



PHASE I ENVIRONMENTAL SITE ASSESSMENT

POWDER HILL ROAD SOLAR
22 POWDER HILL ROAD, ENFIELD
HARTFORD COUNTY, CONNECTICUT
SEPTEMBER 6, 2019



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Executive Summary

This report documents the findings of the Phase I Environmental Site Assessment ("ESA") prepared by All-Points Technology Corporation, P.C. ("APT") for Lodestar Energy ("Lodestar") at a ±24.42-acre property located along Powder Hill Road in Enfield, Hartford County, Connecticut (the "Site"). The Town of Enfield Tax Assessor identifies the Site on Map 84 as Lot 15. The Site is accessed from an existing paved driveway that extends northeastward from Powder Hill Road. The Site is located in rural portion of Enfield and abutting properties consist of wooded, undeveloped land. Residential development are located in the vicinity farther to the north and south of the Site.

APT understands that Lodestar is proposing to develop the central portion of the Site with a solar-based electric generating facility. Progress Plans (dated 8/22/19 by J.R. Russo & Associates, LLC) provided to APT by Lodestar depict that the proposed solar facility would include a development area of approximately 10 (ten) acres.

This report presents the details and findings of the Phase I ESA completed by APT in association with the Site. The purpose of the ESA was to assess existing Site conditions and render a determination as to the identified or potential presence of Recognized Environmental Conditions¹, Controlled Recognized Environmental Conditions², and Historical Recognized Environmental Conditions³ in connection to the Site and Site, generally in accordance with the scope and limitations of the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, American Society for Testing and Materials ("ASTM") Practice E1527-13. Note, as defined in the E1527-13 standard, de minimis⁴ conditions are not considered recognized environmental conditions. This ESA is subject to the terms of the agreement between APT and Lodestar Energy (the "Client"), as well as the Limitations included in Appendix A.

¹ A recognized environmental condition is defined as: ***"The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."***

² A controlled recognized environmental condition is defined as: ***"A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."***

³ A historical recognized environmental condition is defined as: ***"A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."***

⁴ A de minimis condition is defined as: ***"A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions."***

Data Failures

No data failures were identified during the conduct of this assessment.

Data Gaps

The following data gaps are identified:

- Title records were not provided to APT by the occupant/user for review.
- Information regarding environmental liens or limited property use associated with the Site was not provided by the occupant/user. No use limitations were identified in the land records reviewed at the Town of Enfield municipal offices or in files reviewed at the Connecticut **Department of Energy and Environmental Protection ("CTDEEP") Public File Room.**

APT do not believe that the identified data gaps are significant relative to the overall findings of this report.

Recognized Environmental Conditions

No evidence of **recognized environmental conditions ("RECs")** was identified at the Site during the course of this assessment.

Historical Recognized Environmental Conditions

No evidence of historical RECs was identified at the Site during the course of this assessment.

Controlled Recognized Environmental Conditions

No evidence of controlled RECs was identified at the Site during the course of this assessment.

Migration

No RECs were identified relative to the Site. Therefore, there are no contaminant migration or vapor intrusion concerns relative to the Site.

Environmental Concerns

Based upon observations made during the reconnaissance, a large amount of construction waste materials (asphalt millings, concrete catch basins, concrete rubble, etc.) are stored on the central portion of the Site including in the proposed development area. The materials appeared to be relatively inert, however, the composition and source of these construction waste materials is unknown. APT did not observe any overt evidence of petroleum containing wastes, building demolition debris, or industrial dumping at the Site. However, APT could only observe the exterior surfaces of the material piles on the Site.

Conclusion and Recommendations

No RECs were identified relative to the Site and no additional investigations are warranted at this time.

A large amount of construction waste materials was observed on the Site. Lodestar has indicated that the property owner is responsible for removing all materials from the development area prior to construction.

Based on APT's understanding of the project, no excess soils will be generated during construction that will be required to leave the Site. If for any reason excess soils or construction materials are generated that must leave the Site, those materials must be characterized and managed to ensure that they are appropriately recycled or disposed.

