRIP BLANK
					Sample ID	1382621	1379047	1379048	1382619	1382620	1382618	1382612	1382616	1382617	1382613	1382615	1382614	1382627
					Sample Date	9/1/2018	3/29/2018	3/29/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018
					Sample Type	EB	N	N	N	FD	N	N	N	N	N	N	N	TB
					Sample Class	EB	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	TB
Constituents	Fraction Class	Units	CT 2013 GWPC-GA	CT 2013 SWPC in GW														
1,3-Dichlorobenzene	N	ug/L	600	26000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
1,3-Dichloropropane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
1,4-Dichlorobenzene	N	ug/L	75	26000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
1,4-Dichlorobutene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
2,2-Dichloropropane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
2-Butanone (MEK)	N	ug/L	400		< 2.0	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10.0	< 2.0
2-Chlorotoluene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
2-Hexanone	N	ug/L			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0
4-Chlorotoluene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
4-Isopropyltoluene (p-Cymene)	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Acetone	N	ug/L	700		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 50.0	< 10.0
Acrylonitrile	N	ug/L	**0.5**	20	< 0.5	< 2.5*	< 2.5*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5
Benzene	N	ug/L	**1**	710	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5
Bromobenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Bromodichloromethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Bromoform	N	ug/L	4	10800	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Bromomethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Carbon Disulfide	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Carbon Tetrachloride	N	ug/L	5	132	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Chlorobenzene	N	ug/L	100	420000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Chloroethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Chloroform	N	ug/L	6	14100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Chloromethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
cis-1,2-Dichloroethylene	N	ug/L	70		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
cis-1,3-Dichloropropene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Dibromochloromethane	N	ug/L	**0.5**	1020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5
Dibromomethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Dichlorodifluoromethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Ethylbenzene	N	ug/L	700	580000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Ethylene Dibromide (EDB)	N	ug/L	**0.05**		< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 0.5*	< 2.5*	< 0.5*
Hexachlorobutadiene	N	ug/L			< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 2.0	< 0.4
Isopropylbenzene (cumene)	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Methyl Isobutyl Ketone (MIBK)	N	ug/L	350		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10.0	< 2.0
Methyl tert-Butyl Ether (MTBE)	N	ug/L	100		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Methylene Chloride	N	ug/L	5	48000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0
Naphthalene	N	ug/L	280		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5

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TABLE 1
GROUNDWATER SAMPLE ANALYTICAL RESULTS

					Location ID	EQUIPMENT BLANK	MW-01	MW-02	MW-03	MW-03 (Duplicate)	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	TRIP BLANK
					Sample ID	1382621	1379047	1379048	1382619	1382620	1382618	1382612	1382616	1382617	1382613	1382615	1382614	1382627
					Sample Date	9/1/2018	3/29/2018	3/29/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018	9/1/2018
					Sample Type	EB	N	N	N	FD	N	N	N	N	N	N	N	TB
					Sample Class	EB	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	GWLF	TB
Constituents	Fraction Class	Units	CT 2013 GWPC-GA	CT 2013 SWPC in GW														
n-Butylbenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
n-Propylbenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
sec-Butylbenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Styrene	N	ug/L	100		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
t-Butylbenzene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Tetrachloroethylene (PCE)	N	ug/L	5	88	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Tetrahydrofuran	N	ug/L			< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Toluene	N	ug/L	1000	4000000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
trans-1,2-Dichloroethylene	N	ug/L	100		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
trans-1,3-Dichloropropene	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Trichloroethylene (TCE)	N	ug/L	5	2340	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Trichlorofluoromethane	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Vinyl Chloride	N	ug/L	**2**	15750	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5*	< 0.5
Xylene, m-	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Xylene, o-	N	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Xylenes, Total	N	ug/L	530		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0

Legend:
Sample Class WGLF - Ground Water Low Flow
Sample Type EB - Equipment Blank
Sample Type TB - Trip Blank
Sample Type N - Environmental Sample
Sample Type FD - Field Duplicate
NA - Not Analyzed
mg/L - milligrams per Liter
ug/L - micrograms per Liter
SW8260C - Volatile Organic Compounds (VOCs)
SW6010/SW6020/SW7470/SW9014- Metals
*Laboratory reporting limits above CT DEEP RSR criteria
exceedance of CT GWPC
exceedance of CT SWPC
2013 CT GWPC - Connecticut Groundwater Protection Criteria - GA [Sec 22a-133k Appendix C of CT Remediation Standard Regulations]
2013 CT SWPC - Connecticut Surface Water Protection for Substance in Groundwater [Sec 22a-133k Appendix D of CT Remediation Standard Regulations]

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Mr. Mark DiLungo
What TF, LLC
516 Totoket Road
North Branford, CT 06472

FEB 07 2019

Re: Groundwater Assessment
209 & 363 Totoket Road, 127 Forest Road, Neubig's Way (Rear), North Branford

Dear Mr. Dilungo,

The Remediation Division of the Connecticut Department of Energy and Environmental Protection (DEEP) has reviewed a letter dated November 16, 2018, (the "Groundwater Letter Report") and the hard copy of a map accompanying same ("Drawing 1"), which was received on January 24, 2019. The Groundwater Letter Report was prepared by Loureiro Engineering Associates. The Groundwater Letter Report presented the results of a limited groundwater investigation conducted at 209 and 363 Totoket Road, 127 Forest Road, and Neubig's Way (Rear) in North Branford, (the "Sites"). The Groundwater Letter Report presents actions taken to assess shallow groundwater conditions at the Sites where waste disposal had occurred.

Prior to performing this groundwater investigation, a work plan, dated September 12, 2017 and prepared on your behalf by Loureiro Engineering Associates (the Plan) had been submitted to DEEP. This Plan identified specific work activities to be conducted at all the Sites except 363 Totoket Road to assess shallow groundwater conditions and groundwater flow direction. DEEP had reviewed the Plan and had provided comments to Loureiro Engineering Associates in written correspondence dated September 29, 2017 (the "Comments"), a copy of which is attached to this letter.

DEEP has reviewed the Groundwater Letter Report and attached Drawing 1 and based on that review has the following comments:

1. With respect to the 127 Forest and Neubig's Way (Rear) properties; the temporary monitoring/ well locations were altered in the Groundwater Letter Report when compared with the Plan. In the Plan, Figure 1 identified six (6) monitoring wells and the Comments required that another four (4) monitoring wells be placed in areas that were presumed to be downgradient of waste piles A2, B2, A3 and F1. Drawing 1 in the Groundwater Letter Report identifies three (3) wells, none of which were in areas required by DEEP. Additionally, Drawing 1 identified only one (1) well, MW-8, being located in the same area as was proposed in the Plan. *A revised Plan will need to include all of the monitoring wells as shown in the Plan as well as the monitoring wells required in the Comments.*

2. With respect to the 209 Totoket Road property; the locations and number of wells in the Groundwater Letter Report differ from what was proposed in the Plan. Figure 1 in the Plan proposes six (6) well locations and the Comments required one (1) well be relocated and one (1) well be located in an area that was presumed to be downgradient of waste piles O1, O2, and R2. Drawing 1 in the Groundwater Letter Report identifies two (2) wells, MW-3 and MW-4. As your environmental consultant should be aware, a minimum of three (3) wells are needed to assess

groundwater flow direction. *A revised Plan will need to include all of the monitoring wells as shown in the Plan as well as the monitoring wells required in the Comments.*

3. One of the stated goals in the Plan was to determine groundwater flow direction at each of the properties. No groundwater elevation measurements or groundwater contours are presented in the Groundwater Letter Report. *Please provide a Figure with groundwater elevation measurements and groundwater contours based on the data collected from the monitoring wells.*

4. Section 2.3 of the Plan proposed analyzing all monitoring wells for the following: VOCs by Environmental Protection Agency (EPA) Method 8260, SVOCs by EPA Method 8270, ETPH, PCBs by EPA Method 8082, RCRA 8 metals, and pesticides. In the Comments, DEEP required that the above analyses be conducted as well as General Chemistry parameters including color, odor, turbidity, pH, ammonia, nitrate, nitrite, alkalinity, hardness, chloride, sodium, iron and manganese. The Groundwater Letter Report identified that analyses on the ten (10) monitoring wells at the Sites were limited to VOCs by EPA Method 8260 and RCRA 8 metals. *Additional sampling is required to include all of the analyses listed above.*

5. Drawing 1 in the Groundwater Letter Report identifies three (3) monitoring wells located on the 363 Totoket Road property. The Plan made no mention of any proposed activities occurring on the 363 Totoket Road property and DEEP had not reviewed any information regarding this property.

DEEP requests that within sixty (60) days of the date of this letter, you submit a revised Plan that addresses the comments detailed above and contains a schedule for performing the work.

If you have any questions regarding this letter, please feel free to contact me at craig.bobrowiecki@ct.gov or (860) 424-3798.

Sincerely,

Craig Bobrowiecki
Environmental Analyst II
Remediation Division
Bureau of Water Protection and Land Reuse

C: Atty Ann Catino, Halloran & Sage, LLP, 225 Asylum Street #18, Hartford, CT 06103
Jeff Loureiro, Loureiro Engineering Associates, Inc., 100 Northwest Drive, Plainville, CT 06062
Laurene Buckowski, CT DEEP (e copy)

Enclosure: Correspondence dated September 29, 2017 "DEEP Comments"

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September 29, 2017

DEEP Comments
Limited Groundwater Investigation at 127 Forest Road/Neubig's Way Rear and 209 Totoket Road
North Branford, Connecticut

The Connecticut Department of Energy and Environmental Protection, ("DEEP" or the "Department") has reviewed the work plan titled "Limited Groundwater Investigation at 127 Forest Road/Neubig's Way Rear and 209 Totoket Road", (the "Plan"), which was prepared by Loureiro Engineering Associates, Inc. on behalf of What TF, LLC. The Plan details a proposal to perform a limited groundwater investigation in the vicinity of waste disposed at 127 Forest Road/ Neubig's Way Rear and 209 Totoket Road in North Branford, (the "Sites").

