PETITION OF WINDHAM SOLAR LLC FOR A DECLARATORY RULING FOR THE CONSTRUCTION AND OPERATION OF THREE 1.0 MEGAWATT SOLAR PHOTOVOLTAIC RENEWABLE ENERGY GENERATING FACILITIES LOCATED OFF BENZ STREET IN ANSONIA, CONNECTICUT

FEBRUARY 21, 2020

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LIST OF EXHIBITS

I. INTRODUCTION

Pursuant to Section 16-50k(a) and Section 4-176(a) of the Connecticut General Statutes ("CGS") and Section 16-50j-38 *et seq.* of the Regulations of Connecticut State Agencies ("RCSA"), Windham Solar LLC (the "Petitioner") requests that the Connecticut Siting Council (the "Council") issue a declaratory ruling approving the construction and operation of the Petitioner's three (3) – 1.0 megawatt ("MW") solar electric generating facilities (the "Facilities"), located on residentially-zoned land on Benz Street, Ansonia, Connecticut (the "Site") within the electric utility service territory of The United Illuminating Company "(UI)".

CGS § 16-50k(a) provides:

> "Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling ... (B) the construction or location of ... any customer-side distributed resources project or facility ... with a capacity of not more than sixty-five megawatts, as long as such project meets the air and water quality standards of the Department of Energy and Environmental Protection ..."

Pursuant to CGS § 16-50k(a), the Council should approve the Facilities by declaratory ruling since they are customer-side distributed resources facilities under 65 MW in capacity that comply with the air and water quality standards of the Connecticut Department of Energy and Environmental Protection ("DEEP"). Further, CGS § 16a-35k establishes the State's energy policies, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum extent possible." As demonstrated from the information included in this petition, the Facilities will result in no air emissions, have minimal impacts that comply with DEEP's air and water quality standards, and will have no substantial adverse environmental effects. The Facilities will further the State of Connecticut's energy policy by developing renewable energy resources and distributed energy resources. The Facilities also further the State

of Connecticut's goals announced in the 2018 Comprehensive Energy Strategy (the "CES").[1] The Facilities will be an essential part of a clean energy future within UI territory.

II. PETITIONER

Windham Solar LLC ("Windham") is a Connecticut limited liability company active in providing comprehensive solutions for the development, construction, and operation of solar facilities in the State of Connecticut. Windham is working with Ecos Energy, LLC ("Ecos"), based in Minneapolis, MN, on developing the Facilities. Both the Petitioner and Ecos have industry knowledge and experience to develop and implement the Facilities in a way that maximizes benefits to the citizens of Connecticut and ensures all relevant regulatory bodies are satisfied during the project life-cycle development.

Correspondence and communications regarding this petition should be addressed to:

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III. DESCRIPTION OF PROPOSED FACILITIES

The State of Connecticut has recognized the benefits of local renewable energy development and implemented renewable portfolio standard ("RPS") to encourage the development of renewable energy resources. The Facilities will play an essential role in the State's renewable energy goals. The Facilities will provide a source of clean, renewable energy that is locally produced. The Facilities will produce 100 percent clean, renewable electricity with zero

[1] https://www.ct.gov/deep/lib/deep/energy/ces/2018_comprehensive_energy_strategy.pdf

carbon dioxide ("CO2") emissions. Most importantly, the Facilities will displace electricity produced by fossil fuels.

Site Selection

The Site was selected based upon several factors, including:

- Site Suitability
    a. Solar resource
    b. Soil characteristics
    c. Topographic characteristics that allow for efficient facility design and construction,
- Proximity to electrical infrastructure and roadways—the Site has direct public road access and is adjacent to a UI, 3-phase electric utility distribution line,
- Local electrical demand.

A. Site Description

The Site's main address is 31 Benz Street, Ansonia, CT. The Site is a 12.72-acre parcel that is zoned 'A - Residential.' The Site contains two structures, including a two-story house, an old shed, and a stone structure. No other structures exist on the Property. Those structures will be properly removed from the Site before construction begins. Approximately 9.39 acres of the Site appears to have evidence of prior land development activity and covered with dense forestry or large surface boulders. The remaining 3.33 acres of the Site consists of developed land, including the residential structure, an asphalt driveway about 250 linear feet from Benz Street, and a large open area of grass and landscaping. Approximately 0.40 acres of the Site on the North-West portion of the Site is a wetlands area. Topography on the site is fairly undulating with most of the site draining to the north to the delineated wetland. The remainder of the site drains to the south to

the Benz Street right of way. Most of the adjacent parcels of land to the North, East, and West of the Site are residential lots with occupants. An ALTA Survey shows a 15-foot wide section of land, with an approximate area of 0.36 acres, that runs along the Western side of the Site with a designation of the "Old Highway.", this undeveloped area shall provide additional buffering of the project for the residents to the west of the facility. The ALTA Survey showing the Site's general location, characteristics, and boundaries are on Sheet 2 of Exhibit A (Facilities Site Plan). Exhibit B (GIS Maps) shows an aerial view of the Site. Exhibit C (Key Observation Point Plan) contains photographs of the Site taken from ground level as well as cross-sections from key observation points.

B. Description of the Facilities

The Facilities are renewable energy generation facilities that will use polycrystalline solar PV modules to convert solar radiation to electricity. They are on the customer side of the UI meter. Each 1.0 MW (AC) Facility will consist of approximately 2,900 solar modules, based on a module rating of 430 Watts DC at Standard Test Conditions ("STC"). The direct current ("DC") to alternating current ("AC") ratio of the facilities will be approximately 1.24. The solar modules will be supported above the ground by a steel and aluminum fixed-tilt racking system. The modules will be oriented directly due south at a tilt angle of approximately 25-degrees. The solar modules will be installed on the racking system in a portrait orientation, with two rows of modules per rack. The racking system will support the modules to maintain a ground clearance of at least 36-inches. The racking system foundations will be a series of ground screws that are designed for installation on sites with rocky subsurface conditions, this installation method requires no concrete foundations. The length and size of the ground screw undergoes engineering assessment following a geotechnical and structural analysis; an embedment depth of 4 to 5 feet is typical. A cross section

of the racking is shown on Sheet 3 of Exhibit A. The solar modules will be installed in a series of strings consisting of 26± modules per string. Approximately 12-20 Strings will be connected to each inverter mounted in key locations through-out the Site or at a central location depending on the final electrical design. The inverters alter the 1500V DC power output of the solar modules to somewhere between 600V and 800V three-phase AC power output depending on the final inverter selection.

The power output from the inverters will feed into a main switchgear unit, combining each Facility into a single 3-phase electrical output. The collected three-phase AC power output is then input to a step-up transformer to increase the output voltage to 23kV (or other voltage, as determined by UI) for interconnection to the UI electric distribution system. The power output from the transformer will route via underground cabling to a pad or pole mounted fused AC disconnect switch for each 1.0 MW (AC) facility. From the disconnect switch the three-phase utility voltage will be routed to a pole mounted utility meter for each of the facilities revenue generation. From the meter the facilities three-phase voltage will be routed to a pole mounted recloser, which will provide automated overcurrent protection for the facilities and to the UI electric distribution/transmission system.

Each facility will contain a centralized equipment pad area that shall include inverters (if centrally located), transformer, additional revenue metering, disconnect switches, a suite of monitoring, communications and video security equipment. Conceptual details of the electrical equipment throughout the site and equipment pads have been provided as Exhibit J (Electrical Equipment Information).

The centralized equipment pads for each project will be accessible by a 14-foot wide gravel driveway and hammerhead turn-around for operations, maintenance, and emergency vehicle

access. The entirety of the project footprint will have a 7-foot tall chain-link security fence surrounding it, with an interior perimeter clear space for site accessibility and maintenance around the facility. Access to the Site will be via a padlocked gate in the perimeter fence at the location of the main access driveway from Benz Street, which follows the original asphalt driveway entrance. Access to the facility will be provided to local emergency services. A series of motion-sensitive video security cameras will be installed around and within the perimeter fence for site monitoring and security. No night-time lighting of any kind is proposed for the Facilities. After construction, the ground area within the Facilities' footprint will be hydro-seeded with a botanist-reviewed seed mix that offers low/slow-growing groundcover vegetation that is drought-tolerant and native to the area. A series of arborvitae type trees and natural vegetation will be planted around the Site perimeter to create a visual barrier from neighboring properties and vehicles traveling along Benz Street. The Facilities' footprint area will encompass approximately 11.5 acres of the Site, all within the Facilities' perimeter fence line. All elements of Facilities' design, construction, operation, and maintenance will be performed in accordance with all applicable local, state, and national rules, guidelines, and regulations. The particulars of each Facility's footprint design and equipment locations are detailed in Exhibit A.

C. Interconnection

Each Facility is proposed for interconnection to the UI electric distribution grid at an existing 23 kV overhead electric line located along Benz Street. The interconnection would be in accordance with UI technical standards and State of Connecticut, ISO-New England ("ISO-NE"), and the Federal Energy Regulatory Commission ("FERC") requirements. The point of interconnection ("POI") will consist of installing UI-specified metering and circuit protection (breakers/switches/relays) equipment for each Facility. The POI is designed and constructed

according to UI's Guidelines for Generator Interconnection. UI has performed a system impact study for the Facilities and found that the Facilities cannot be connected safely and reliably with no significant upgrades. The Petitioner is awaiting the issuance of the Facilities Study which was due on October 31, 2019 and plans to execute an Interconnection Agreement ("IA") with UI for each Facility shortly thereafter.

D. Service Life and Capacity Factor

Each Facility's equipment has an expected useful life of approximately 45 years, and the Petitioner will plan to operate each Facility until the equipment has exhausted its useful life. According to the 2012 Integrated Resources Plan for Connecticut, fixed-tilt PV solar has an expected capacity factor of approximately 13 percent.

IV. FACILITIES' BENEFITS

Projects that are "necessary for the reliability of the electric power supply of the state or for a competitive [electric market]" present a clear public benefit. Conn. Gen. Stat. § 16-50p(c)(1). Each Facility provides the benefits contemplated in the statute and more, as it will generate much of its power during the typical high demand hours for electricity. By providing electricity when there is high demand, each Facility will help stabilize the electrical grid by effectively operating as if it were a Commercial & Industrial business enrolled in a demand response program; enabling a benefit for both the electric utility and their customers by providing enhanced electric load management to the transmission/distribution grid that is at risk of brown-outs and black-outs.

Additionally, there exists a clear public need for renewable projects and undertaking them supports the State's energy policies as codified in Conn. Gen. Stat. § 16a-35k, expressing the legislature's goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent."

In the April 10, 2019 edition of the Boston Globe, Bill McKibben, the Schumann Distinguished Scholar at Middlebury College, wrote:

> The basic stability of our planet has been upended in our lifetimes. Unless we act quickly, the changes we've seen so far will be mild by comparison with what comes next. Science makes clear that without an emergency transition away from coal and gas and oil, we can expect such rapid shifts that our ability to maintain civilizations will be in doubt… Unless we goose the pace with government action, the world that we someday power with clean energy would be a dirty world, a broken planet.[2]

Last fall, the U.S. Administration released the complete *Fourth National Climate Assessment* (the "Climate Report").[3] The Climate Report assesses the current and increasing adverse impacts from the continued use of fossil fuels on the public health, safety and welfare of the United States, its citizens and residents, and individual areas of the United States:

> *Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities. The impacts of global climate change are already being felt in the United States and are projected to intensify in the future—but the severity of future impacts will depend largely on actions taken to reduce greenhouse gas emissions.*

Climate Report, Vol. II, Overview at 2.

The *Climate Report* provides overwhelming evidence proving that the continued use of fossil fuels endangers the public health, safety and welfare of Connecticut and the Northeastern United States:

> *Changing climate threatens the health and well-being of people in the Northeast through more extreme weather, warmer temperatures, degradation of air and water quality, and sea level rise. These environmental changes are expected to lead to health-related impacts and costs, including additional deaths, emergency room visits and hospitalizations, and a lower quality of*

[2] https://www.bostonglobe.com/opinion/2019/04/10/the-clock-keeps-ticking-fight-save-planet/R8ZrHbh2yFqA8bNXe6wdjJ/story.html.