This conclusion is based on the review of available historical and regulatory records, aerial photographs, topographic maps, environmental records, and other resources, observations made during the Site and vicinity reconnaissance, and interviews with available personnel familiar with the Site. **APT's conclusion** and recommendations are not subject to contamination that is hidden, unpublished or otherwise unknown using standard Phase I methodology.

Please note that this Executive Summary is provided as a brief summary of results and does not represent a detailed account of all the information compiled in preparing the Phase I ESA report. The Phase I ESA report should be reviewed in its entirety to fully understand environmental conditions at the Site.

Introduction

This report documents the findings of the Phase I Environmental Site Assessment ("ESA") prepared by All-Points Technology Corporation, P.C. ("APT") for Lodestar Energy ("Lodestar") at a ±24.42-acre property located along Powder Hill Road in Enfield, Hartford County, Connecticut (the "Site"). The Town of Enfield Tax Assessor identifies the Site on Map 84 as Lot 15. The Site is accessed from an existing paved driveway that extends northeastward from Powder Hill Road. The Site is located in rural portion of Enfield and abutting properties consist of wooded, undeveloped land. Residential development are located in the vicinity farther to the north and south of the Site.

APT understands that Lodestar is proposing to develop the central portion of the Site with a solar-based electric generating facility. Progress Plans ("**Progress Plans**"; dated 8/22/19, prepared by J.R. Russo & Associates, LLC and included in the Figures Section of this report) provided to APT by Lodestar depict that the proposed solar facility would include a development area of approximately 10 (ten) acres.

This report presents the details and findings of the Phase I ESA completed by APT in association with the Site. The purpose of the ESA was to identify through appropriate inquiry⁵ the environmental condition of the Site with respect to recognized environmental conditions and to permit a user to satisfy one of the requirements to qualify for innocent landowner defense as it pertains to the list of contaminants⁶ listed within the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and petroleum products. APT conducted this ESA generally in conformance with the methodology provided in the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, American Society for Testing and Materials ("ASTM") E1527-13.

The methodology employed for this ESA report consisted of the following:

- Review of historical aerial photographs, topographic maps, and other resource maps
- Review of available historical and regulatory records
- Review of select federal, tribal, state and local governmental records
- Review of environmental records and permits
- Visual inspections of the Site, Site, adjoining properties and the vicinity
- Interviews with property owner(s) or a designated representative
- Report of findings and conclusions

The term recognized environmental conditions is defined as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the

⁵ For purposes of this ESA, the term appropriate inquiry is that inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial and customary practice."

⁶ Petroleum products are customarily included within the list of contaminants of concern in evaluating environmental conditions at commercial properties. The inclusion of petroleum products is not based upon the applicability of CERCLA to petroleum products.

property.” The term is not intended to include *de minimis* conditions that generally do not present a material risk to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies.

Recognized environmental conditions may include, but are not necessarily limited to:

- Hazardous substances and petroleum products under conditions that indicate an existing release, a past release, or a material threat of release;
- **Underground storage tanks (“USTs”);**
- **Aboveground storage tanks (“ASTs”);**
- Drums or Chemical Containers;
- Unidentified materials or containers;
- Unusual or suspect odors or staining;
- Presence of stressed or discolored vegetation;
- Floor drains or sumps;
- Pits, ponds, lagoons, septic tanks, drain fields, or waste pits;
- **Polychlorinated biphenyls (“PCBs”) or PCB-containing equipment;**
- Solid waste disposal;
- Sunken or depressed areas, indicating possible disposal areas; and,
- Water wells.

APT performed this ESA according to the scope and format recommended in the ASTM Practice E1527-13. The findings and conclusions presented herein are based on the results of a Site reconnaissance, review of specific regulatory records and available historical reports, and interviews with the property owner(s) or a designated representative. The absence of significant indicators, which suggest that hazardous substances, petroleum products or PCBs have environmentally impacted the Site does not preclude their presence. The findings of this report are also limited by the potential for the presence of hazardous substances, petroleum products or PCBs or other conditions that are buried, covered by vegetation or otherwise obstructed from view.