The Department recognizes that the Plan will only provide a "snapshot" understanding of shallow (water table) groundwater conditions at limited sampling locations at the Sites. Further, the Plan should in no way be understood to provide a comprehensive study of groundwater conditions either on or off the Sites, including but not limited to an investigation of deep(er) groundwater, or potentially, a bedrock groundwater investigation. In addition, nothing in this limited groundwater investigation will provide data to support the absence or presence of pollution that may be present in the waste materials deposited at the Sites or what pollution may have leached from the waste materials to underlying soils at the Sites.

In section 1.0 of the Plan, results of limited potable well sampling conducted at 209, 400, and 420 Totoket Road are presented. The samples collected at the properties were analyzed for the presence of volatile organic compounds (VOCs) using United States Environmental Protection Agency, (EPA) method 524.2. Results of the sampling were non-detect for each compound analyzed. In order to more comprehensively evaluate the impact to residential wells in the vicinity of the Sites, the Department requests that a receptor survey be conducted to identify any potable wells within a 500 foot radius of each of the Sites. Guidance for conducting a receptor survey can be found on the following web page: http://www.ct.gov/deep/lib/deep/site_clean_up/guidance/site_characterization/water_supply_well_receptor_survey_guidance.pdf. The Department also requests that the potable wells located at 209, 400, and 420 Totoket Road and any other potable wells identified in the receptor survey located within 500 feet of the Sites be analyzed for the following:

- Organochlorine Pesticides via EPA method 505FULL
- Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH)
- Semi-volatile organic compounds (SVOCs) via EPA method 525.2
- Total Resource Conservation and Recovery Act (RCRA) 8 metals
- General Chemistry, including color, odor, turbidity, pH, ammonia, nitrate, nitrite, alkalinity, hardness, chloride, sodium, iron, and manganese
- VOCs via 524.2 (not necessary for 209, 400, and 409 Totoket Road, previously analyzed)

Section 2.2-Temporary Monitoring Well Installation

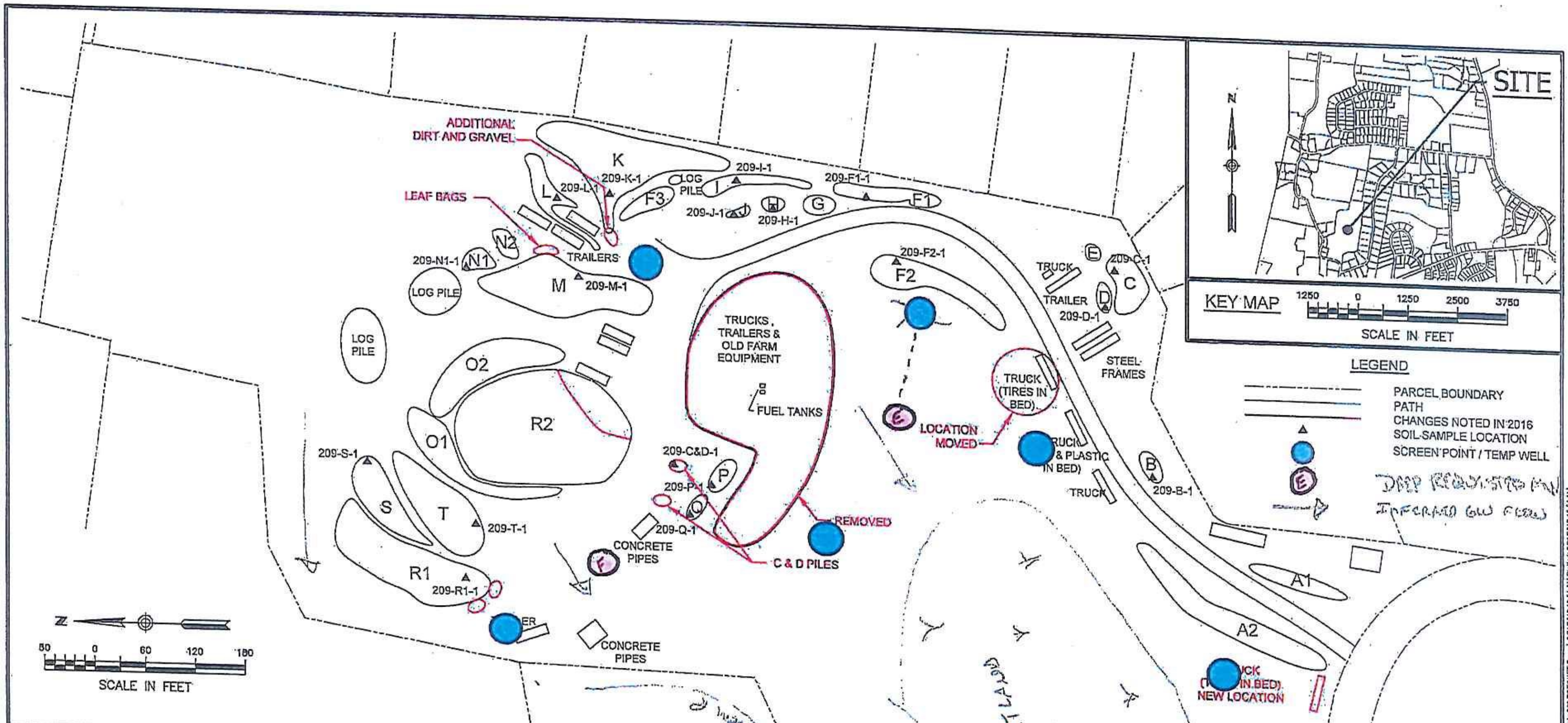
While the Department recommends comprehensive characterization of groundwater, the following comments are provided in light of the limited investigation currently proposed.

- The Department recommends that additional monitoring wells be installed at the northern edge of Neubig's Way Rear property in pile A2 (well A), north of pile B2 (well B), in the northeast portion of pile A3 (well C) and approximately 60 feet east of soil sample A3-1 (well D). The placement of these wells will be to assess shallow groundwater that is inferred to flow from where waste has been deposited towards potential receptors (see attached modified figure).
- The Department also recommends the following changes to the Plan be incorporated at the 209 Totoket Road Property. Specifically, the temporary well located just to the east of pile F2 (well E) should be relocated approximately 120 feet to the west of its planned location and an additional temporary well should be installed approximately 100 feet southwest of piles R2 and O1 (well F). The placement of these wells will be to potentially provide an initial and limited assessment of shallow groundwater that is inferred to flow from areas where waste has been deposited towards potential receptors (see attached modified figure).

Section 2.3- Groundwater Sampling

- All of the temporary wells should be analyzed for the parameters outlined in Section 2.3 as well as the following General Chemical parameters as detailed below. The Department recommends that General Chemistry parameters including color, odor, turbidity, pH, ammonia, nitrate, nitrite, alkalinity, hardness, chloride, sodium, iron, and manganese be included in the analysis for the wells. Additionally, Low-Stress, (Low-Flow) sampling should be utilized whenever possible.

- The Plan must identify that a sufficient amount of time is provided after the wells are purged to allow for the groundwater in the wells to recover prior to taking and recording the groundwater elevation measurements.



Pile ID	Size (est. in ft)	Height (est. in ft)	Cubic Yards	Description
A	A1: 220x10 A2:10x125	4	611.11	Gravel and asphalt fill with soils. Related to Rest Area construction. Documented and sampled.
B	18x35	10	233.33	Dirt pile with rubber and metal waste.
C	70x50	8	1037.04	Processed fill. Sandy material with gravel and construction debris.
D	20x40	4	118.519	Construction generated sand and gravel.
E	20x15	4	44.44	Tire pile.
F	F1:130x20 F2:20x70 F3:185x25	F1/F2: 6 F3: 8	F1: 577.78 F2: 311.11 F3: 1370.37 Total: 2259.26	Sandy piles with asphalt debris, construction debris, and metal scraps.
G	30x30	6	266.67	Processed wood chips and mulch
H	35x15	6	116.67	Roofing materials, scraps, and associated debris
I	160x20	8	948.15	Landfill debris. Bulky waste consisting of carpeting, foam, tires, and scrap metal.
J	25x15	8	111.11	Landscaping wastes, brush, organics, and some metal scraps.
K	100x120	15	6666.67	Household wastes on landclearing debris and organic waste. Large buried wood poles. Large aluminium pipe located centrally.
L	80x25	8	592.59	Construction generated soil with concrete and metal waste.

Pile ID	Size (est. in ft)	Height (est. in ft)	Cubic Yards	Description
M	210x30	8	1866.67	Mulched wood and wood scraps with household debris and some metal scraps.
N	N1: 30x40 N2: 40x25	N1 / N2: 8	N1: 355.56 N2: 296.3 Total: 651.85	Soils with organic wastes, leaf litter, wood clearing debris, and some plastic.
O	O1: 300x80 O2: 125x70	O1 / O2: 25	O1: 22222.2 O2: 8101.85 Total: 30324.05	Soils with gravel, concrete, and metal scraps.
P	50x30	15	833.33	Soil debris mixed with wood and plastic. Large amounts of blue painted wood in pile.
Q	40x25	10	370.37	Soil mixed with land clearing debris and household waste. Concrete pipes and a rusted 55-gallon drum observed on the pile.
R	R1: 150x70 R2: 135x100	R1: 15 R2: 20	R1: 5833.33 R2: 10000 Total: 21833.33	Processed land clearing debris and organic wastes.
S	150x100	20	11111.1	Construction generated sand and stone. Some asphalt chunks.
T	80x70	25	3888.89	Land clearing debris with traces of household waste on the surface.