[3] *See*, https://nca2018.globalchange.gov/, USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA. doi:10.7930/NCA4.2018.

> *life. Health impacts are expected to vary by location, age, current health, and other characteristics of individuals and communities.*

Climate Report, Vol. II, Ch. 18, at 117.

As the preeminent climatologist, Dr. James Hansen, has warned, "Failure to act with all deliberate speed in the face of the clear scientific evidence of the long term dangers posed is the functional equivalent of a decision to eliminate the option of later generations and their legislatures to preserve a habitable climate system."[4] Allowing excessive carbon dioxide emissions to imperil the climate system jeopardizes the fundamental rights of all and of future generations. If fossil fuel emissions are not rapidly abated, then our children, grand-children and future generations will confront an inhospitable future.

Solar facilities are considered Class I renewable energy sources under General Statutes § 16-1(a)(26). Over the life of each Facility, they will contribute to a significant reduction in emissions, such as NOx, SOx, PM, CO_2, and VOC emissions as compared to other electric generating facilities that produce greenhouse gases as a by-product. These figures are further outlined *infra.* Additionally, each Facility will deliver its generated power 'locally' by injecting that power into a distribution-level electric circuit for use by nearby homes and businesses. A local electric generating facility decreases the amount of power that will need to be brought into the area from further away, providing relief to the utility transmission infrastructure and increasing local grid reliability and transmission efficiency due to an increase in power quality.

Each Facility will also help the State move closer to meeting its renewable portfolio standards. Concerning labor, the Company fully intends to employ local labor in completing each facility wherever practical. As part of a broader state, federal, and global strategies, reductions in

[4]James E. Hansen et al., *Scientific Case for Avoiding Dangerous Climate Change to Protect Young People and Nature*, NASA (Jul. 9, 2012), *available at* http://pubs.giss.nasa.gov/abs/ha08510t.html.

greenhouse gas emissions and project life-cycle carbon footprint reduction from each facility will have long-term positive secondary biological, social, and economic benefits.

V. LOCAL INPUT & NOTICE

Exhibit A (Facilities Site Plan) submitted with this application will also be submitted to the Town of Ansonia Engineer, Fred D'Amico, for review and comments. The plans will be circulated internally among town departments for comments, as well. Any comments received from the Town of Ansonia's review will be forwarded to the CT Siting Council.

In addition to contacting the Town directly, the Petitioner will provide notice of this petition to all persons and appropriate municipal officials and government agencies to whom notice is required pursuant to CGS § 16-50j-40(a). For details, reference Exhibit D (Notice Service List).

VI. POTENTIAL ENVIRONMENTAL EFFECTS

The Petitioner has evaluated the Site and taken inventory of the existing resources onsite. Phases I & II of an Environmental Site Assessment ("ESA") have been performed, and no existing environmental issues were found at the site. For details on both ESA Phases, see Exhibit E (Phases I & II Environmental Site Assessment).

The proposed solar Facilities have been designed to minimize significant changes to the site and maintain ecological and other protected resources.

A. Natural Environment and Ecological Balance.

The Site selected for the Facilities' footprint is not within an area containing any sensitive, rare, or protected natural resources. Approximately 12 acres of the site will be cleared of tree/timber vegetation for the facilities' construction. The clearing limits can be found on Sheet 7 of Exhibit A. No clearing is proposed within the wetland area. During the clearing operation the

existing residential structures on site and the fill material identified in the Phase 2 ESA will be removed and disposed of at the appropriate waste and recycling facilities.

Minimal grading will be required for each Facility, as the solar racking equipment is designed to follow the existing elevations of the Site's topography, therefore no major earthwork will occur in the array field. Approximately 2 acres of grading will be performed on the site to create stormwater conveyance swales the stormwater sediment and water quality basins. Additional grading will occur for the re-construction of the access driveway and transformer equipment pads.

B. Public Health and Safety

Overall, each Facility will meet or exceed all health and safety requirements applicable to electric power generating facilities. During construction, each employee working onsite will:

1) Receive required general and site-specific health and safety training.
2) Comply with all health and safety controls as directed by local and state requirements.
    i. Understand and employ the site health and safety plan while on the job site.
3) Know the location of local emergency care facilities, travel times, ingress, and egress routes.
4) Report all unsafe conditions to the construction managers.

During construction, heavy equipment, delivery trucks, and water trucks for dust suppression will be required to access the Site during typical weekday working hours. It is anticipated that during the peak periods of construction activity, approximately 10 to 15 construction vehicles will make daily trips to and from the Site during the approximate five-month construction period. During construction of the Facilities, noise may be audible offsite so that all work will be conducted during regular weekday working hours, and measures will be set in place

to mitigate construction noise levels below state and local noise limit standards. During construction operations, the Facilities will not present a health or safety hazard to anyone located onsite or offsite. The Facilities will generate no offsite noises, harmful glare, vibrations, or dangerous emissions of any kind. Solar PV is a long-proven solid-state, safe and benign technology for generating electricity. Authorized personnel visiting the Facilities during operation will be fully licensed and adequately trained on how to navigate a solar facility safely and how to quickly respond in the event of an emergency. Once operational, the Petitioner will work with local fire and law enforcement officials to ensure they have the appropriate knowledge and access to provide their services to the Facilities if necessary.

C. Air Quality

Overall, the Facilities will have minor air emissions of regulated air pollutants and greenhouse gases during construction, and no air permit will be required. During construction, any air emission effects will be temporary and will be controlled by enacting appropriate mitigation measures (e.g. water for dust control, avoiding mass early morning vehicle startups, etc.). Accordingly, any potential air effects as a result of the Facilities' construction activities will be negligible. During operation, the Facilities will not produce air emissions of regulated air pollutants or greenhouse gases (i.e. PM10, PM2.5, VOCs, GHG, or Ozone). Thus, no air permit will be required.

Additionally, over the expected 45-year lifespan, the Facilities will result in the offset/elimination of approximately 156,229 tons[1] of CO_2 equivalent, which is equal to 33,029 passenger vehicles off the road[2] or 45,597 tons of avoided landfill waste[3] The Facilities will have a net beneficial effect on air quality. It's estimated that 11.69 acres of trees will be removed from the site during construction. The carbon debt payback period for the removal of these trees,

based on the EPA estimate of 1.22 metric tons of carbon dioxide sequestered by one acre of average U.S. forest in one year, would be approximately 1.5 days. In other words, the solar generating facilities would off-set the same amount of CO_2 sequestered by the 11.69 acres of trees being removed, within the first two days of operation.

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[1] CO2 off-set calculations were made using the US Environmental Protection Agency ("EPA") GHG Equivalencies Calculator: https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references

[2] Passenger Vehicle off-set calculations were made using the EPA GHG Equivalencies Calculator: https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references

[3] Avoided landfill calculations were made using the EPA GHG Equivalencies Calculator: https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references

D. Scenic Values and Visual Renderings

The Facilities will be minimally visible from neighboring property owners as well as viewsheds from Benz Street. Residential homes west of the Facilities are separated from the property by an existing 15' right of way parcel as illustrated in the ALTA survey on Sheet 2 of Exhibit A. The residences west of the Facilities are approximately 150 feet or greater from the nearest solar module. Residential homes east of the Facilities are separated from the nearest solar module by approximately 100 feet or greater, as dimensioned on Sheet 3 of Exhibit A.

To soften visual impacts from abutters and Benz Street a proposed arborvitae tree hedge is to be installed along the Facilities' fence line as detailed on Sheet 7 of Exhibit A. The proposed plantings along the Facilities' boundary will remain throughout the life of the project and will aid in screening the Facilities from the abutting residences. The solar modules on the racking has a low profile rising less than 9 feet above the grade of the site. The solar equipment at each Facilities equipment pad location is less than 7 feet in height. The tallest element of the Facilities will be poles for video cameras and meteorological equipment, which are installed at 12-14' feet in height at each equipment pad. The proposed screening hedge is expected to grow to 30 feet or greater in

maturity, significantly higher than the Facilities infrastructure. The Facilities will have a minimum setback distance of 50-feet from Benz Street and the arborvitae screening hedge will also shield views from passing motorists.

There are no protected or designated scenic areas, roadways, or trails at any vantage point within the Site boundaries. Given these details, and the proposed screening infrastructure the Facilities will not have a significant adverse effect on the scenic values of the area. Current photographs of the Site, along with visual cross-sections of the Facilities, can be found in Exhibit C.

E. Historic Values

The Petitioner has requested a review of the Facilities and site by the Connecticut State Historic Preservation Office ("SHPO"). On February 7th, 2019 the petitioner received a response attached as Exhibit H. Based on the Site and Facilities information provided to SHPO, a decision has been made, stating "…no historic properties will be affected by the construction of the Facility."

F. Wildlife & Habitat

The Facilities have been designed to avoid any impacts to sensitive plant or wildlife species or the associated habitats. The site was investigated for wetlands features and a seasonally flooded, forested wetland was located along the west property boundary and extends off-site. The wetland hydrology appears to be driven primarily by groundwater discharge/seeps originating from extremely stony uplands adjacent to the wetland. Full details of the delineation can be found in Exhibit F (Wetlands Report). The wetland delineation and a 50' upland buffer setback is represented on all pertinent plan sheets in Exhibit A. The Facilities solar footprint was designed to avoid the delineated wetlands features entirely, and the 50-foot buffer around them.

A stormwater management basin will be installed partially within the 50-buffer and will ultimately create additional habitat adjacent to the wetland for wildlife. Appropriate erosion control measures will also be installed to protect the wetland habitat during construction.

The Petitioner submitted a request to DEEP for NDDB for review of the Property and the Facilities' footprint. DEEP responded on January 24th, 2019, attached as Exhibit G (Determination Letter). The NDDB review stated, "I do not anticipate negative impacts on State-listed species (RSA Sec. 26-306) resulting from your proposed activity at the site." DEEP recommends conducting on-site surveys required for environmental assessments as a means to enhance existing data within their database. Due to the previous and relatively cleared nature of the Site, an in-depth field survey for species and habitat was not performed. Additional surveys that identify any potential additional populations of species and locations of habitats of concern will be addressed to comply with the standards and requirements set by DEEP.

G. Water Resources and Storm Water Management.

The Facilities will not adversely impact surrounding water resources. The sites current grading design conceptually implements the state of Connecticut's 2002 CT Guidelines for Erosion and Sedimentation Control as well as the permeant stormwater treatment requirements outlined by the 2004 CT Stormwater Quality Manual to ensure adequate areas are available for stormwater control measures.

Most of the site where the solar racking and modules will be installed will remain un-altered from a grading standpoint. Due to the rocky nature of the site, ground screws will be the likely solar racking foundation design. Ground screws can penetrate almost any surface without major ground disturbances during the racking foundation installation. Existing topography of the site is gradual enough for the racking to follow the existing grade without any major site grading.

During construction, the contractor will follow the requirements to maintain site stabilization per the requirements of the General Permit, and upon completion of construction, the site will be seeded in all areas with groundcover as illustrated on Sheet 7 of Exhibit A. The solar racking provides adequate height above the ground to promote vegetative growth underneath the solar array and allow for natural overland drainage and infiltration to continue to occur on site. Stormwater runoff from the solar array field will be directed into sediment traps via graded perimeter conveyance swales. The sediment traps will be maintained throughout construction and will ultimately remain as permeant Stormwater management system for post-construction runoff.

The Petitioner will register the Facilities final stormwater design and SWPCP under the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities at least sixty (60) days before commencing any construction activities. The Petitioner intends to request coverage under the existing Connecticut General Permit, DEP-PED-GP-015, by submitting a complete and accurate General Permit Registration Form and Transmittal before construction activities and following applicable rules at the time of filing. This information will also be submitted to the CSC at the time of submitting a development and management plan for approval prior to construction.