Site Description

Location

The 24.42-acre Site is located along the northeast side of Powder Hill Road in Enfield, Hartford County, Connecticut. The Town of Enfield Tax Assessor identifies the Site on Map 84 as Lot 15. A Site Location Map (Figure 1) and a Site Schematic (Figure 2) are included in the Figures Section of this report.

Site and Vicinity Characteristics

A paved driveway extends northeastward from Powder Hill Road and rises up a grade to provide access to the Site, which is located at a higher ground elevation than Powder Hill Road. The paved driveway provides access to the central portion of the Site. The central portion of the Site is cleared and shows evidence of earthwork related to a sand and gravel mining and material storage operation at the Site. The perimeter of the Site, outside of the cleared planned development area, consists of wooded, undisturbed land.

Based upon the Progress Plans, the proposed solar array would occupy the central portion of the Site and include a proposed development area of approximately 10 (ten) acres.

The Site is located in rural area in the southeastern portion of Enfield. The area immediately surrounding the Site consists of wooded, undeveloped land. Residentially developed properties are located farther to the north and southeast. Cleared agricultural properties are located further to the south and southwest from the Site.

Physical Setting

Topographical Assessment

The **United States Geological Survey** ("USGS") 7.5 minute Broad Brook, Connecticut topographic quadrangle map was used to characterize the general topography of the Site. The central portion of the Site is generally level and located at approximately 181 feet above mean sea level. Topography of the western and southwestern portions of the Site slope downward to Powder Hill Road. Extreme northern, eastern, and southern portions of the Site rise up to the level of the surrounding land.

Typically, regional groundwater flow gradient travels in correlation to surface topography; therefore, based on review of the topographic map, groundwater beneath the Site is anticipated to flow radial outward with shallow groundwater flow to the north and west moving toward the Scantic River. Note that groundwater flow is often locally influenced by underground structures, seasonal influences, soil and bedrock geology, and other factors beyond the scope of this assessment.

Groundwater Classification

Based upon reviewed Connecticut Department of Energy and Environmental Protection ("CTDEEP") mapping, groundwater underlying the Site is **classified by the CTDEEP as "GA, GAA may not meet current standards". Groundwater located in "GA" or "GAA" areas is presumed to be suitable for human consumption without prior treatment.** However, based upon the CTDEEP mapping, groundwater beneath the Site may not meet current standards. Based upon a review of available CTDEEP mapping, the Site is located within two (2) mapped Level A (Final Adopted)⁷ Aquifer Protection Areas ("APAs"). The western portion **of the Site is located in the "Avery APA" and the eastern portion of the Site is located in the "Powder Hollow APA".**

Surface Water Classification

The nearest mapped surface waterbody is the Scantic River, which flows east to west north of the Site. The nearest portion of the Scantic River is **located downgradient and approximately 580' northeast of the Site.** The Scantic River is classified by the CTDEEP as a Class B surface waterbody. Designated uses for Class B surface water bodies include habitat for fish and other aquatic life and wildlife; recreation; navigation; and water supply for industry and agriculture.

Site Geology

Surficial materials on the Site and surrounding area are identified as deposits of sand. Soils located on and in the vicinity of the Site are identified as Hinckley loamy sand, Agawam fine sandy loam, and Udorthents-Pits complex. Hinckley loamy sand is described as an excessively drained, sandy and gravelly glaciofluvial deposited soil derived from gneiss and/or granite and/or schist parent material. Agawam fine sandy loam is described as a well-drained, coarse-loamy eolian deposited soil over sandy and gravelly glaciofluvial deposits which is derived from gneiss, granite, schist, and/or phyllite parent material. Bedrock geology beneath the Site is identified as Portland Arkose. Portland Arkose is described as a reddish-brown to maroon micaceous arkose and siltstone and red to black fissile silty shale. The arkose formation grades eastward into coarse conglomerate (fanglomerate).