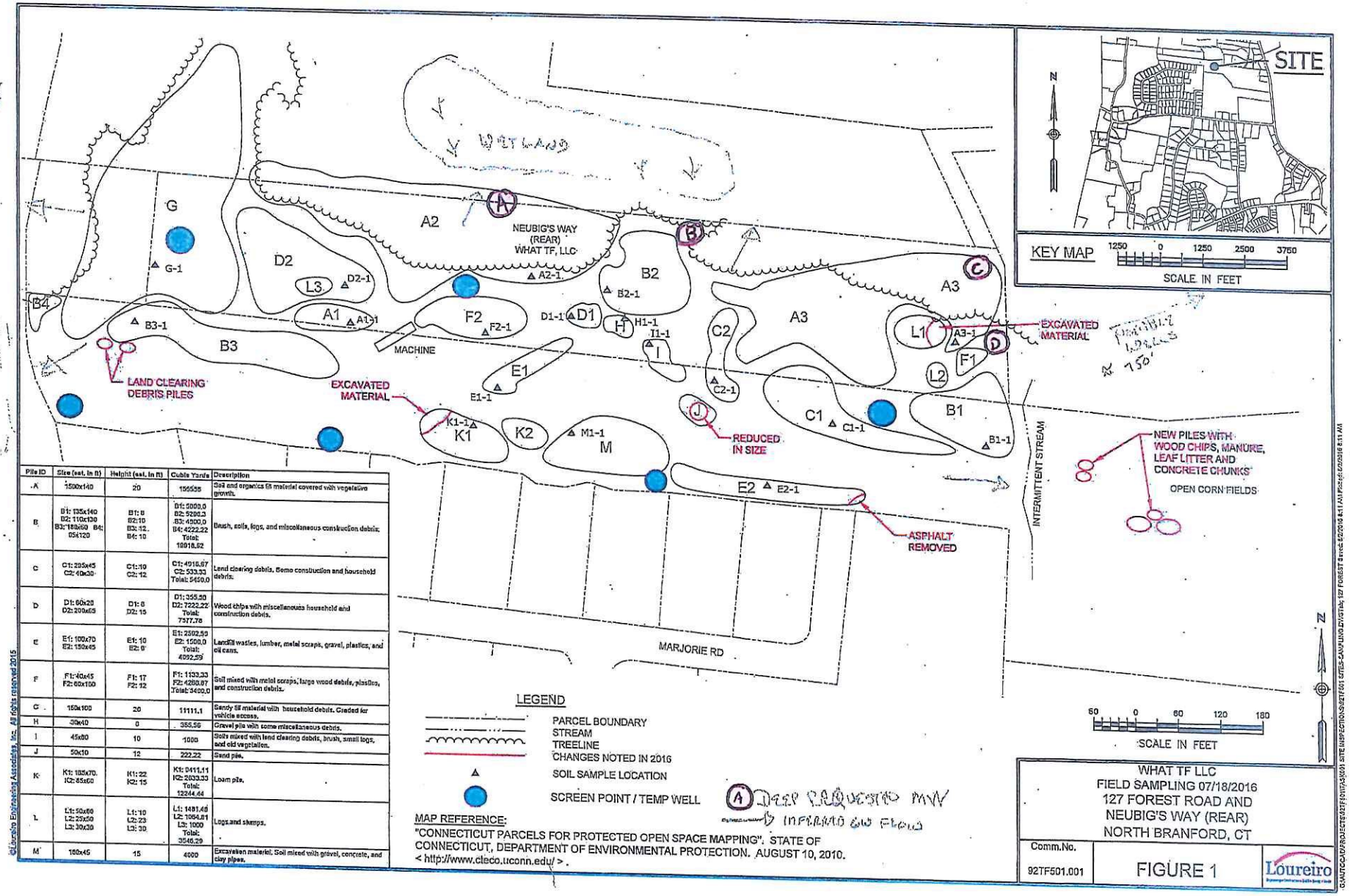
MAP REFERENCE:
"CONNECTICUT PARCELS FOR PROTECTED OPEN-SPACE MAPPING". STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION. AUGUST 10, 2010.
< http://www.cteco.uconn.edu/ >.

WHAT TF LLC
FIELD SAMPLING 09/14/2016
209 TOTOKET ROAD
NORTH BRANFORD, CONNECTICUT

Comm.No. 92TF501

FIGURE 1

Loureiro



Pile ID	Size (est. in ft)	Height (est. in ft)	Cubic Yards	Description
A	1500x140	20	155555	Soil and organics fill material covered with vegetative growth.
B	B1: 135x140 D2: 110x130 B3: 180x60 B4: 65x120	B1: 8 B2: 10 B3: 12 B4: 10	D1: 5000.0 D2: 5200.0 B3: 4000.0 B4: 4222.22 Total: 18918.52	Brush, soils, logs, and miscellaneous construction debris.
C	C1: 205x45 C2: 40x30	C1: 10 C2: 12	C1: 4016.67 C2: 533.33 Total: 5450.0	Land clearing debris. Some construction and household debris.
D	D1: 90x20 D2: 200x65	D1: 8 D2: 15	D1: 355.56 D2: 7222.22 Total: 7577.78	Wood chips with miscellaneous household and construction debris.
E	E1: 100x70 E2: 150x45	E1: 10 E2: 8	E1: 2592.59 E2: 1500.0 Total: 4092.59	Landfill wastes, lumber, metal scraps, gravel, plastics, and oil cans.
F	F1: 40x45 F2: 60x100	F1: 17 F2: 12	F1: 1133.33 F2: 4266.67 Total: 5400.0	Soil mixed with metal scraps, large wood debris, plastics, and construction debris.
G	150x100	20	11111.1	Sandy fill material with household debris. Graded for vehicle access.
H	30x40	0	355.56	Gravel pile with some miscellaneous debris.
I	45x80	10	1000	Soils mixed with land clearing debris, brush, small logs, and old vegetation.
J	50x10	12	222.22	Sand pile.
K	K1: 185x70. K2: 85x60	K1: 22 K2: 15	K1: 9411.11 K2: 2833.33 Total: 12244.44	Loam pile.
L	L1: 50x60 L2: 20x50 L3: 30x30	L1: 10 L2: 23 L3: 30	L1: 1481.48 L2: 1064.81 L3: 1000 Total: 3546.29	Logs and stumps.
M	150x45	15	4000	Excavation material; Soil mixed with gravel, concrete, and clay pipes.

LEGEND

PARCEL BOUNDARY
STREAM
TREELINE
CHANGES NOTED IN 2016
SOIL SAMPLE LOCATION
SCREEN POINT / TEMP WELL

MAP REFERENCE:
"CONNECTICUT PARCELS FOR PROTECTED OPEN SPACE MAPPING". STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION. AUGUST 10, 2010. < http://www.cteco.uconn.edu/ > .

WHAT TF LLC
FIELD SAMPLING 07/18/2016
127 FOREST ROAD AND
NEUBIG'S WAY (REAR)
NORTH BRANFORD, CT

Comm.No. 92TF501.001

FIGURE 1

Loureiro

ATTACHMENT B

TOPOGRAPHIC AND AERIAL DOCUMENTS

127 Forest Road

127 Forest Road

Northford, CT 06472

Inquiry Number: 6225501.4

October 13, 2020

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

10/13/20

Site Name:

127 Forest Road
127 Forest Road
Northford, CT 06472
EDR Inquiry # 6225501.4

Client Name:

GeoInsight
200 Court Street
Middletown, CT 06457
Contact: Ashley Benitez

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by GeoInsight were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 11120
Project: 11120

Coordinates:

Latitude:	41.342645 41° 20' 34" North
Longitude:	-72.802198 -72° 48' 8" West
UTM Zone:	Zone 18 North
UTM X Meters:	683883.80
UTM Y Meters:	4579125.31
Elevation:	92.61' above sea level

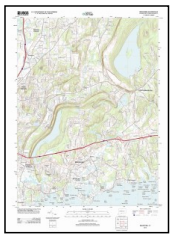
Maps Provided:

2012
1984
1972
1967
1954
1921
1892

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

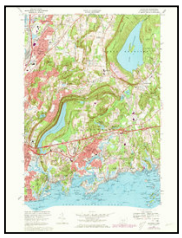


Branford
2012
7.5-minute, 24000

1984 Source Sheets

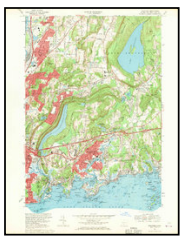
Branford
1984
7.5-minute, 24000
Aerial Photo Revised 1982

1972 Source Sheets



Branford
1972
7.5-minute, 24000
Aerial Photo Revised 1972

1967 Source Sheets



Branford
1967
7.5-minute, 24000
Aerial Photo Revised 1966

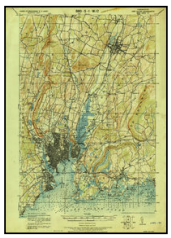
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1954 Source Sheets

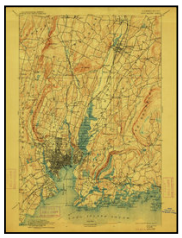
Branford
1954
7.5-minute, 24000
Aerial Photo Revised 1949