VII. ADDITIONAL INFORMATION

The Council has previously reviewed petitions for other solar facilities similar to the ones being proposed by the Petitioner. In these other dockets, the Council has sent out interrogatory requests with multiple questions about each facility. This section will attempt to pre-emptively answer some of those questions that were not addressed in previous sections of this petition.

Q01. How did the Petitioner become aware of the Site?

A01. The Site was actively being listed for sale at the time that the Petitioner was searching for an acceptable location for the Facilities.

Q02. Did the Petitioner investigate any other properties as potential locations for the Facilities? If so, identify these properties.

A02. The Petitioner investigated a large number of properties that were listed for sale. The Site was selected based upon favorable characteristics.

Q03. Has the Petitioner conducted a shading analysis of the Site? If so, provide the results.

A03. No, a shading analysis was not preformed but the array was set back from the clearing limits to minimize major shading of the array for preliminary project modeling.

Q04. What is the efficiency of the photovoltaic module technology that would be employed by the Petitioner at the proposed project? Does this efficiency decrease over time?

A04. The efficiency will be in the range of 16 to 19 percent, depending on the manufacturer and model of solar module selected for construction. The efficiency does decrease over time, at a predicted average rate of 0.5% per year.

Q05. Would the angles of the Facilities' solar modules be adjusted during the year to maintain optimal alignment with the sun's changing path?

A05. No. The solar modules will be installed on a fixed-tilt racking system at 25°.

Q06. Approximately what percentage of the proposed project's maximum possible output would occur during those times of the year when Connecticut normally experiences its peak demand for electricity?

A06. Energize Connecticut (www.energizect.com) defines the peak electricity demand in Connecticut as occurring weekdays between noon and 8 pm, during the summer months of June through September. The Facilities will create approximately 14% of their total annual output during this timeframe.

Q07. Does the Petitioner have contracts to sell the electricity it expects to generate with the proposed Facilities?

A07. A contract for the sale of the renewable energy credits with UI has been executed for two of the Facilities. No other contracts have been executed as of now for the sale of renewable energy credits or electricity.

Q08. Are the Facilities located near any Important Bird Areas designated by the Connecticut Audubon Society?

A08. No.

Q09. What would be the construction timeline of the Facilities from groundbreaking to full operation?

A09. Approximately 5 months.

Q10. Describe how the project would be decommissioned at the end of its useful life.

A10. A decommissioning memo is included as Exhibit I.

Q11. Describe the land use within a 0.5-mile radius of the Site.

A11. Low density developed residential lots as well as undeveloped forestry area.

VIII. CONCLUSION

The Facilities will provide numerous and significant benefits to the Town of Ansonia, the State of Connecticut and its citizens while producing significant environmental benefits with minimal undesired environmental impact. Pursuant to CGS § 16-50k(a), the Siting Council shall

approve by declaratory ruling the construction or location of customer-side distributed resources project or facility with a capacity of not more than sixty-five (65) MW, as long as such project meets DEEP air and water quality standards. As shown in the attached exhibits and correspondences with regulatory officials, the Facilities meet these criteria. Each Facility is a "customer-side distributed resources facility" and a "grid-side distributed resources" facility, as defined in CGS § 16-1(a)(40), because the facilities involve "the generation of electricity from a unit with a rating of not more than sixty-five megawatts on the premises of a retail end-user within the transmission and distribution system including, but not limited to . . .photovoltaic systems and, as demonstrated herein, each Facility will meet DEEP air and water quality standards. The Facilities will not produce air emissions, will not utilize water to produce electricity, were designed to minimize wetland impacts, will employ a stormwater management plan that will result in no net increase in runoff to any surrounding properties, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources ("DER"). Additionally, as demonstrated above, the Facilities will not have an adverse environmental impact in the State of Connecticut.

Accordingly, the Petitioner respectfully requests that the Siting Council approve the location, construction, and operation of the Facilities by the declaratory ruling.

Respectfully Submitted,
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Exhibit A

Facilities Site Plan

BENZ STREET SOLAR
CONNECTICUT SITING COUNCIL DOCUMENTS

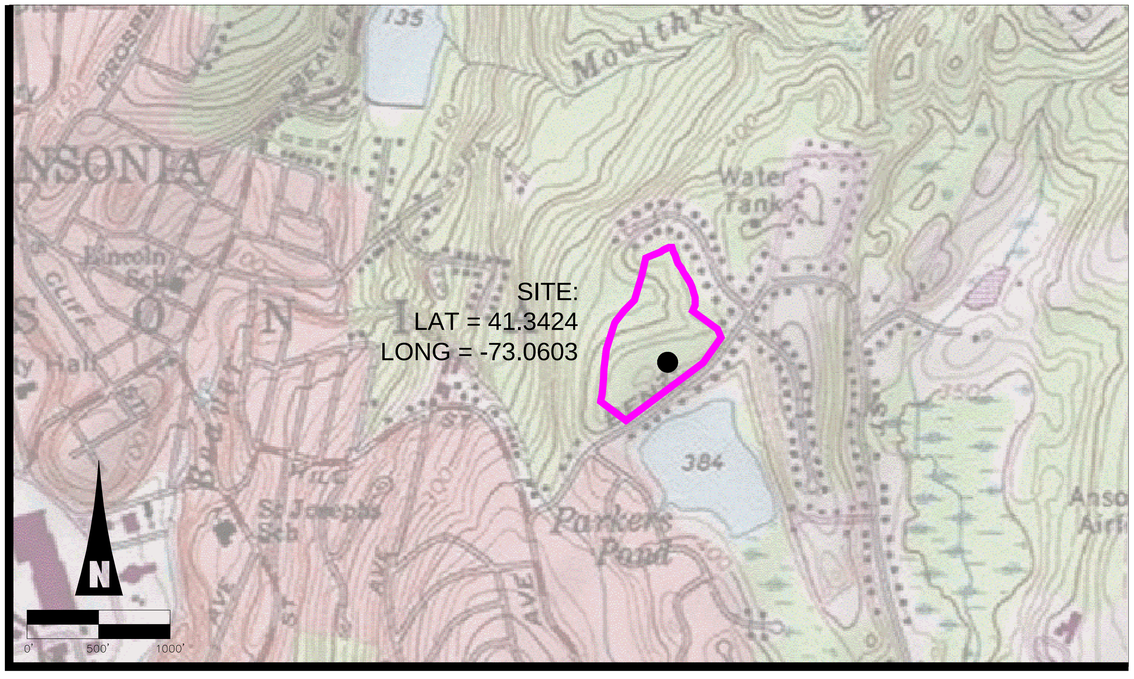
FOR

Site/Electrical Layout, Grading/Drainage/Erosion Control/Landscaping

IN

ANSONIA, CONNECTICUT

LOCATION MAP



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●	-	2/11/2020	9	PROJECT CROSS SECTION
●	-	2/11/2020	10	CIVIL NOTES
●	-	2/11/2020	11	CIVIL DETAILS

DRAWING INDEX LEGEND

FILLED CIRCLE INDICATES DRAWING INCLUDED WITHIN THIS ISSUE
MOST RECENT REVISION NUMBER
MOST RECENT ISSUE OR REVISION DATE

○	-	X/XX/202X	X	SHEET TITLE

CONTACT INFO:

RECORD LANDOWNER:
PLH, LLC
77 WATER STREET
8TH FLOOR
NEW YORK, NY 10005

OWNER/DEVELOPER:
ECOS ENERGY
222 SOUTH 9TH STREET
SUITE 1600
MINNEAPOLIS, MN 55402

CIVIL ENGINEER:
CLA ENGINEERS, INC.
317 MAIN STREET
NORWICH, CT 06360
TEL: 860-886-1966

SURVEYOR & WETLANDS DELINEATION:
GODFREY HOFFMAN HODGE, LLC
26 BROADWAY
NORTH HAVEN, CT 06085
TEL: 203-239-4217

No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

31 BENZ STREET
PLAINFIELD, CT 06239

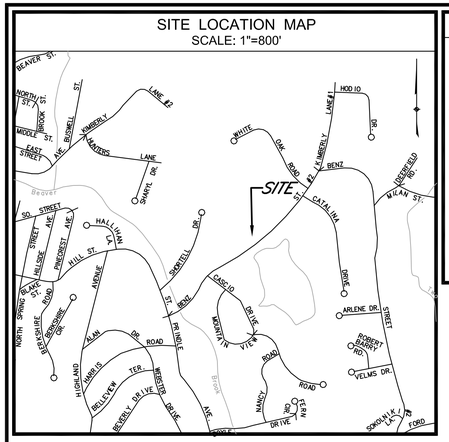
BENZ STREET SOLAR

COVER SHEET

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 1

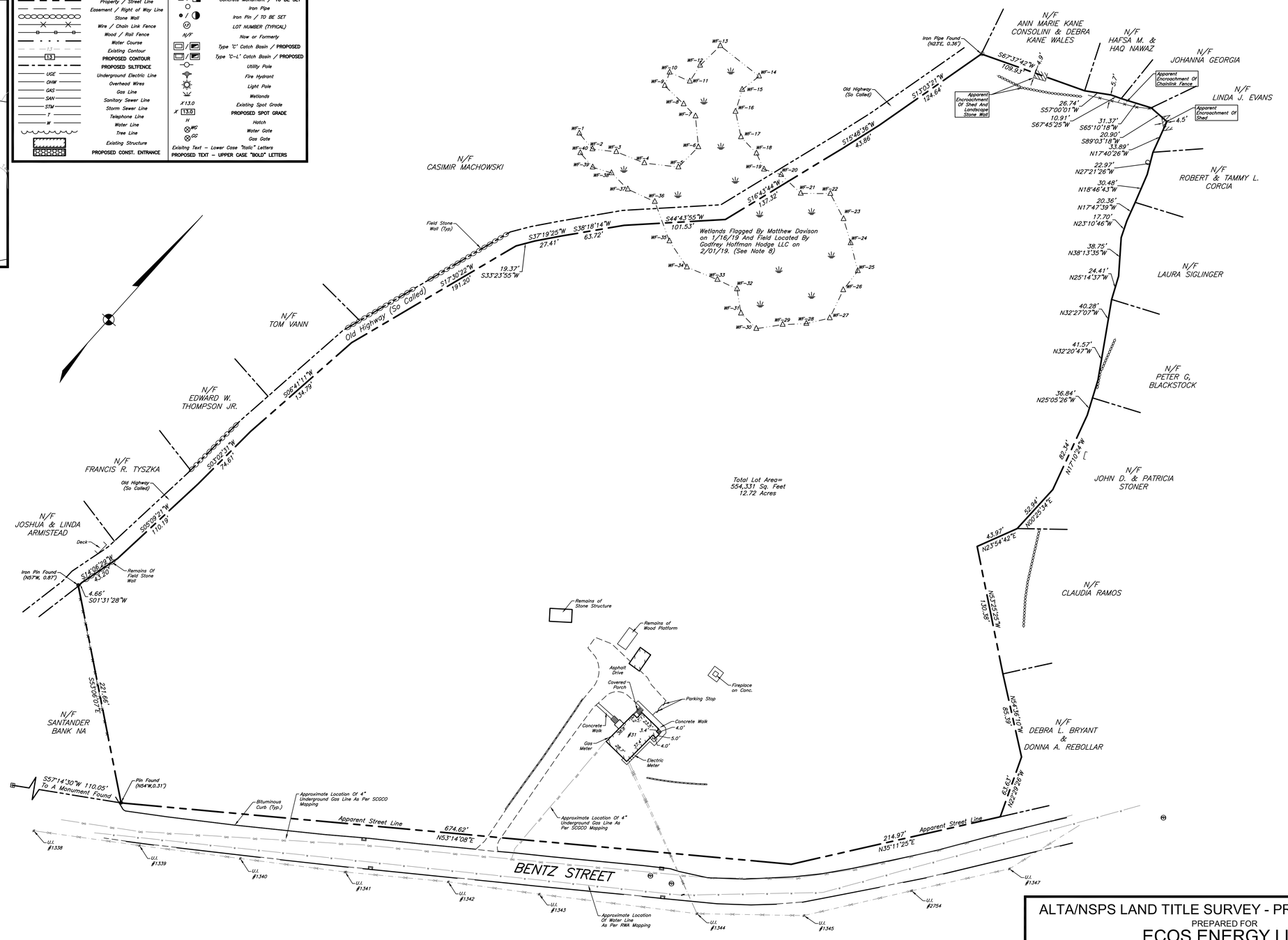
CLA

SITE LOCATION MAP
SCALE: 1"=800'