Wetlands

A wetland delineation is outside the scope of this assessment. Based upon reviewed National Wetlands Inventory ("NWI") mapping, **no mapped wetlands are located on the Host Property. A copy of the reviewed NWI Map is included in Appendix B of this report.**

Floodplains

APT reviewed the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Maps ("FIRM") for the Site. A FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and risk premium zones applicable to the community. Based on this review, the Host Property is located in an area designated as Zone X. Zone X is defined as a

⁷ CTDEEP "Level A" APA mapping delineates the final Aquifer Protection Area, which becomes the regulatory boundary for land use controls designed to protect the well from contamination.

minimal risk flood area. The Host Property is depicted on FIRM PANEL #09003C 0231 F, dated September 26, 2008. A copy of the FIRM Map is included in Appendix B of this report.

Ownership History

Title records were not provided to APT. A title review is not within the scope of this assessment. According to the Town of Enfield **Tax Assessor's office**, the Site is owned by "**Powder Hill Sand and Gravel, LLC**". The current deed for the Site is recorded in the Town of Enfield land records in Book 1123, Page 225 and is dated 6/4/1998. A copy of the current deed is included in Appendix B.

Environmental Liens

No environmental liens were identified during local and state file reviews. A certified title search, where environmental liens would be definitively identified, is not within the scope of services for this project. A title company is capable of completing a full title and environmental lien search.

Past Uses of the Site

APT reviewed of select historical sources including municipal records, historical topographic maps, and aerial photographs. Copies of these sources are provided in Appendix B. A 1934 aerial photograph shows a small cleared area on the southwestern portion of the Site adjacent to Powder Hill Road. The cleared area appears to be a portion of a dirt road that extends eastward from Powder Hill Road, across the southern portion of the Site, and continuing eastward onto adjacent properties east of the Site. Remaining portions of the Site are wooded and undeveloped. A 1952 aerial photograph shows an additional small cleared area on the southern portion of the Site, immediately north of the aforementioned dirt road that traverses the Site. Symbology on a 1984 topographic map identifies a sand and gravel pit on the central portion of the Site. No roads or other evidence of development are mapped on the Site. A 1985/1986 aerial photograph shows a driveway (matching the location and configuration of the current driveway) extending northeastward onto the Site from Powder Hill Road. The majority of the Site is shown as cleared land. Evidence of earthwork and apparent sand and gravel mining are shown on the Site. The Site is shown similarly up through a 2006 aerial photograph. A 2010 aerial photograph shows the previously disturbed areas on the central portion of the Site revegetated with grasses. A 2018 aerial photograph shows piles of apparent asphalt millings and concrete rubble (corresponding with the observations made during the reconnaissance) on the central portion of the Site.

Past Uses of Surrounding Area

The 1934 aerial photograph shows Powder Hill Road along the western side of the Site. The properties that abut the Site are all shown as wooded and primarily undeveloped. A dirt road providing access to the abutting property to the east traverses the southern portion of the Site. Cleared agricultural fields are shown farther to the south. The surrounding area is shown similarly up through a 1970 aerial photograph. A 1985/1986 aerial photograph shows residentially-developed properties to the south, east, and southeast of the Site. A 2014 aerial photograph shows a new residential subdivision northeast

of the Site. The surrounding area is shown similarly on a 2018 aerial photograph. Properties abutting the Site are shown as wooded and undeveloped.

Records Review

Consistent with ASTM Practice E1527-13, APT reviewed federal and state environmental databases using an Environmental FirstSearch Report prepared by Environmental Data Resources, Inc. APT also conducted select file reviews to help further identify – or obtain additional information on the nature and extent of incidents on - properties in the vicinity of the Site that have had a release or pose a threat of release of hazardous material and/or petroleum products, and which may impact the environmental quality of the Site.

Previous Environmental Reports

No previous environmental reports were provided by the Client to APT for review during this investigation and no previous environmental reports were identified by APT during the completion of this assessment.