1921 Source Sheets



New Haven
1921
15-minute, 62500

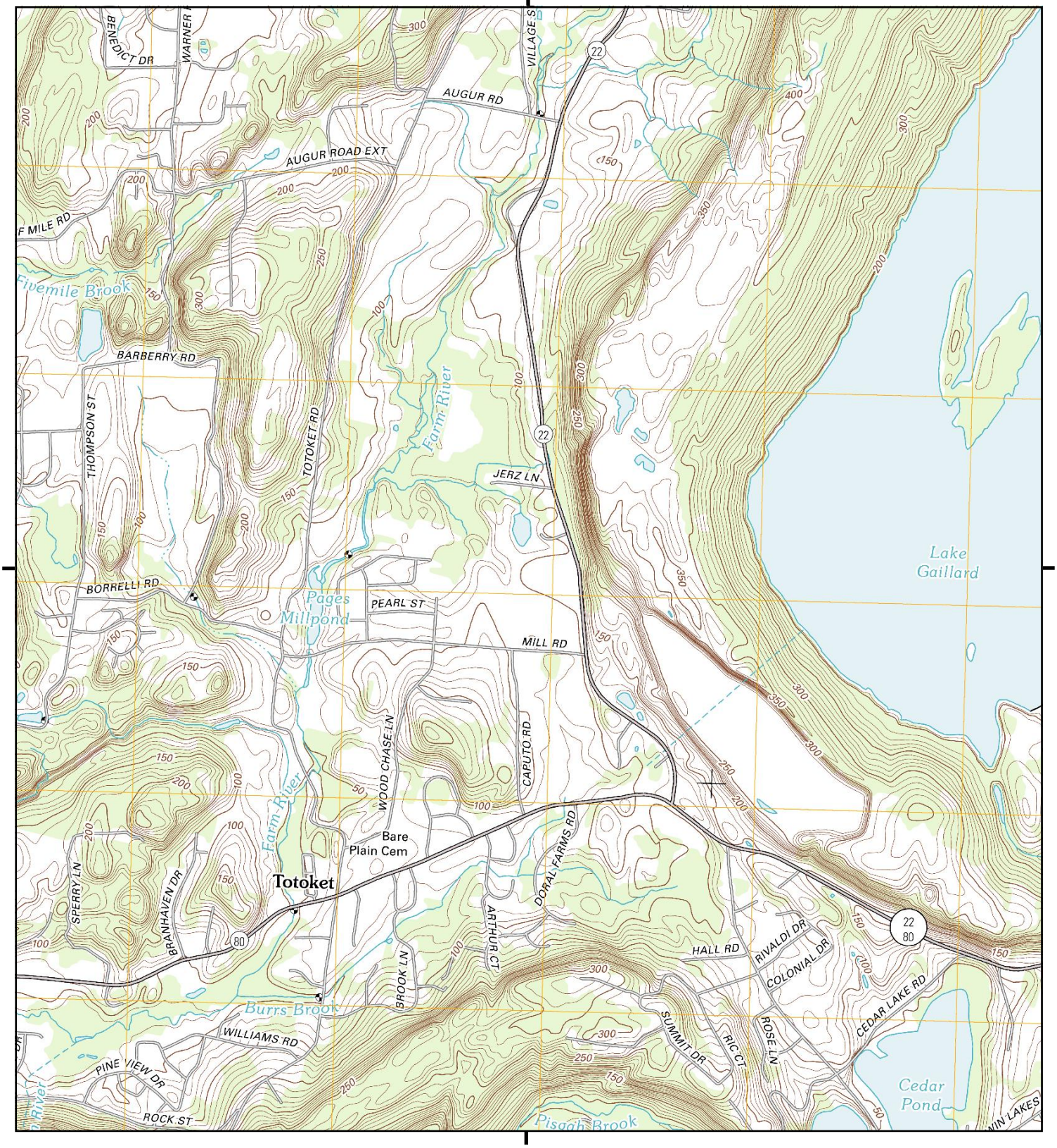
1892 Source Sheets



New Haven
1892
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

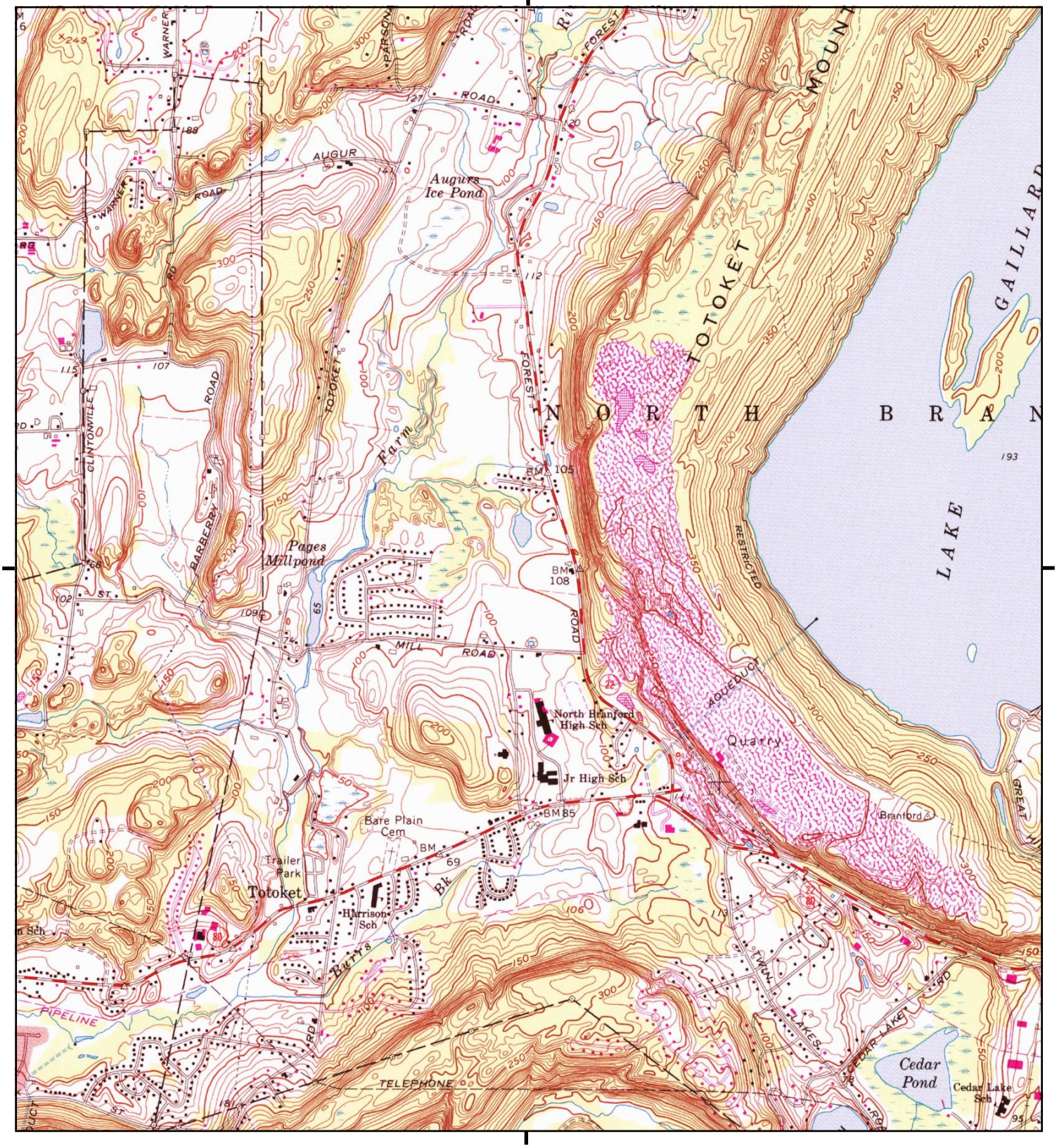
TP, Branford, 2012, 7.5-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N

Historical Topo Map

1984



This report includes information from the following map sheet(s).

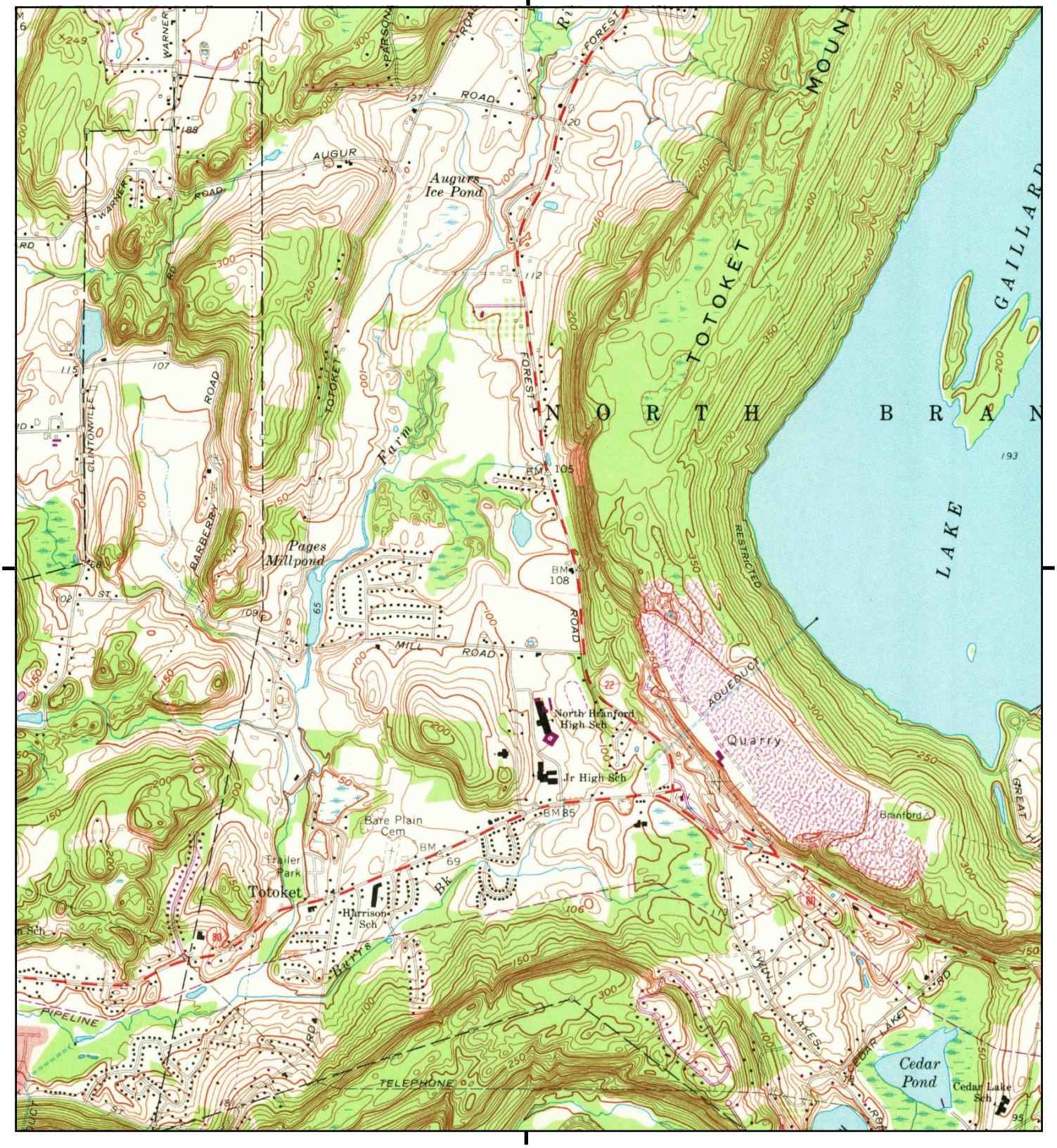
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Branford, 1984, 7.5-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