LEGEND

Property / Street Line	Concrete Monument / TO BE SET
Easement / Right of Way Line	Iron Pipe
Stone Wall	Iron Pin / TO BE SET
Wire / Chain Link Fence	LOT NUMBER (TYPICAL)
Wood / Rail Fence	N/F Now or Formerly
Water Course	Type "C" Catch Basin / PROPOSED
Existing Contour	Type "D-L" Catch Basin / PROPOSED
PROPOSED CONTOUR	Utility Pole
PROPOSED SILTFENCE	Fire Hydrant
UGE Underground Electric Line	Light Pole
OHW Overhead Wires	Wetlands
GAS Gas Line	Existing Spot Grade
SAN Sanitary Sewer Line	PROPOSED SPOT GRADE
STM Storm Sewer Line	Hatch
T Telephone Line	Water Gate
W Water Line	Gas Gate
Tree Line	Existing Text – Lower Case "Italic" Letters
Existing Structure	PROPOSED TEXT – UPPER CASE "BOLD" LETTERS
PROPOSED CONST. ENTRANCE	



NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300B-1 THRU 20-300B-20, THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT EFFECTIVE JUNE 21, 1996, AMENDED OCTOBER 26, 2018.
A) THE HORIZONTAL ACCURACY CONFORMS TO CLASS "A-2".
B) THE BOUNDARY DETERMINATION CATEGORY IS A "FIRST SURVEY".
C) THE TYPE OF SURVEY IS A "PROPERTY SURVEY".

2. ALL MONUMENTATION FOUND OR SET IS DEPICTED ON THIS MAP.

3. THE NORTH ARROW, BEARINGS, AND COORDINATES ARE BASED UPON THE CONNECTICUT STATE PLANE COORDINATE SYSTEM, NAD 83 UTILIZING THE STATE OF CONNECTICUT ACORN GPS NETWORK.

4. REFERENCE MAP(S):
A. MAP OF TWO LOTS PROPERTY OF JOSEPH DAVIDSON BENZ ST ANSONIA, CONN.
BY, DANIEL B. GUION
DATED, MAY. 16, 1985
B. ANTHONY & ELAINE DEFAZIO LOT 12 ANSONIA, CONN.
BY, JOSEPH WYSOWSKI
DATED, AUGUST 14, 1969
C. MAP SHOWING HOUSE LOCATION ON LOT #14 WHITE OAK RIDGE ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, OCTOBER 2, 1962
D. MAP SHOWING HOUSE LOCATION ON LOT #2 WHITE OAK RIDGE ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, SEPTEMBER 6, 1961
E. MAP SHOWING HOUSE LOCATION ON LOT #6 WHITE OAK RIDGE ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, OCTOBER 25, 1961
F. WHITE OAK RIDGE DEVELOPMENT BY FOREST HEIGHTS INC. ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, MAY 1961, REVISED TO JUNE 9, 1961
G. MAP OF BUILDING LOTS OWNED BY ANDREW WEISZ, THOMAS WEISZ, & JOSEPH DIGIORGI SECTION 1 ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, AUGUST 19, 1959
H. MOUNTAIN VIEW ESTATES SECTION 1 ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959
I. MOUNTAIN VIEW ESTATES SECTION 3 ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, MARCH 5, 1959
J. LOT #1 MOUNTAIN VIEW ESTATES ANSONIA CONN
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959
K. LOT #2 MOUNTAIN VIEW ESTATES ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, DECEMBER 26, 1958
L. LOT #3 MOUNTAIN VIEW ESTATES ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, DECEMBER 26, 1958
M. LOT #4 MOUNTAIN VIEW ESTATES ANSONIA CONN
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959
N. LOT #5 MOUNTAIN VIEW ESTATES ANSONIA CONN
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959

5. PROPERTY IS SUBJECT TO AND TOGETHER WITH THE FOLLOWING:
A. SUBJECT TO AN AGREEMENT IN FAVOR OF THE CITY OF ANSONIA AS PER VOLUME 121 PAGE 208 OF THE ANSONIA LAND RECORDS.
B. RIGHTS, RESTRICTIONS, ENCUMBRANCES, COVENANTS, EASEMENTS, ETC. AS PER THE RECORD MAY APPEAR.

6. THE SUBJECT PROPERTY IS DESIGNATED AS MAP 87, BLOCK 00, LOT 01 ON THE ANSONIA ASSESSOR'S RECORDS.

7. PROPERTY IS LOCATED IN FLOOD ZONE(S): "X" (AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN) AS DEPICTED ON F.I.R.M. COMMUNITY NO. 090090C0408J DATED MAY 16, 2017 AND 090090C0406H DATED DECEMBER 17, 2010.

8. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON MAY HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES; FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE. THE LOCATIONS OF WHICH ARE UNKNOWN TO GODFREY–HOFFMAN HODGE, LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

TO CONNECTICUT ATTORNEYS TITLE INSURANCE COMPANY,
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 6, 7(A), 8, 9, 10 , 11, 12, 13, 14, 16, 17, 18, 19 AND 20 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON FEBRUARY 1, 2019.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ADAM HOFFMAN, L.S. #15168

NOT VALID WITHOUT LIVE SIGNATURE AND SEAL.

STATE OF CONNECTICUT ADAM HOFFMAN No.15168 LICENSED LAND SURVEYOR

NO.	DATE	DESCRIPTION

REVISIONS

ALTA/NSPS LAND TITLE SURVEY - PROPERTY SURVEY

PREPARED FOR

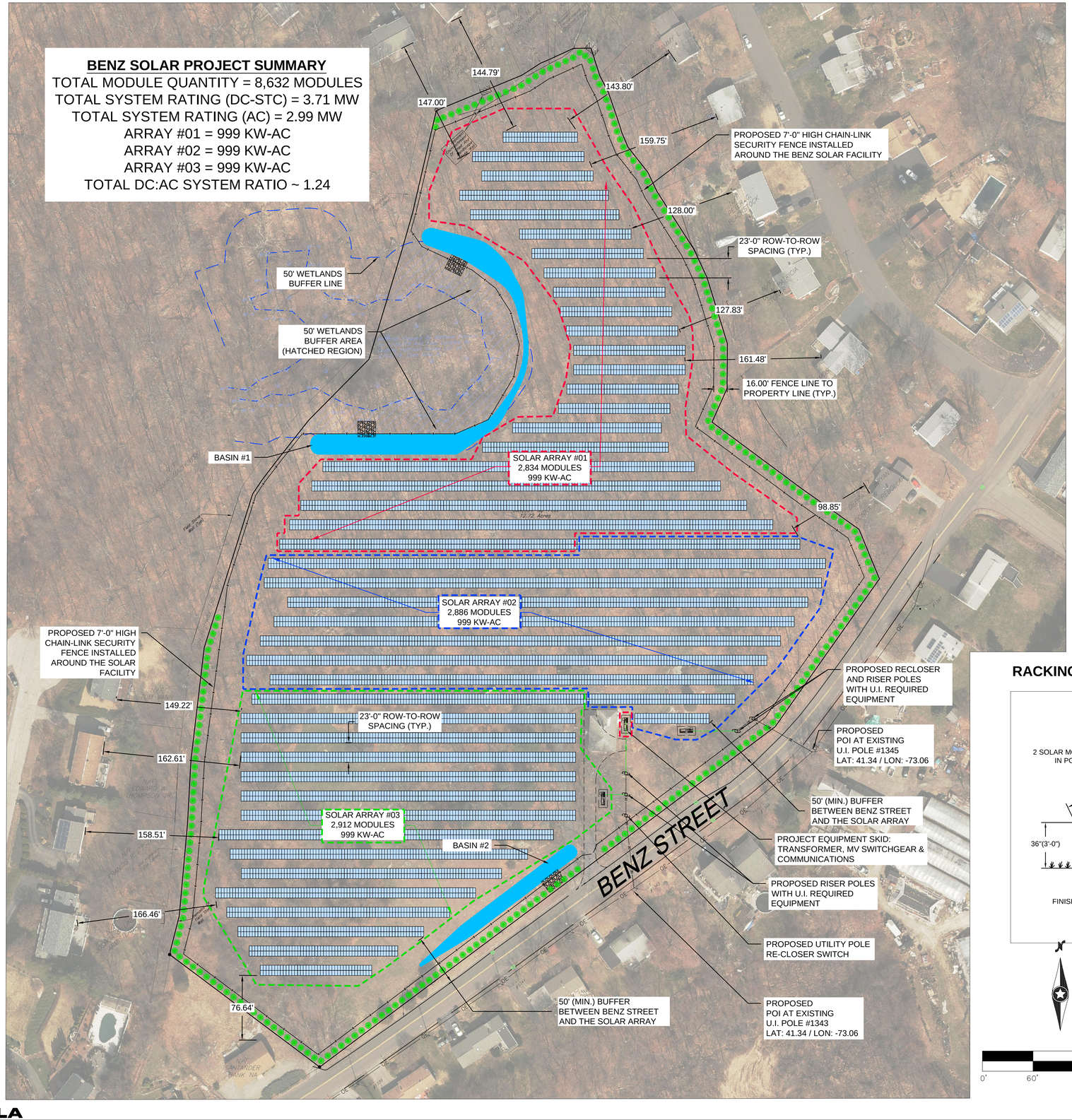
ECOS ENERGY LLC

31 BENZ STREET
ANSONIA, CONNECTICUT

0 25 50 75 100 125

GODFREY HOFFMAN HODGE, LLC
PROFESSIONAL LAND SURVEYORS & CIVIL ENGINEERS
26 BROADWAY NORTH HAVEN, CT 06473; TEL: 203.239.4217 - WWW.GODFREYHOFFMAN.COM
1783 FARMINGTON AVENUE, UNIONVILLE, CT 06085; TEL: 860.673.0444 - WWW.HODGELLC.COM

DRAWN BY:	KMA
CHECKED BY:	CSW
DATE:	02-04-2019
SCALE:	1"=50'
PROJECT:	19-006
DRAWING:	1 of 1



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED PROJECT FENCE
- PROPOSED GRAVEL ACCESS ROAD
- UMV — PROPOSED AC DISTRIBUTION
- OE — PROPOSED OVERHEAD ELECTRIC
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- ARBORVITAE SCREENING TREES
- BASIN OUTLET

PROJECT INFORMATION:

EXISTING ZONING : R
PROPOSED USE : SPECIAL COMMERCIAL

SPECIFIC SITE NOTES:
1. NO LIGHTING PROPOSED WITH THE PROJECT
2. NO AUDIBLE NOISE GREATER THAN THE SITES EXISTING AMBIENT NOISE LEVEL SHALL BE DETECTABLE AT OR BEYOND THE PROPERTY LINE OF THE PROJECT
3. EMERGENCY VEHICULAR & SITE ACCESS TO BE PROVIDED TO ALL LOCAL RESPONDERS (POLICE, FIRE, ETC...)