Environmental Database Search

APT reviewed the following environmental databases: United States Environmental Protection Agency (“USEPA”) **National Priorities List (“NPL” or Superfund sites); EPA NPL Delisted sites; EPA Comprehensive Environmental Response Compensation And Liability Information System (“CERCLIS”); CERCLIS No Further Remedial Action Planned (“NFRAP”); Resource Conservation and Recovery Act (“RCRA”) Corrective Action sites (“COR”); RCRA Treatment, Storage, and Disposal (“TSD”) facilities list; RCRA Generators of hazardous waste; Superfund sites where engineering or institutional controls have been implemented (“Federal IC/EC”); Emergency Response Notification System (“ERNS”); state hazardous waste sites (“State/Tribal Sites”); Active Solid Waste Landfill (“State/Tribal SWL”) facilities; State Leaking Underground Storage Tanks (“LUST”); CTDEEP registered Underground Storage Tanks (“State/Tribal Tanks”); sites where environmental land use restrictions and institutional controls have been implemented (“State/Tribal IC/EC”); sites within the States Voluntary Cleanup Program (“State/Tribal VCP”); State Brownfields database (“State/Tribal Brownfields”); EPA Brownfield Management System (“US Brownfield”); other hazardous waste sites; local land records, state list of spills sites (“State Spills”); and others.**

The FirstSearch Report is attached in Appendix C⁸. Database search radii were chosen generally in accordance with the ASTM E1527-13 Standard Practice for Environmental Site Assessments. Results of the database search are summarized in the accompanying table.

⁸ See FirstSearch report for full descriptions of the databases reviewed in this assessment.

SUMMARY OF ENVIRONMENTAL DATABASES REVIEW RESULTS

DATABASE	ASTM SEARCH RADIUS	SITE LISTINGS	NON SITE LISTINGS	NON GEOCODED LISTINGS
NPL Sites	1 mile			
NPL Delisted Sites	0.5 mile			
CERCLIS sites	0.5 mile			
CERCLIS NFRAP sites	0.5 mile			
RCRA COR ACT	1 mile			
RCRA TSD	0.5 mile			
RCRA Generators	0.25 mile			
Federal IC/EC	0.5 mile			
ERNS	Site			
State/Tribal Sites	1 mile		2	4
State/Tribal SWL	0.5 mile			1
State/Tribal LUST	0.5 mile		1	
State/Tribal Tanks	0.25 mile			
State/Tribal IC/EC	0.5 mile			
State/Tribal VCP	0.5 mile			
State/Tribal Brownfields	0.5 mile			
US Brownfields	0.5 mile			
Other Hazardous Sites	Site			
Local Land Records	0.25 mile			
Spills	Site			
Other	0.25 mile			

Cells on the table with no number indicate that no listings were identified in the queried database. For clarity, the zero (0) has been omitted on the table.

- Site Listings – The Site is not identified on any of the databases queried in the environmental database report.
- Non-Site Listings – Three (3) non-Site listings (representing two (2) properties) are identified within the selected search radii on the databases queried in the environmental database report. The nearest property identified is located at a lower ground elevation and 0.48-mile from the Site. The second property is located at a similar ground elevation and 0.64-mile from the Site. Based upon the information provided in the listings and their relative distances from the Site, the listings do not pose a concern to impact the environmental conditions of the Site.

- Non-Geocoded Listings – APT reviewed the five (5) non-geocoded (“orphan”) listings identified in the environmental database report. Based upon the information provided, none of the listing appear to be located in proximity to the Site. Therefore, they do not pose an environmental concern.

State Record Sources

APT conducted a review of publically-available files for the Site at the CTDEEP Public File Room on September 4, 2019. No publically-available files were identified for the Site in the Public File Room. In addition, APT also reviewed the following database for information on the Site:

CTDEEP List of Contaminated or Potentially Contaminated Sites

APT reviewed the *List of Contaminated or Potentially Contaminated Sites Reported to CTDEEP*, updated July 10, 2019. The Site is not identified on the list.

List of Significant Environmental Hazards Reported to CTDEEP

APT reviewed the *List of Significant Environmental Hazards Reported to CTDEEP*, updated March 8, 2019. The Site is not identified on the list.