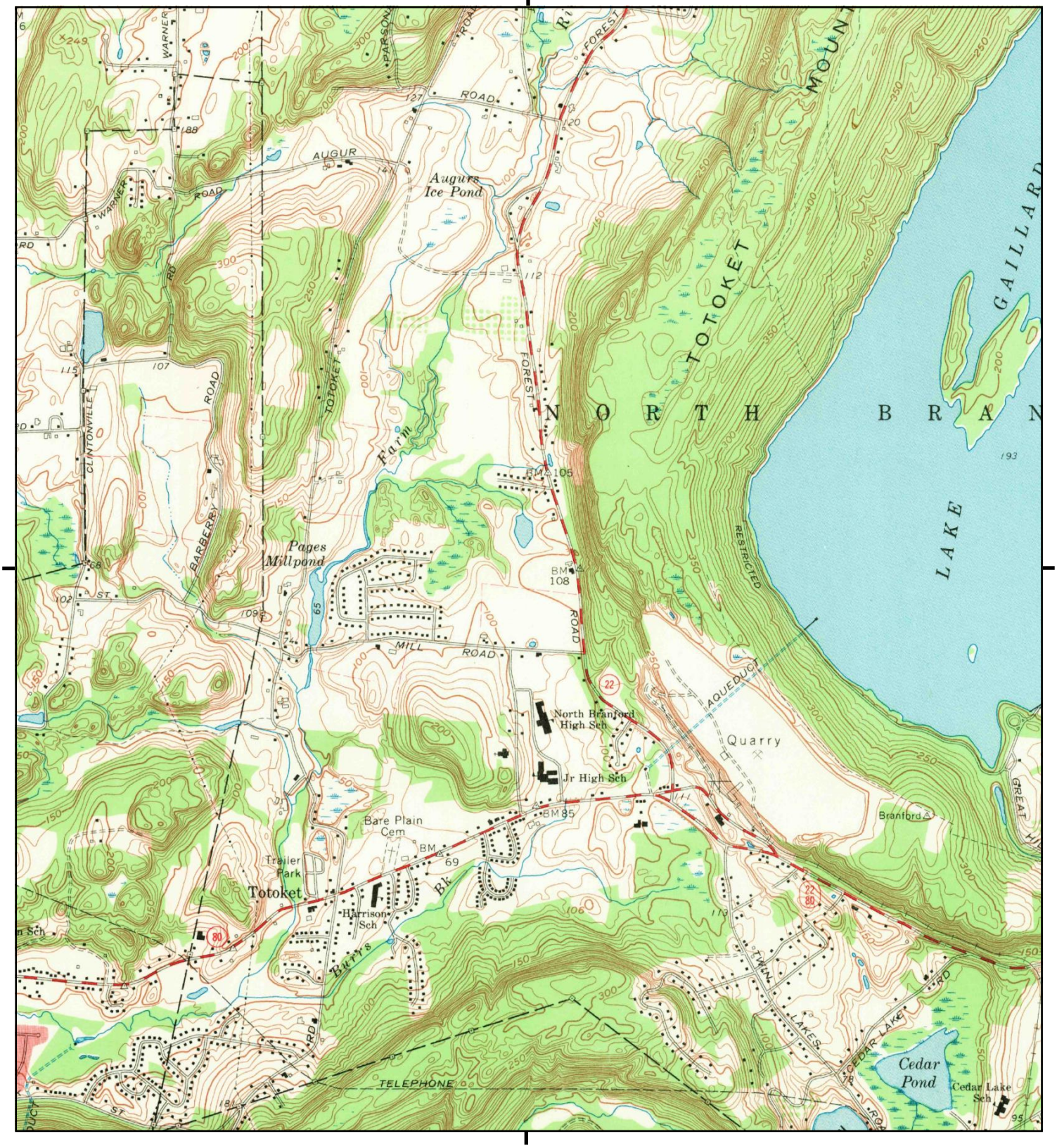
TP, Branford, 1972, 7.5-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N

Historical Topo Map

1967



This report includes information from the following map sheet(s).

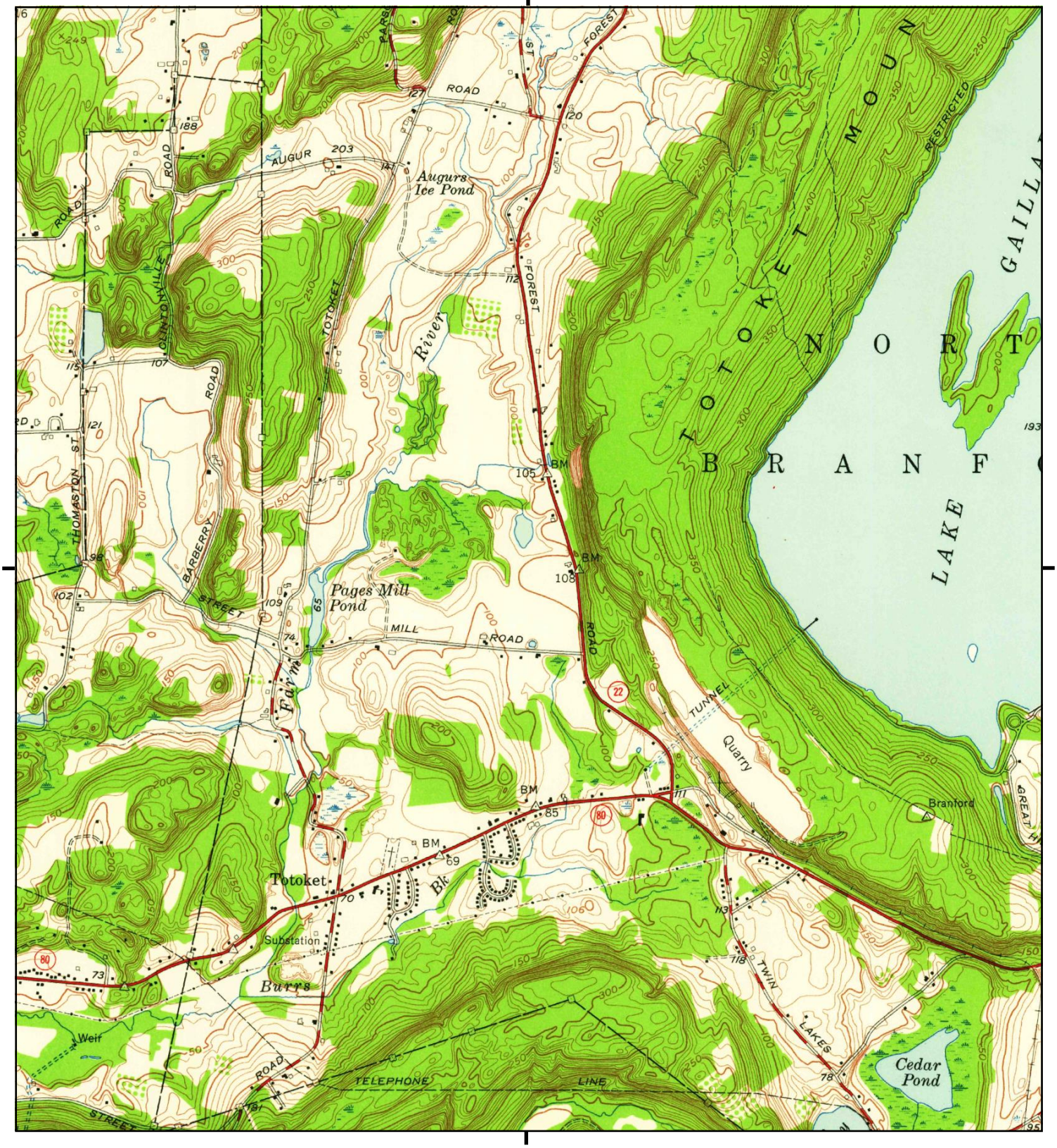
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Branford, 1967, 7.5-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N



This report includes information from the following map sheet(s).