PROJECT AREAS & IMPACTS:

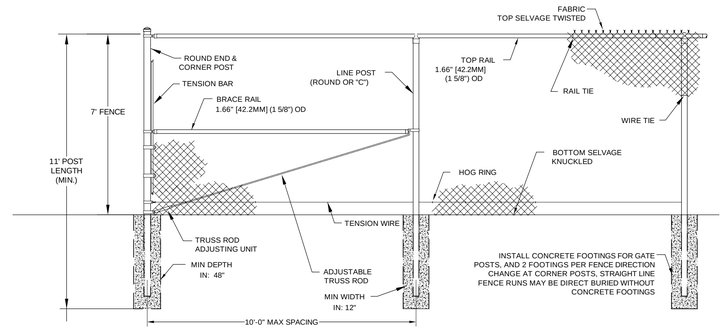
TOTAL SITE AREA = 12.72 ACRES

TOTAL SITE CLEARING = 10.68 ACRES

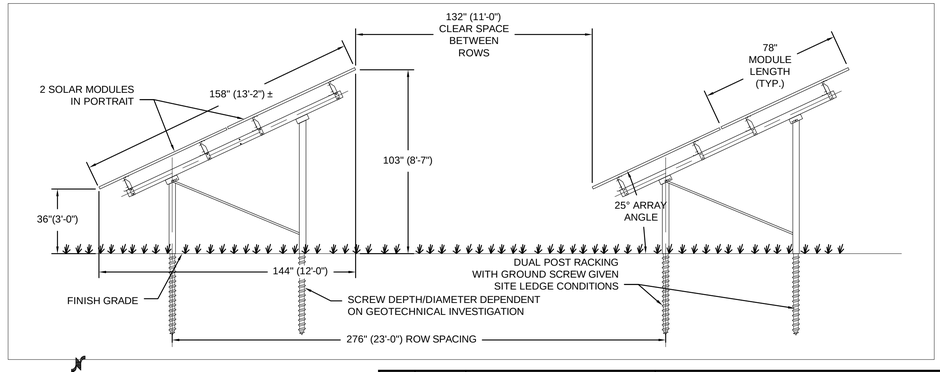
TOTAL ARRAY FOOTPRINT (FENCE LIMITS) = 11.35 ACRES

TOTAL PROPOSED IMPERVIOUS:
GRAVEL ACCESS ROAD, STRUCTURAL POSTS & EQUIPMENT PADS
SITE TOTAL = 0.17 ACRES

PERIMETER FENCE DETAIL:



RACKING PROFILE DETAIL:



No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

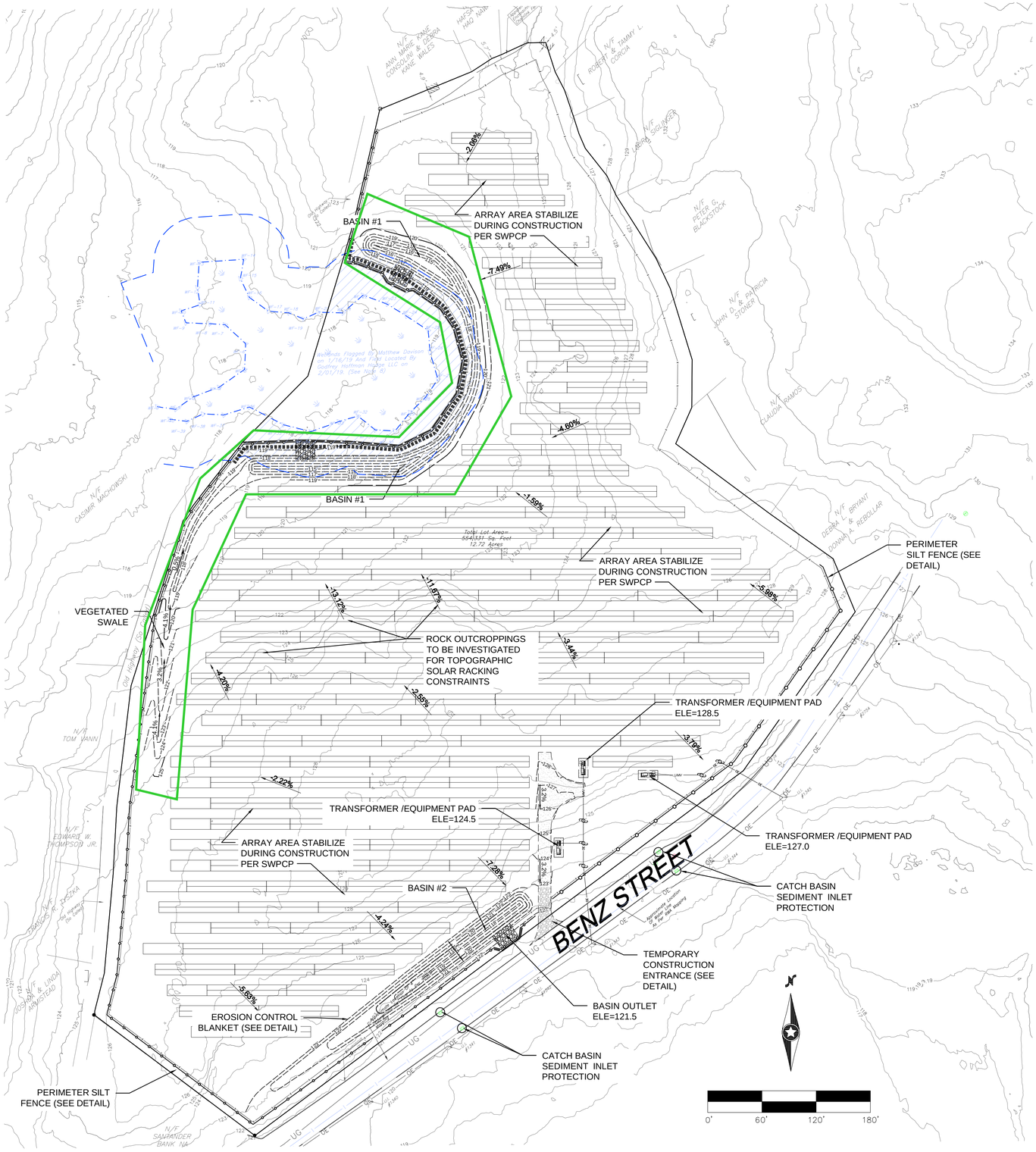
31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

SITE PLAN

Project No. CLA-6430
Proj. Engineer F.M.B.
Date: 2/11/2020
Sheet No. 3

CLA



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

CONSTRUCTION NOTES:

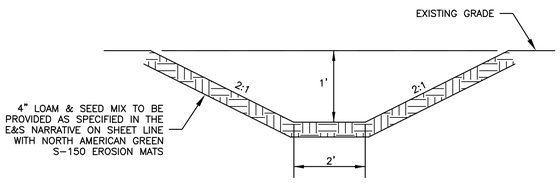
1. THE CONTRACTOR SHALL PERFORM ALL TREE REMOVAL ACTIVITIES ON SITE TO ALLOW FOR SEDIMENT TRAP INSTALLATION, NO GRUBBING IS TO OCCUR DURING TREE REMOVAL, PRIOR TO SEDIMENT TRAP INSTALLATION.
2. ALL SEDIMENT TRAP'S IDENTIFIED ON THE PLAN SHALL BE STAKED BY A REGISTERED SURVEYOR AND INSTALLED PER PLANS PRIOR TO ANY CONSTRUCTION ACTIVITY.
3. AS-BUILT DRAWINGS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF THE PROJECT.

EROSION CONTROL NOTES:

1. DEVELOPER/CONTRACTOR TO OBTAIN A DEEP GENERAL STORMWATER PERMIT PRIOR TO BEGINNING CONSTRUCTION.
2. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE ANY SOIL DISTURBANCE.
3. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
4. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES.
5. WETLAND AREAS AND SURFACE AREAS SHALL BE PROTECTED FROM SEDIMENT. OFF-SITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED THROUGH THE PROJECT AREA WITHOUT CAUSING EROSION. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
6. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. STABILIZATION MEASURES SUCH AS HYDRO-SEEDING OR APPLICATION OF HAY/MULCH OR SOIL NETTING SHALL BE APPLIED PRIOR TO REMOVAL OF TEMPORARY EROSION MEASURES AND INSPECTED WEEKLY UNTIL STABILIZATION IS COMPLETE. TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED ONCE STABILIZATION OF ALL SITE SOILS HAS BEEN ACHIEVED AND WRITTEN AUTHORIZATION TO DO SO HAS BEEN PROVIDED BY THE STORM-WATER AUTHORITY. TRAPPED SEDIMENT SHALL BE REMOVED IMMEDIATELY WITH TEMPORARY EROSION CONTROL METHODS AND LAWFULLY DISPOSED OF OFF-SITE. OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN THIRTY DAYS.

NOTES

SOLAR MODULE FOOTPRINT WITHIN THE FENCELINE OF THE PROJECT REPRESENTED IN THESE DOCUMENTS WILL BE ADJUSTED BASED ON TOPOGRAPHICAL CONSTRAINTS PRESENTED BY SITE SLOPES AND STORMWATER BASINS. THE PROJECT FOOTPRINT IN THESE DOCUMENTS REPRESENTS THE PROJECT APPROVED BY THE CONNECTICUT SITING COUNCIL ON JANUARY 18, 2018



VEGETATED SWALE
NOT TO SCALE

No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

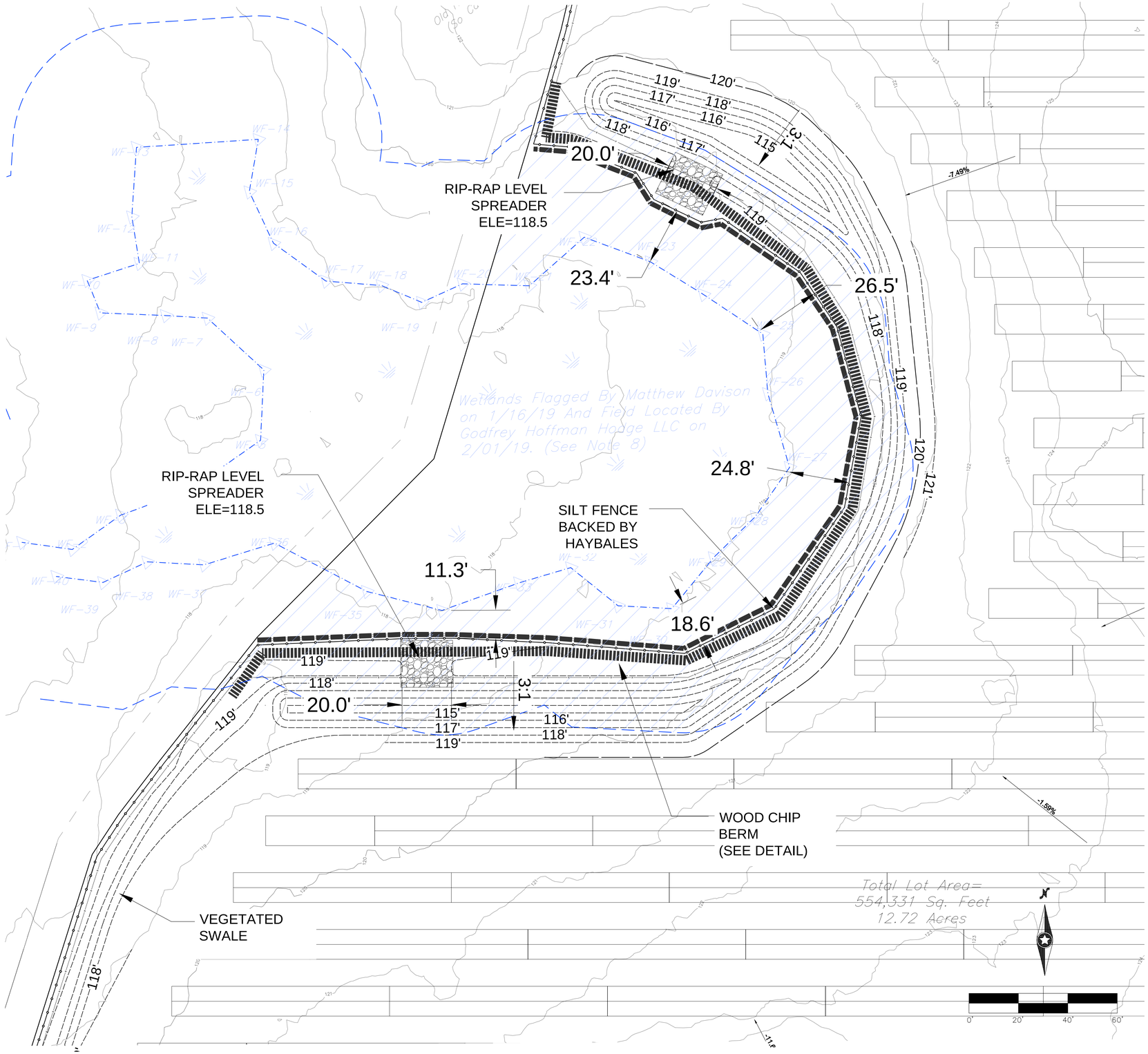
31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