Connecticut Transfer Act (Property Transfer Program)

The Connecticut Transfer Act (C.G.S. 22a-134 as amended), requires the disclosure of environmental conditions when certain real properties and/or businesses, referred to in the Transfer Act as **establishments, are transferred. The Transfer Act defines an establishment as “any real property at which or any business operation from which: (A) on or after November 19, 1980, there was generated, except as the result of remediation of polluted soil, groundwater, or sediment, more than one hundred kilograms of hazardous waste in any one month; (B) hazardous waste generated at a different location was recycled, reclaimed, reused, stored, handled, treated, transported, or disposed of; (C) the process of dry cleaning was conducted on or after May 1, 1967; (D) furniture stripping was conducted on or after May 1, 1967; or (E) a vehicle body repair facility was located on or after May 1, 1967.”**

Based upon APT’s review of information collected during the completion of this assessment, the Site does not meet the definition of an establishment as defined by the Transfer Act.

Municipal Record Sources

APT visited the municipal offices of the Town of Enfield on September 4, 2019 to review publicly-available files for pertinent environmental information on the Site. A summary of the information reviewed is presented below.

Assessor’s Office

The **Town of Enfield Tax Assessor’s Office** identifies the 24.42-acre Site on Map 84 as Lot 15. The **property card identifies the address of the Site as “Long Hollow Road”.**

Town Clerk

According to the Town of Enfield Tax Assessor's office, the Site is owned by "Powder Hill Sand and Gravel, LLC". The current deed for the Site is recorded in the Town of Enfield land records in Book 1123, Page 225 and is dated 6/4/1998. A copy of the current deed is included in Appendix B.

Building Department

APT conducted a review of publicly available files for the Site at the Town of Enfield Building Department. No files were identified for the Site.

Hazardville **Fire Marshal's Office**

APT contacted John (Jack) Flanagan, Fire Marshal for the Hazardville section of Enfield and requested all publicly available files for the Site. **Mr. Flanagan responded that the Fire Marshal's office did not have any information on file for the Site.**

North Central District Department of Health

The North Central District Department of Health ("**NCDDH**") is a regional health district that serves the Town of Enfield. APT conducted a review of publicly-available at NCDDH files for the Site. No files were identified for the Site.

Site Reconnaissance

APT completed a Site reconnaissance on September 4, 2019 that included observing portions of the Site and the general Site area for overt evidence of hazardous materials and/or petroleum products, and visually surveying adjacent properties from publicly accessible areas. Site photographs are provided in Appendix D.

General Observations

The Site is located east of Powder Hill Road. A paved driveway extends northeastward from Powder Hill Road and provides access to the southwestern portion of the Site. The driveway provides access to a large open sand and gravel mining and material storage yard that includes the entire central portion of the Site.

- Proposed Area of Development

Based upon the reviewed Progress Plans, the proposed solar arrays would include a development area of approximately 10 (ten) acres on the central portion of the Site. The surface of this area current consists of sand and gravel. Large piles of sand, gravel, stone, reclaimed asphalt millings, concrete rubble, concrete pipes, concrete catch basins, metal catch basin grates, and a single pile of tree branches and brush are located on the central portion of the Site. Multiple loaders, a bulldozers, a rock screener, and a conveyor are also located on this portion of the Site. A galvanized drainage pipe, **several black PVC corrugated drainage pipes, concrete "Jersey Barriers", concrete blocks**, a construction storage trailer, and a port-a-potty are also located on the central portion of the Site. No overt evidence of staining was observed during the reconnaissance.

- Periphery of Site

The perimeter of the Site, outside of the cleared planned development area, consists of wooded, undisturbed land. Northern, eastern, and southern portions of the Site rise up to the level of the surrounding land. The western portion of the Site slopes downward to Powder Hill Road.

Utilities

Overhead electric and telephone services exist along Powder Hill Road west of the Site. No utilities appear to currently extend onto the Site.

Storage Tanks

No aboveground storage tanks ("ASTs") or evidence (concrete tankpads, manways, fill ports, or vent pipes) of underground storage tanks ("USTs") were observed at the Site. Limited petroleum (diesel fuel) storage in construction equipment (loaders, a bulldozer, a rock screener, and a conveyor belt system) was observed at the Site. No overt evidence of staining was observed adjacent to the construction equipment during the reconnaissance.