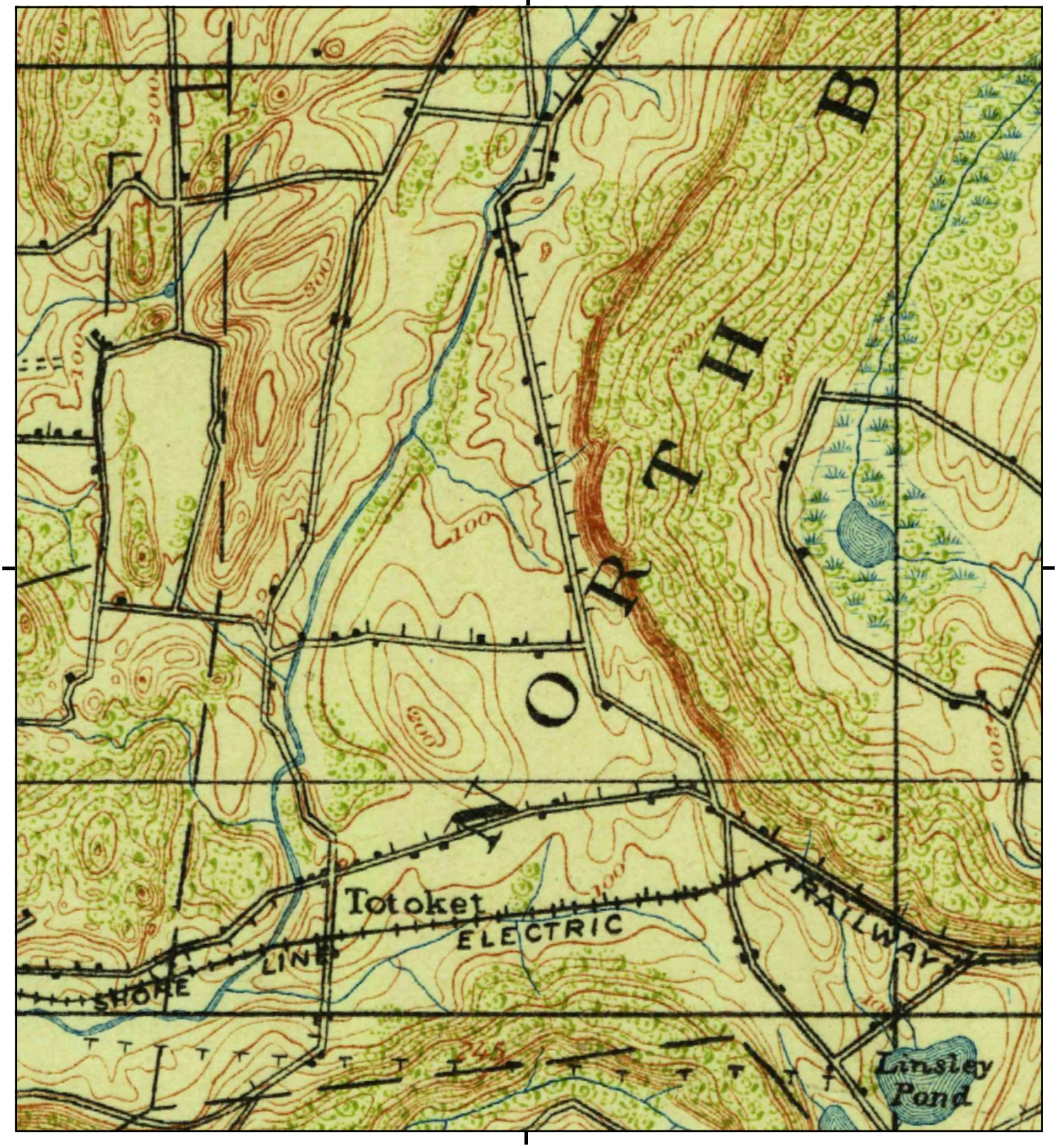
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Branford, 1954, 7.5-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N



This report includes information from the following map sheet(s).

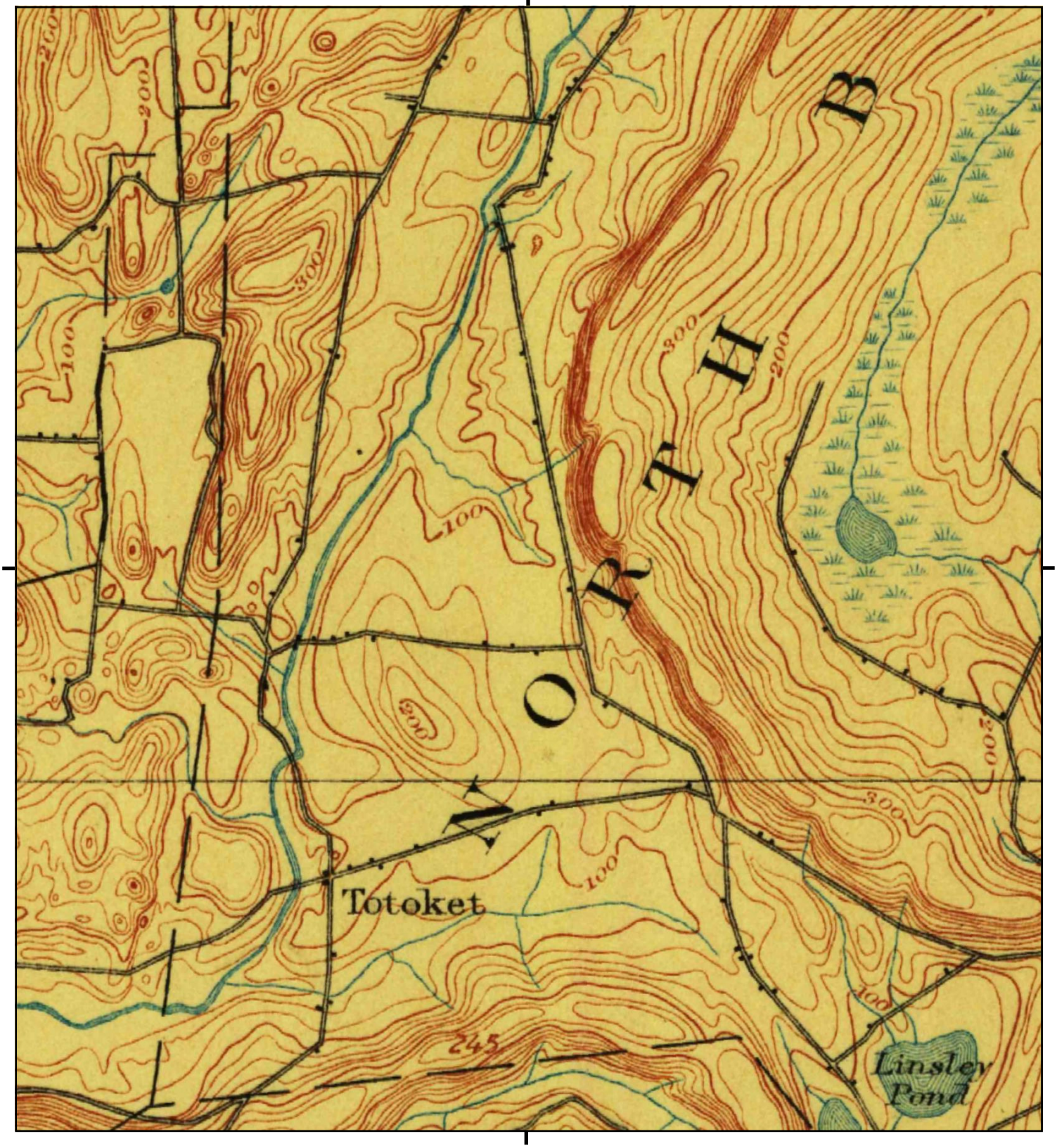
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, New Haven, 1921, 15-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, New Haven, 1892, 15-minute

SITE NAME: 127 Forest Road
ADDRESS: 127 Forest Road
Northford, CT 06472
CLIENT: GeoInsight

N

127 Forest Road

127 Forest Road

Northford, CT 06472

Inquiry Number: 6225501.8

October 13, 2020

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

10/13/20

Site Name:

127 Forest Road
127 Forest Road
Northford, CT 06472
EDR Inquiry # 6225501.8

Client Name:

GeoInsight
200 Court Street
Middletown, CT 06457
Contact: Ashley Benitez

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1995	1"=500'	Flight Date: April 20, 1995	CTMAGIC
1991	1"=500'	Acquisition Date: March 31, 1991	USGS/DOQQ
1986	1"=500'	Flight Date: March 30, 1986	USDA
1980	1"=500'	Flight Date: July 06, 1980	USDA
1972	1"=500'	Flight Date: May 12, 1972	USGS
1970	1"=500'	Flight Date: March 01, 1970	CTMAGIC
1966	1"=500'	Flight Date: February 18, 1966	USGS
1959	1"=500'	Flight Date: October 29, 1959	USGS
1951	1"=500'	Flight Date: August 02, 1951	CTMAGIC
1949	1"=500'	Flight Date: April 21, 1949	USGS
1934	1"=500'	Flight Date: April 26, 1934	FAIR

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INQUIRY #: 6225501.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 6225501.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 6225501.8
YEAR: 2008
= 500'
N
EDR


INQUIRY #: 6225501.8
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 6225501.8

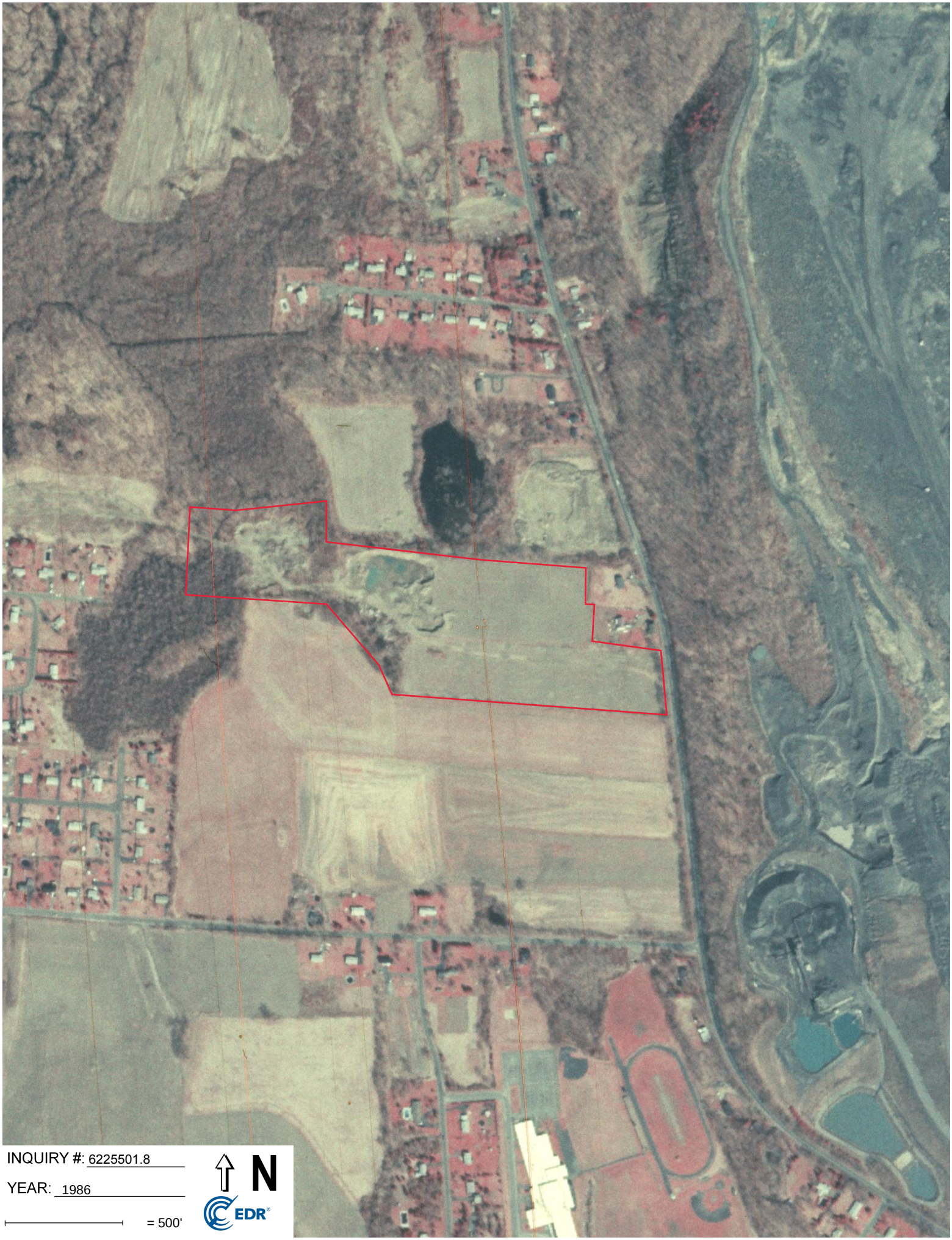
YEAR: 1995

= 500'