GRADING AND EROSION CONTROL PLAN

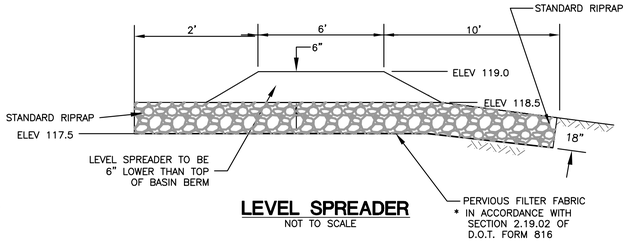
Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 4

CLA



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET



LEVEL SPREADER
NOT TO SCALE

SEED MIX FOR STORMWATER TREATMENT BASIN

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. IT IS AN EXCELLENT SEED MIX FOR ECOLOGICALLY APPROPRIATE RESTORATIONS ON MOIST SITES THAT REQUIRE QUICK STABILIZATION AS WELL AS LONG-TERM ESTABLISHMENT OF NATIVE VEGETATION. THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASIS THAT DO NOT NORMALLY HOLD STANDING WATER. SOME PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING.

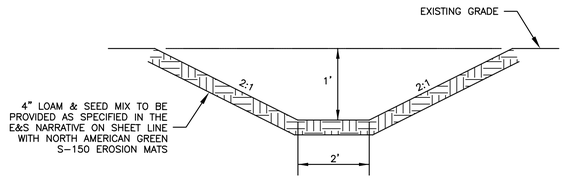
SEEDING: THE MIX MAY BE APPLIED BY HYDROSEEDING, BY MECHANICAL SPREADER, BY HYDRO-SEEDING OR ON SMALL SITES IT CAN BE SPREAD BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, THEN LIGHTLY RAKE OVER. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH A SPRING OR EARLY FALL SEEDING. SUMMER AND LATE FALL SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.

APPLICATION RATE: 35 LBS/ACRE (1250 SQ. FT./LB.)

SPECIES *: SWITCHGRASS (PANICUM VIRGATUM), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), CREEPING RED FESCUE (FESTUCA RUBRA), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS STOLONIFERA), SOFT RUSH (JUNCUS EFFUSUS), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), GRASS-LEAVED GOLDENROD (EUTHAMIA GRAMINIFOLIA), GREEN BULRUSH (SCIRPUS ATROVIRENS), BONESET (EUPATORIUM PERFOLIATUM), BLUE VERVAIN (VERBENA HASTATA) UPLAND BENTGRASS (AGROSTIS PERENNANS), BIG BLUESTEM, NIAGRA (ANDROPOGON GERARDII), SENSITIVE FERN (ONOCLEA SENSIBILIS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), WOOLGRASS (SCIRPUS CYPERINUS).

NOTES

SOLAR MODULE FOOTPRINT WITHIN THE FENCELINE OF THE PROJECT REPRESENTED IN THESE DOCUMENTS WILL BE ADJUSTED BASED ON TOPOGRAPHHICAL CONSTRAINTS PRESENTED BY SITE SLOPES AND STORMWATER BASINS. THE PROJECT FOOTPRINT IN THESE DOCUMENTS REPRESENTS THE PROJECT APPROVED BY THE CONNECTICUT SITING COUNCIL ON JANUARY 18, 2018



VEGETATED SWALE
NOT TO SCALE

No.	Date	Revision
	2/11/20	CSC SUBMISSION

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317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

31 BENZ STREET
PLAINFIELD, CT 06239

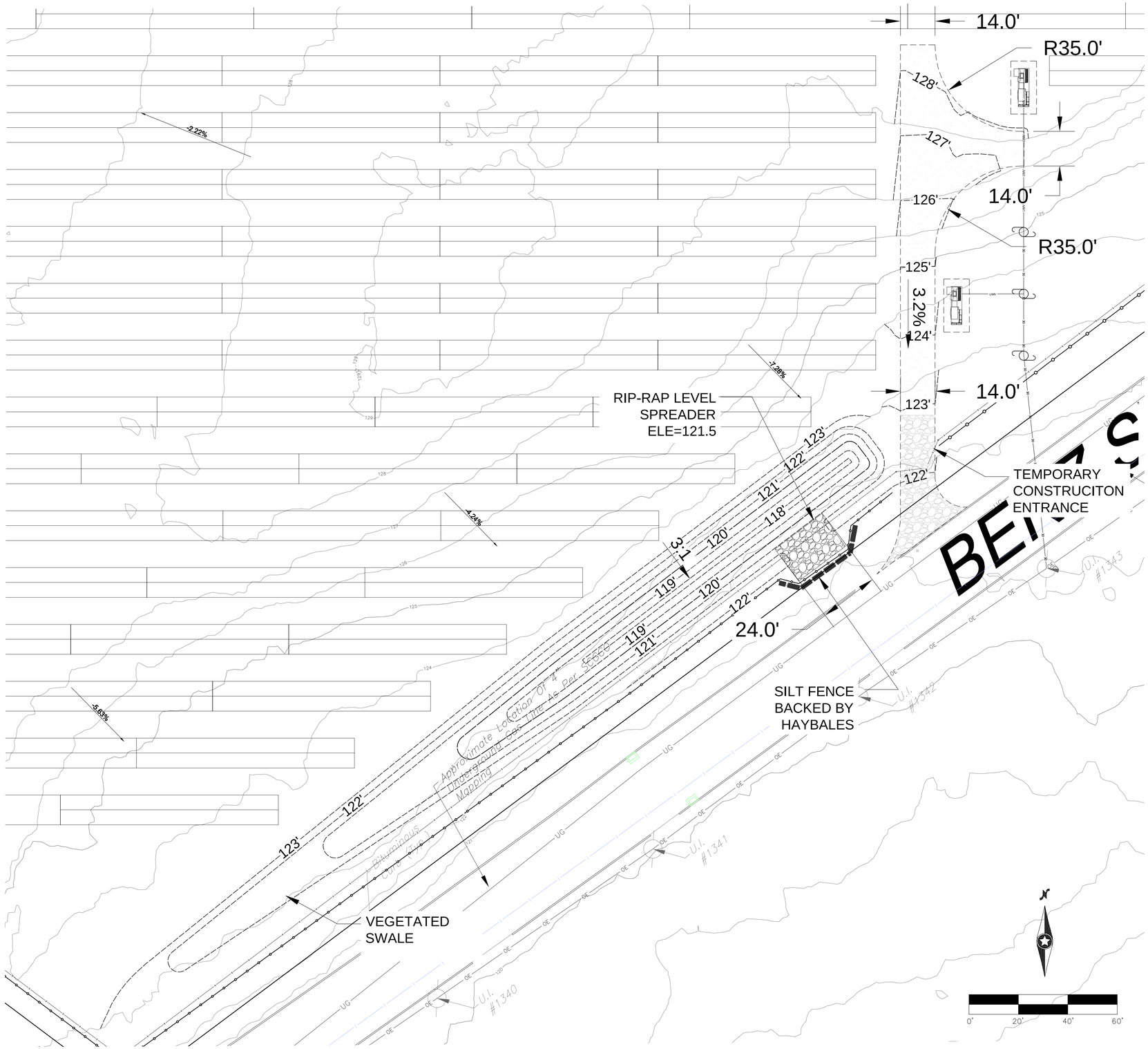
BENZ STREET SOLAR

GRADING PLAN : BASIN #1

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	5

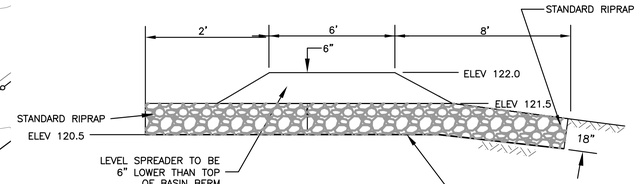
STATE OF CONNECTICUT · ERIC M. BOTHWELL · 24134 · REGISTERED PROFESSIONAL ENGINEER

CLA



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET



LEVEL SPREADER
NOT TO SCALE

SEED MIX FOR STORMWATER TREATMENT BASIN

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. IT IS AN EXCELLENT SEED MIX FOR ECOLOGICALLY APPROPRIATE RESTORATIONS ON MOIST SITES THAT REQUIRE QUICK STABILIZATION AS WELL AS LONG-TERM ESTABLISHMENT OF NATIVE VEGETATION. THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASIS THAT DO NOT NORMALLY HOLD STANDING WATER. SOME PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING.

SEEDING: THE MIX MAY BE APPLIED BY HYDROSEEDING, BY MECHANICAL SPREADER, BY HYDRO-SEEDING OR ON SMALL SITES IT CAN BE SPREAD BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, THEN LIGHTLY RAKE OVER. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH A SPRING OR EARLY FALL SEEDING. SUMMER AND LATE FALL SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.

APPLICATION RATE: 35 LBS/ACRE (1250 SQ. FT./LB.)

SPECIES *: SWITCHGRASS (PANICUM VIRGATUM), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), CREEPING RED FESCUE (FESTUCA RUBRA), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS STOLONIFERA), SOFT RUSH (JUNCUS EFFUSUS), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), GRASS-LEAVED GOLDENROD (EUTHAMIA GRAMINIFOLIA), GREEN BULRUSH (SCIRPUS ATROVIRENS), BONESET (EUPATORIUM PERFOLIATUM), BLUE VERVAIN (VERBENA HASTATA) UPLAND BENTGRASS (AGROSTIS PERENNANS), BIG BLUESTEM, NIAGRA (ANDROPOGON GERARDII), SENSITIVE FERN (ONOCLEA SENSIBILIS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), WOOLGRASS (SCIRPUS CYPERINUS).