Indications of Polychlorinated Biphenyls

No transformers or other suspect PCB-containing equipment was observed on or immediately adjacent to the Site.

Indications of Asbestos Containing and Lead-Containing Building Materials

A survey to identify the potential presence of asbestos containing and/or lead-containing building materials is beyond the scope of this assessment. No buildings are currently located on the Site. APT did not observe any overt evidence of building demolition debris during the Site reconnaissance. Therefore, based upon these observations, the presence of asbestos-containing or lead-containing building materials is not a concern at the Site.

Summary of Findings

This Phase I ESA was performed, generally in conformance with the scope and limitations of ASTM Practice E1527-13, for the Site located on Powder Hill Road in Enfield, Hartford County, Connecticut.

Data Failures

No data failures were identified during the conduct of this assessment.

Data Gaps

The following data gaps are identified:

- Title records were not provided to APT by the occupant/user for review.
- Information regarding environmental liens or limited property use associated with the Site was not provided by the occupant/user. No use limitations were identified in the land records reviewed at the Town of Enfield municipal offices or in files reviewed at the Connecticut **Department of Energy and Environmental Protection ("CTDEEP") Public File Room.**

APT do not believe that the identified data gaps are significant relative to the overall findings of this report.

Recognized Environmental Conditions

No evidence of **recognized environmental conditions ("RECs")** was identified at the Site during the course of this assessment.

Historical Recognized Environmental Conditions

No evidence of historical RECs was identified at the Site during the course of this assessment.

Controlled Recognized Environmental Conditions

No evidence of controlled RECs was identified at the Site during the course of this assessment.

Migration

No RECs were identified relative to the Site. Therefore, there are no contaminant migration or vapor intrusion concerns relative to the Site.

Environmental Concerns

Based upon observations made during the reconnaissance, a large amount of construction waste materials (asphalt millings, concrete catch basins, concrete rubble, etc.) are stored on the central portion of the Site including in the proposed development area. The materials appeared to be relatively inert, however, the composition and source of these construction waste materials is unknown. APT did not

observe any overt evidence of petroleum containing wastes, building demolition debris, or industrial dumping at the Site. However, APT could only observe the exterior surfaces of the material piles on the Site.

Conclusion and Recommendations

No RECs were identified relative to the Site and no additional investigations are warranted at this time.

A large amount of construction waste materials was observed on the Site. Lodestar has indicated that the property owner is responsible for removing all materials from the development area prior to construction.

Based on APT's understanding of the project, no excess soils will be generated during construction that will be required to leave the Site. If for any reason excess soils or construction materials are generated that must leave the Site, those materials must be characterized and managed to ensure that they are appropriately recycled or disposed.

This conclusion is based on the review of available historical and regulatory records, aerial photographs, topographic maps, environmental records, and other resources, observations made during the Site and vicinity reconnaissance, and interviews with available personnel familiar with the Site. **APT's conclusion** and recommendations are not subject to contamination that is hidden, unpublished or otherwise unknown using standard Phase I methodology.