N

EDR


INQUIRY #: 6225501.8
YEAR: 1991
= 500'
N
EDR


INQUIRY #: 6225501.8
YEAR: 1986
= 500'
N
EDR

INQUIRY #: 6225501.8

YEAR: 1980

= 500'

N

EDR

INQUIRY #: 6225501.8

YEAR: 1972

= 500'

N

EDR

[redacted]

INQUIRY #: 6225501.8

YEAR: 1970

= 500'

N

EDR

INQUIRY #: 6225501.8

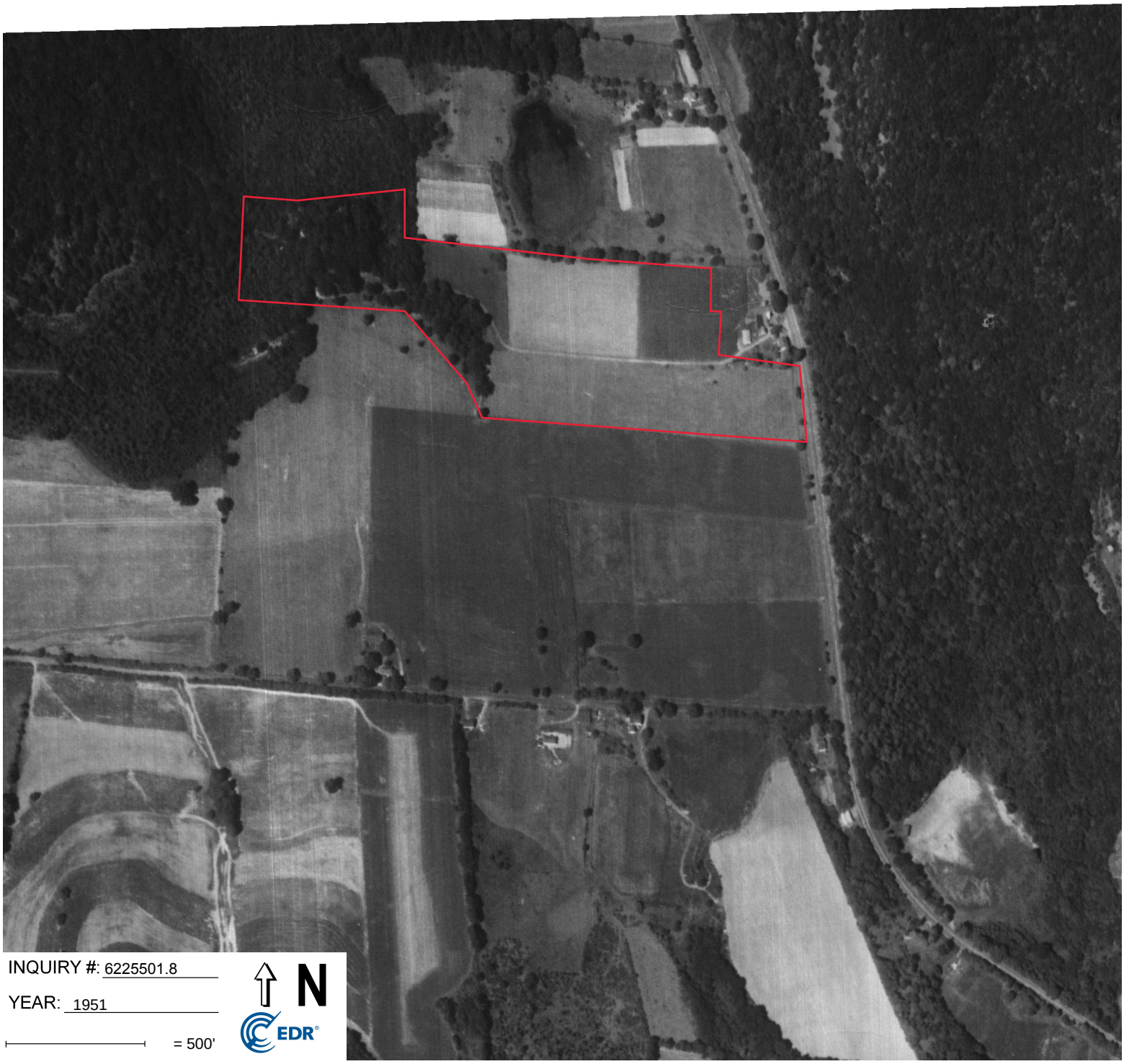
YEAR: 1966

= 500'

N

EDR


INQUIRY #: 6225501.8
YEAR: 1959
= 500'
N
EDR



INQUIRY #: 6225501.8

YEAR: 1951

= 500'

N

EDR

INQUIRY #: 6225501.8

YEAR: 1949

= 500'

N

EDR

INQUIRY #: 6225501.8

YEAR: 1934

= 500'

N

EDR

1934 Aerial Photograph

obtained from the University of Connecticut MAGIC website

GeoInsight Project 11120-000

1986 Aerial Photograph

obtained from the University of Connecticut MAGIC website

GeoInsight Project 11120-000

1990 Aerial Photograph

obtained from the University of Connecticut MAGIC website

GeoInsight Project 11120-000

1995 Aerial Photograph

obtained from the University of Connecticut MAGIC website

2004 Aerial Photograph

obtained from the University of Connecticut MAGIC website

GeoInsight Project 11120-000

2006 Aerial Photograph

obtained from the University of Connecticut MAGIC website

GeoInsight Project 11120-000

2008 Aerial Photograph

obtained from the University of Connecticut MAGIC website

ATTACHMENT C

TEST PIT LOGS

TEST PIT LOG

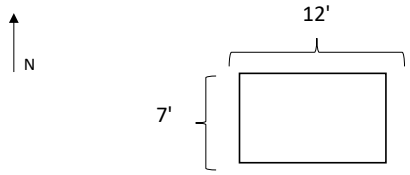
GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-1
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 78 ft[see note 1]

GROUNDWATER OBSERVATIONS	FIELD TESTING PERFORMED
Depth (ft. bgs): 5	
Stabilization (hours): After excavation	
Est. SHWT (feet bgs): Not recorded	
Description: NA	

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-1	1.6	FILL/TOPSOIL	0 - 1: Dark brown, fine to medium SAND and SILT, little Gravel, trace Asphalt, Brick, and Cobble fragments (<1 cm).	
1		1-2.5	1.6	NATIVE BEACH SAND AND GRAVEL DEPOSIT	1 - 2.5: Reddish brown, fine to medium SAND, some Gravel, little Cobble, trace Silt, damp to moist.	
2		2.5-5.5	1.8		2.5 - 5.5: Reddish brown, fine to medium SAND, trace Gravel and Silt, moist to wet.	
3						
4						
5					End of excavation - 5.5 feet. Refusal not encountered.	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'

Width: 7'

Depth: 5.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

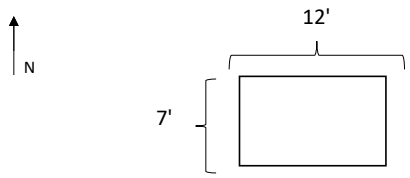
GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC		**Test Pit Identification:** TP-2
Project: Geotechnical Engineering Assessment and Additional Evaluation		**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut		**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020	
Reach: 14'	**Chkd. By:**	
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55	
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 80 ft[see note 1]	

GROUNDWATER OBSERVATIONS	FIELD TESTING PERFORMED
Depth (ft. bgs): 5.5	
Stabilization (hours): After excavation	
Est. SHWT (feet bgs): Not recorded	
Description: NA	

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-1.5	1.9	FILL/TOPSOIL	0 - 1.5: Dark brown, fine to medium SAND, some Silt, little Gravel, trace Cobble and Roots.	
1						
2		1.5-6	1.9	NATIVE BEACH SAND AND GRAVEL DEPOSIT	1.5 - 6: Reddish brown, fine to medium SAND, trace Gravel and Silt, moist to wet.	
3						
4						
5						
6					End of excavation - 6 feet. Refusal not encountered.	
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'

Width: 7'

Depth: 6'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-3
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 82 ft[see note 1]

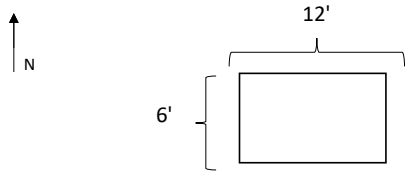
GROUNDWATER OBSERVATIONS

Depth (ft. bgs): 9.5
Stabilization (hours): After excavation
Est. SHWT (feet bgs): Not recorded
Description: NA