No.	Date	Revision
	2/11/20	CSC SUBMISSION

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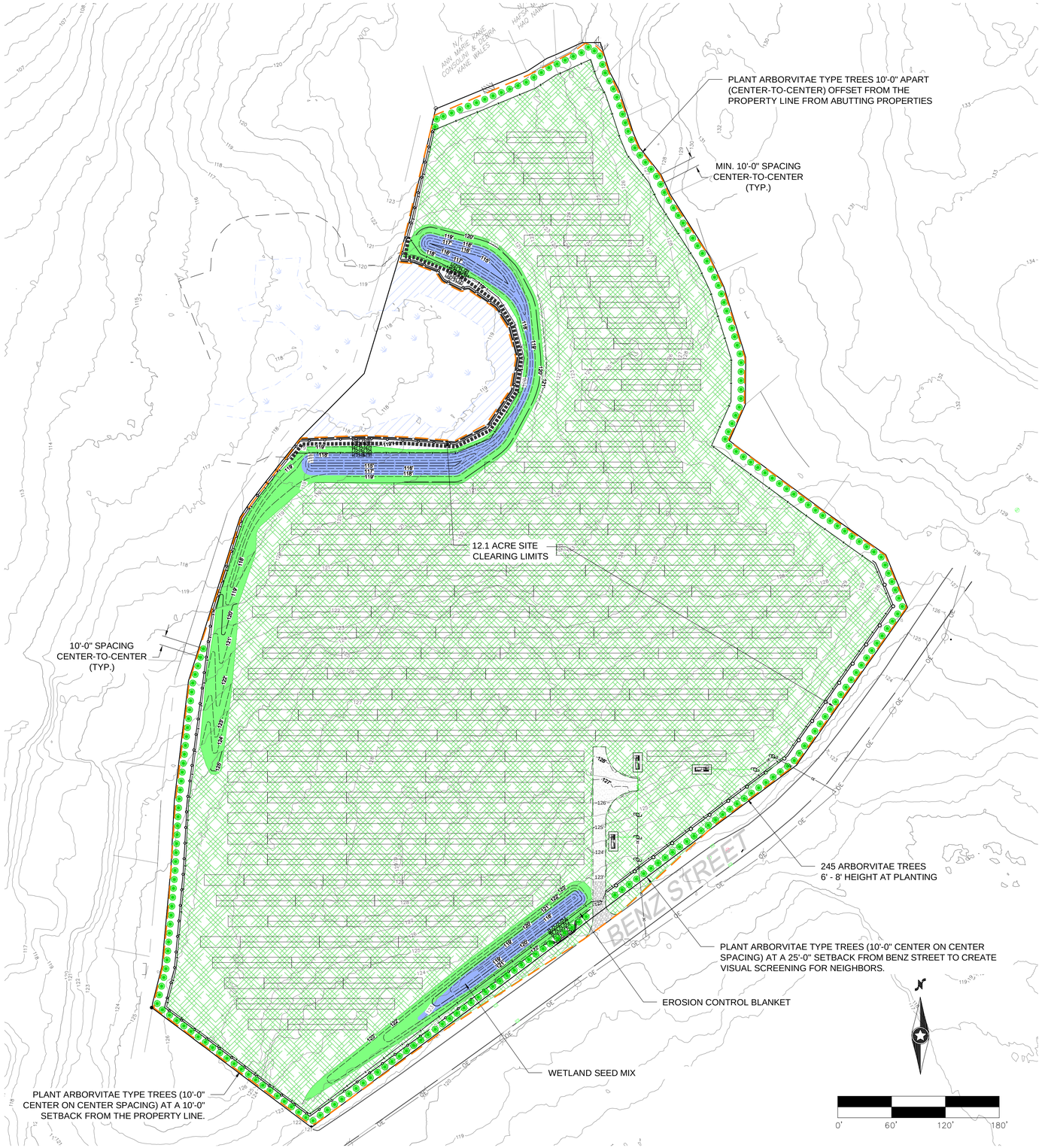
31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

GRADING PLAN : BASIN #2

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	6

CLA



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CLEARING LIMITS
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

SEED LEGEND:

- STORMWATER BASIN SEED MIX (AREA = 0.29 AC)
- EROSION CONTROL BLANKET WITH SEED (AREA = 0.89 AC)
- SOLAR ARRAY SEEDING / HAY MULCH EROSION CONTROL (AREA = 10.3 AC)

SEED MIX FOR STORMWATER TREATMENT BASIN

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. IT IS AN EXCELLENT SEED MIX FOR ECOLOGICALLY APPROPRIATE RESTORATIONS ON MOIST SITES THAT REQUIRE QUICK STABILIZATION AS WELL AS LONG-TERM ESTABLISHMENT OF NATIVE VEGETATION. THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASIS THAT DO NOT NORMALLY HOLD STANDING WATER. SOME PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING.

SEEDING: THE MIX MAY BE APPLIED BY HYDROSEEDING, BY MECHANICAL SPREADER, BY HYDRO-SEEDING OR ON SMALL SITES IT CAN BE SPREAD BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, THEN LIGHTLY RAKE OVER. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH A SPRING OR EARLY FALL SEEDING. SUMMER AND LATE FALL SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.

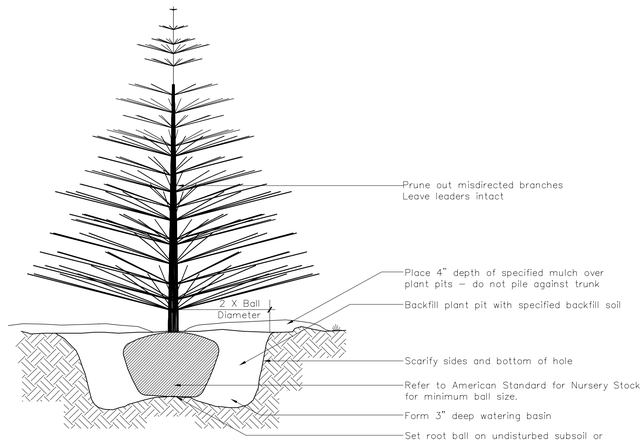
APPLICATION RATE: 35 LBS/ACRE (1250 SQ. FT./LB.)

SPECIES *: SWITCHGRASS (PANICUM VIRGATUM), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), CREEPING RED FESCUE (FESTUCA RUBRA), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS STOLONIFERA), SOFT RUSH (JUNCUS EFFUSUS), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), GRASS-LEAVED GOLDENROD (EUTHAMIA GRAMINIFOLIA), GREEN BULRUSH (SCIRPUS ATROVIRENS), BONESET (EUPATORIUM PERFOLIATUM), BLUE VERVAIN (VERBENA HASTATA) UPLAND BENTGRASS (AGROSTIS PERENNANS), BIG BLUESTEM, NIAGRA (ANDROPOGON GERARDII), SENSITIVE FERN (ONOCLEA SENSIBILIS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), WOOLGRASS (SCIRPUS CYPERINUS).

SEEDING NOTES:

1. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS ASSOCIATED WITH TREE AND ROCK REMOVAL AND SITE CLEARING. CONTRACTOR SHALL A INSTALL A 50% / 50% CLOVER / FESCUE MIX OR ENGINEER APPROVED ALTERNATE SEED MIXTURE.
2. ALL SEDIMENT TRAP SIDE SLOPES ARE 3:1 AND SHALL BE SEEDED AND BLANKETED

ARBORVITAE TREE DETAIL:



No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

LANDSCAPE PLAN

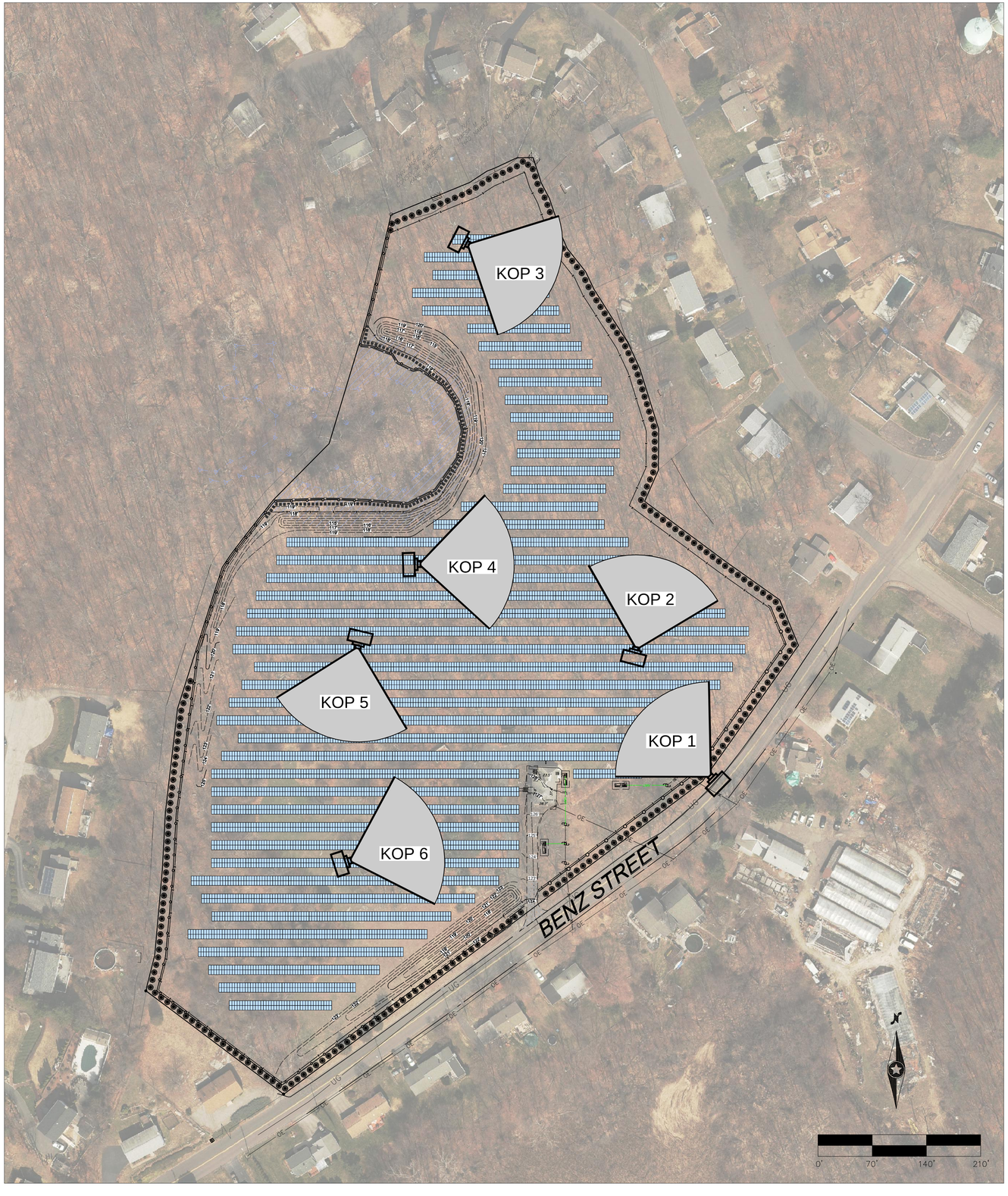
Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 7

CLA

KOP 4 - MIDDLE OF SITE LOOKING EAST

KOP 5 - EASTERN MIDDLE OF SITE LOOKING SOUTH

KOP 6 - SOUTH WEST OF SITE LOOKING EAST



KOP 3 - NORTHERN SITE, LOOKING SOUTH-EAST

KOP 2 - BENZ STREET LOOKING NORTH

KOP 1 - SOUTH OF BENZ STREET LOOKING NORTH-WEST

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BENZ STREET SOLAR

KEY OBSERVATION POINTS

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 8

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EXHIBIT A: PROJECT CROSS SECTION (NORTHERN SITE VIEW)

(SCALE: 1" = 80')