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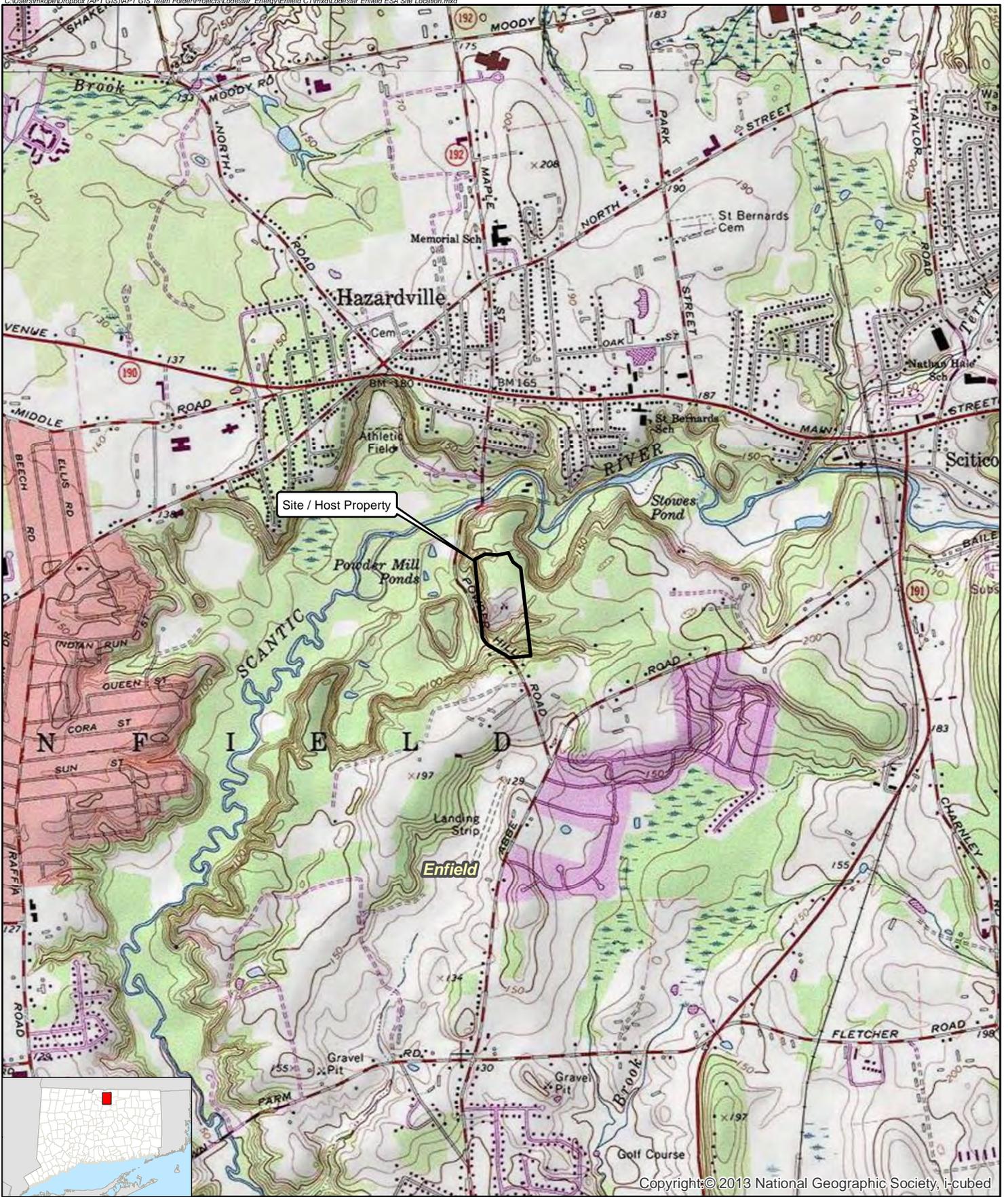


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Figures



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Legend

-  Site / Host Property
-  Municipal Boundary

Map Notes:
 Base Map Source: USGS 7.5 Minute Topographic
 Quadrangle Map, Broad Brook, CT (1984)
 Map Scale: 1:24,000
 Map Date: August 2019



Figure 1 - Site Location Map

Proposed Solar Facility
 22 Powder Hill Road
 Enfield, Connecticut





Legend

-  Site / Host Property
-  Proposed Project Area / Perimeter Fence
-  Proposed 14' Wide Gravel Access Drive
-  Approximate Parcel Boundary (CTDEEP)
-  Aquifer Protection Area (CTDEEP, July 2019)
-  Final Adopted Aquifer Protection Area

Map Notes:
 Base Map Source: CTECO 2016 Aerial Photograph
 Map Scale: 1 inch = 200 feet
 Map Date: August 2019



Figure 2 - Site Schematic

Proposed Solar Facility
 22 Powder Hill Road
 Enfield, Connecticut



Appendix B

Historical, Municipal, and Other Sources