FIELD TESTING PERFORMED

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-2	2.1	FILL/TOPSOIL	0 - 2: Brown, fine to medium SAND, some Silt, little Gravel, trace Brick, Clay, and Concrete fragments (<0.5 cm), damp.	
2		2-4	1.9	NATIVE BEACH SAND AND GRAVEL DEPOSIT	2 - 4: Reddish brown, fine to medium SAND, some Cobble and Gravel, trace Silt, damp.	
4		4-5	1.6		4 - 5: Light brown, very fine to medium SAND, some Gravel, trace Cobble and Silt, damp.	
5		5-7	1.6		5 - 7: Reddish brown, fine to medium SAND, some Cobble and Gravel, trace Silt, damp to moist.	
7		7-10	1.6		7 - 10: Light brown, fine to medium SAND, little Gravel, trace Cobble and Silt, moist to wet.	
10					End of excavation - 10 feet. Refusal not encountered.	
15						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'
Width: 6'
Depth: 10'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-4
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 86 ft[see note 1]

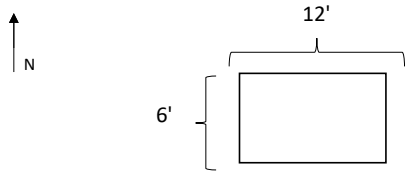
GROUNDWATER OBSERVATIONS

Depth (ft. bgs): 10
Stabilization (hours): After excavation
Est. SHWT (feet bgs): Not recorded
Description: NA

FIELD TESTING PERFORMED

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-0.5		TOPSOIL	6 inches Organic TOPSOIL.	
1		0.5-5	2	REWORKED NATIVE	0.5 - 5: Brown, fine to medium SAND, some Gravel and Silt, little Cobble, damp.	
5		5-6	1.6	NATIVE BEACH SAND AND GRAVEL DEPOSIT	5 - 6: Light brown, fine to medium SAND, little Gravel, trace Silt, damp.	
6		6-10.5	1.6		6 - 10.5: Reddish brown, fine to medium SAND, some Cobble and Gravel, trace Silt, moist to wet.	
10					End of excavation - 10.5 feet. Refusal not encountered.	
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'
Width: 6'
Depth: 10.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-5
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 82 ft[see note 1]

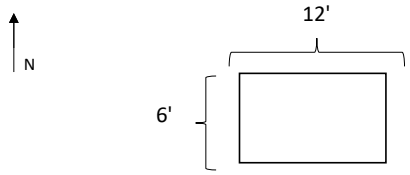
GROUNDWATER OBSERVATIONS

Depth (ft. bgs): 7.5
Stabilization (hours): After excavation
Est. SHWT (feet bgs): Not recorded
Description: NA

FIELD TESTING PERFORMED

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-1.5	0.6	FILL/TOPSOIL	0 - 1.5: Brown, fine to medium SAND, some Gravel and Silt, little Cobble, trace Brick and Concrete fragments (<2 cm), damp.	
1						
2		1.5-4	0.3	NATIVE BEACH SAND AND GRAVEL DEPOSIT	1.5 - 4: Orange to brown, fine to coarse SAND, some Gravel, trace Cobble and Silt, damp.	
3						
4		4-8	0.3		4 - 8: Orange to brown, fine to medium SAND, trace Gravel and Silt, moist to wet.	
5						
6						
7						
8					End of excavation - 8 feet. Refusal not encountered.	
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'
Width: 6'
Depth: 8'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

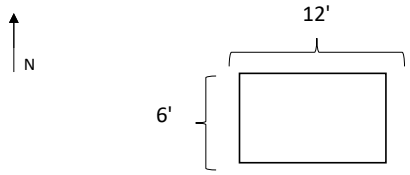
GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC		**Test Pit Identification:** TP-6
Project: Geotechnical Engineering Assessment and Additional Evaluation		**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut		**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020	
Reach: 14'	**Chkd. By:**	
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55	
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 83 ft[see note 1]	

GROUNDWATER OBSERVATIONS	FIELD TESTING PERFORMED
Depth (ft. bgs): 8	
Stabilization (hours): After excavation	
Est. SHWT (feet bgs): Not recorded	
Description: NA	

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-0.5		**TOPSOIL**	6 inches Organic TOPSOIL.	
1		0.5-2	1.0	**FILL**	0.5 - 2: Brown, fine to medium SAND, some Silt, little Gravel, trace Brick fragments, Cobble, Roots, and Woody debris, damp.	
2		2-8.5	0.5	**NATIVE BEACH SAND AND GRAVEL DEPOSIT**	2 - 8.5: Reddish brown, fine to coarse SAND, little Gravel, trace Cobble and Silt, moist to wet.	
8					End of excavation - 8.5 feet. Refusal not encountered.	

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'

Width: 6'

Depth: 8.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-7
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 86 ft[see note 1]

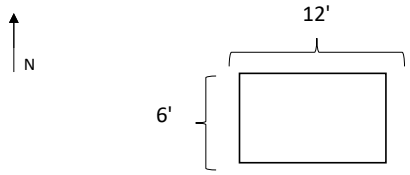
GROUNDWATER OBSERVATIONS

Depth (ft. bgs): 12
Stabilization (hours): After excavation
Est. SHWT (feet bgs): Not recorded
Description: NA

FIELD TESTING PERFORMED

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-2	2	REWORKED NATIVE/TOPSOIL	0 - 2: Brown, fine to medium SAND, some Silt, little Gravel, trace Cobble and Roots, damp.	
2		2-5	1.6	NATIVE BEACH SAND AND GRAVEL DEPOSIT	2 - 5: Reddish brown, fine to medium SAND, some Gravel, trace Cobble and Silt, damp.	
5		5-6	1.6		5 - 6: Light brown, very fine to fine SAND, trace Gravel and Silt, damp.	
6		6-10	1.6		6 - 10: Reddish brown, fine to coarse SAND, little Gravel, trace Silt, damp to moist.	
10		10-12.5	1.6		10 - 12.5: Reddish brown, very fine to medium SAND, little Silt, trace Gravel, wet.	
13					End of excavation - 12.5 feet. Refusal not encountered.	
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'
Width: 6'
Depth: 12.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

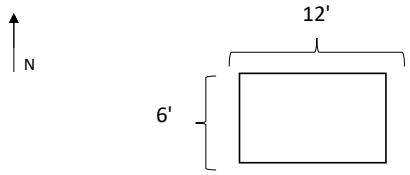
GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-8
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 85 ft[see note 1]

GROUNDWATER OBSERVATIONS	FIELD TESTING PERFORMED
Depth (ft. bgs): 8	
Stabilization (hours): After excavation	
Est. SHWT (feet bgs): Not recorded	
Description: NA	

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-2	0.3	FILL/TOPSOIL	0 - 2: Brown, fine to medium SAND, some Silt, little Cobble and Gravel, damp.	
1						
2		2-8.5	0.3	NATIVE BEACH SAND AND GRAVEL DEPOSIT	2 - 8.5: Orange to brown, very fine to medium SAND, trace Gravel and Silt, damp to wet.	
3						
4						
5						
6						
7						
8						
9					End of excavation - 8.5 feet. Refusal not encountered.	
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'

Width: 6'

Depth: 8.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

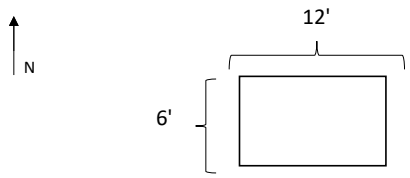
GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-9
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 85 ft[see note 1]

GROUNDWATER OBSERVATIONS	FIELD TESTING PERFORMED
Depth (ft. bgs): 7	
Stabilization (hours): After excavation	
Est. SHWT (feet bgs): Not recorded	
Description: NA	

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-1	0.5	FILL/TOPSOIL	0 - 1: Brown, fine to medium SAND, some Silt, little Cobble and Gravel, trace Concrete fragment, damp.	
1		1-7.5	0.3	NATIVE BEACH SAND AND GRAVEL DEPOSIT	1 - 7.5: Light brown, very fine to medium SAND, trace Gravel and Silt, damp to wet.	
2						
3						
4						
5						
6						
7						
8						
9					End of excavation - 7.5 feet. Refusal not encountered.	
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'

Width: 6'

Depth: 7.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).

TEST PIT LOG

GeoInsight
Environmental Strategy & Engineering

Client: Citrine Power LLC	**Test Pit Identification:** TP-10
Project: Geotechnical Engineering Assessment and Additional Evaluation	**Sheet:** 1 of 1
Location: 127 Forest Road, North Branford, Connecticut	**Project No.** 11120
Equipment: CAT 308E2 CR	**Date:** 10/27/2020
Reach: 14'	**Chkd. By:**
GeoInsight Rep.: AHF	**Weather:** Cloudy, 55
Contractor: Butler Construction	**Ground Surface Elev.:** ~ 95 ft[see note 1]

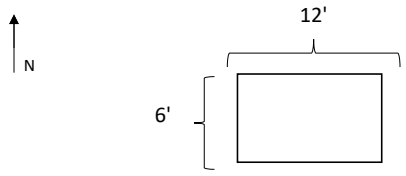
GROUNDWATER OBSERVATIONS

Depth (ft. bgs): 12
Stabilization (hours): After excavation
Est. SHWT (feet bgs): Not recorded
Description: NA

FIELD TESTING PERFORMED

DEPTH (ft)	SAMPLE INFORMATION #	Depth (ft)	Screening (ppm)	STRATUM DESCRIPTION	SAMPLE DESCRIPTION	NOTE
0		0-2	0.4	**REWORKED NATIVE/TOPSOIL**	0 - 2: Brown, fine to medium SAND, some Silt, little Gravel, trace Cobble, damp.	
1						
2		2-7	0.4		2 - 7: Brown, fine to medium SAND, little Gravel and Silt, trace Cobble, damp.	
3						
4						
5						
6						
7		7-12.5	0.3	**NATIVE BEACH SAND AND GRAVEL DEPOSIT**	7 - 12.5: Light brown, very fine to fine SAND, little Silt, trace Clay and Gravel, damp to wet.	
8						
9						
10						
11						
12						
13					End of excavation - 12.5 feet. Refusal not encountered.	
14						
15						
16						
17						
18						
19						
20						

TEST PIT ORIENTATION (sketch)



TEST PIT DETAILS (feet)

Length: 12'
Width: 6'
Depth: 12.5'

NOTES

1. Ground surface elevation based upon data obtained from the CTECO Connecticut Elevation Viewer (https://cteco.uconn.edu/viewers/ctelevation/).