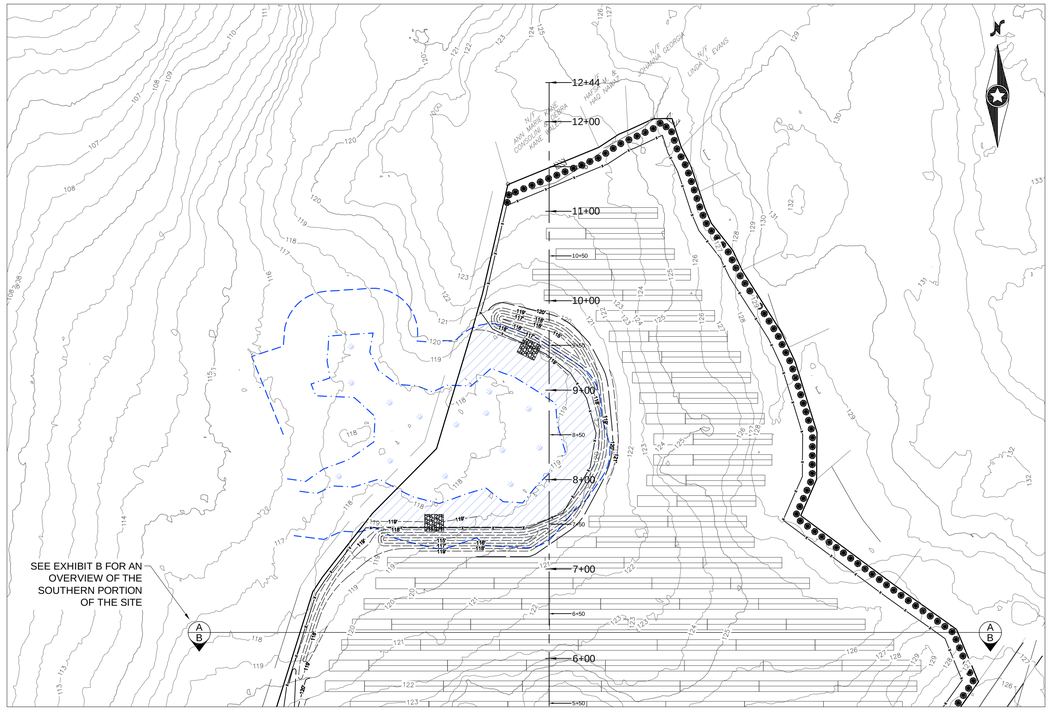
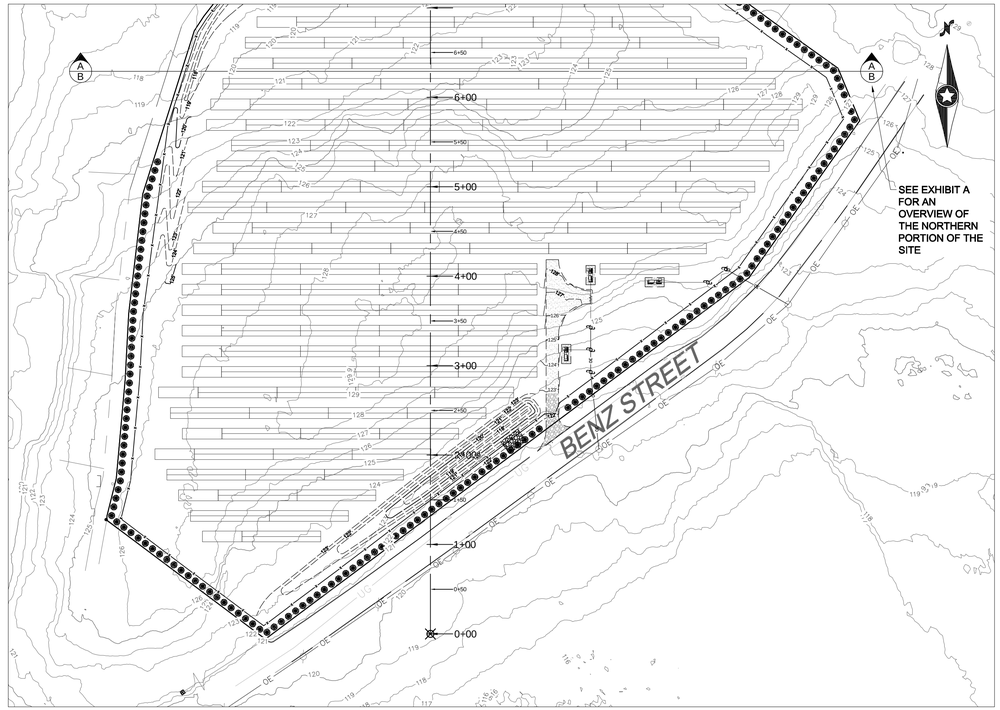
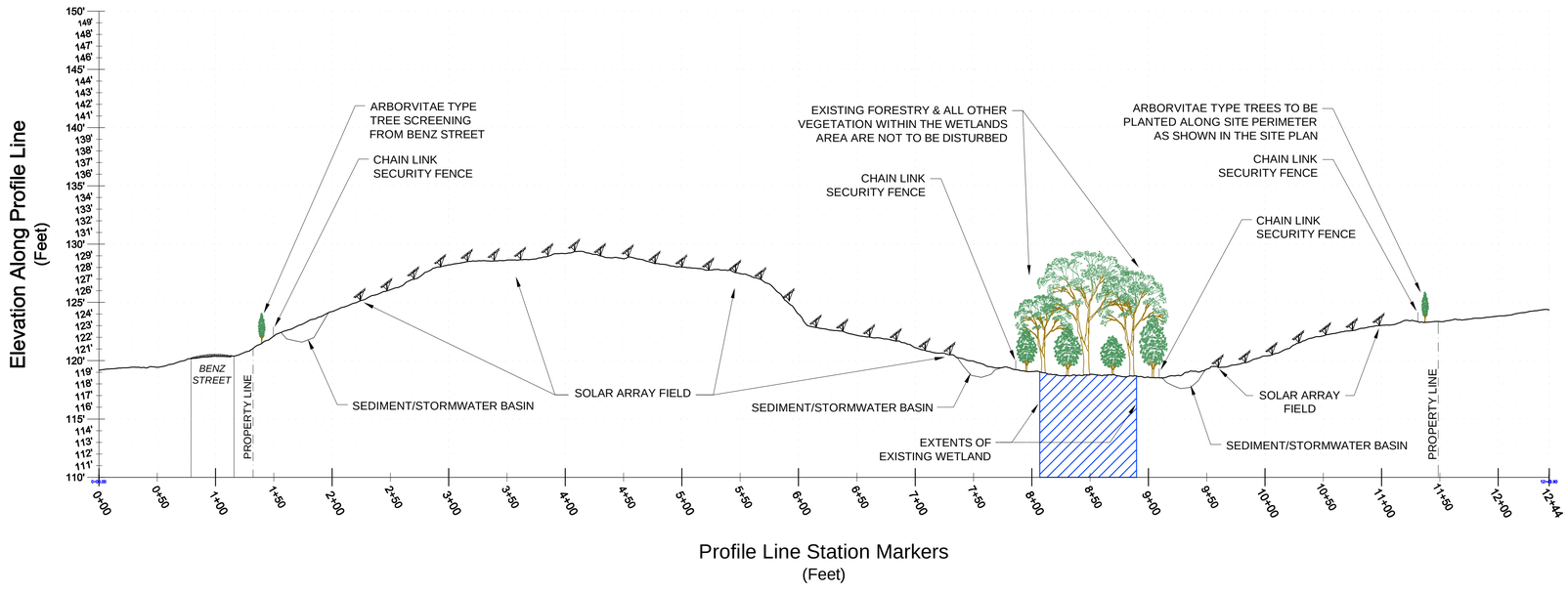


EXHIBIT B: PROJECT CROSS SECTION (SOUTHERN SITE VIEW)

(SCALE: 1" = 80')



PROJECT PROFILE:



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BENZ STREET SOLAR

PROJECT CROSS SECTION

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	9

CLA

ROAD DESIGN PARAMETERS

1. ROAD MAINTENANCE CAN BE EXPECTED OVER THE LIFE OF THE PERMANENT FACILITY.

SPECIAL PROVISIONS FOR GRADING AND EROSION CONTROL

THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AS PLANNED AND SPECIFIED FOLLOWING BEST MANAGEMENT PRACTICES AS OUTLINED BY THE STATE OF CONNECTICUT AND BEING IN CONFORMANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL STORMWATER PERMIT. SEE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR EROSION CONTROL AND RESTORATION SPECIFICATIONS. UNLESS OTHERWISE NOTED OR MODIFIED HEREIN, ALL SECTIONS OF THE GENERAL CONDITIONS SHALL APPLY.

EXECUTION

1. CLEARING AND GRUBBING
   A. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL TREES, STUMPS, BRUSH, AND DEBRIS WITHIN THE GRADING LIMITS SHOWN ON THE PLANS. THE CONTRACTOR IS TO REMOVE ONLY THOSE TREES WHICH ARE DESIGNATED BY THE OWNER'S REPRESENTATIVE FOR REMOVAL, AND SHALL EXERCISE EXTREME CARE AROUND EXISTING TREES TO BE SAVED.
2. TOPSOIL STRIPPING
   A. TOPSOIL SHALL BE STRIPPED FROM ALL ROADWAY AREAS THROUGH THE ROOT ZONE. TOPSOIL SHALL NOT BE STRIPPED OUTSIDE OF THE DESIGNATED DISTURBANCE AREAS.
   B. ANY TOPSOIL, THAT HAS BEEN STRIPPED, SHALL BE RE-SPREAD OR STOCKPILED WITHIN GRADING AREAS AND/OR USED AS FILL OUTSIDE OF THE DISTURBANCE AREAS, AS DIRECTED BY THE ENGINEER.
3. EMBANKMENT CONSTRUCTION.
   A. EMBANKMENT CONSTRUCTION SHALL CONSIST OF THE PLACING OF SUITABLE FILL MATERIAL, AFTER TOPSOIL STRIPPING, ABOVE THE EXISTING GRADE. GENERALLY, EMBANKMENTS SHALL HAVE COMPACTED SUPPORT SLOPES OF TWO AND A HALF FEET HORIZONTAL TO ONE FOOT VERTICAL. THE MATERIAL FOR EMBANKMENT CONSTRUCTION SHALL BE OBTAINED FROM THE ACCESS ROAD EXCAVATION (SEE GEOTECHNICAL REPORT FOR RESTRICTIONS), OR ANY SUITABLE, APPROVED SOIL OBTAINED OFFSITE BY CONTRACTOR, AS DIRECTED OR APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 9".
   B. SIDE SLOPES GREATER THAN 2.5:1 WILL NOT BE PERMITTED, UNLESS OTHERWISE NOTED ON THE PLAN.

TESTING REQUIREMENTS:

1. TESTING SHALL BE PERFORMED BY A DESIGNATED INDEPENDENT TESTING AGENCY.
2. SUBMIT TESTING AND INSPECTION RECORDS SPECIFIED TO THE CIVIL ENGINEER OF RECORD FOR REVIEW.
   A. THE ENGINEER WILL REVIEW THE TESTING AND INSPECTION RECORDS TO CHECK CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONSTRUCTION CONTRACTOR FROM THE RESPONSIBILITY FOR CORRECTING DEFECTIVE WORK.
3. PROOF ROLLING:
   A. PROOF-ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER OR QUALIFIED GEOTECHNICAL REPRESENTATIVE USING A FULLY LOADED TANDEM AXLE DUMP TRUCK WITH A MINIMUM GROSS WEIGHT OF 25 TONS OR A FULLY LOADED WATER TRUCK WITH AN EQUIVALENT AXLE LOADING. PROOF-ROLLING ACCEPTANCE STANDARDS INCLUDE NO RUTTING GREATER THAN 1.5 INCHES, AND NO "PUMPING" OF THE SOIL BEHIND THE LOADED TRUCK.
4. SIEVE ANALYSIS:
   A. SIEVE ANALYSIS SHALL BE CONDUCTED IN ACCORDANCE WITH AASHTO T27
5. PROCTOR:
   A. PROCTORS SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1557
6. ATTERBERG LIMITS:
   A. ATTERBERG LIMITS SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T89 AND T90
7. MOISTURE DENSITY (NUCLEAR DENSITY):
   A. MOISTURE DENSITY TESTING SHALL BE DONE IN ACCORDANCE WITH AASHTO T310

SUBGRADE COMPACTION, TEST ROLLING AND AGGREGATE BASE COMPACTION:

1. FILL MATERIAL:
   A. SOILS USED AS FILL MATERIAL SHALL BE TESTED FOR GRAIN SIZE ANALYSIS, MOISTURE CONTENT, ATTERBERG LIMITS ON FINES CONTENT, AND PROCTOR TESTS (MODIFIED DRY MAXIMUM DENSITY).
      a. FOR PLACED & COMPACTED FILLS, PROVIDE ONE COMPACTION TEST PER LIFT FOR EVERY 1000 FT OF ROAD LENGTH. INCLUDE THE LOCATION, DRY DENSITY, MOISTURE CONTENT, AND COMPACTION PERCENT BASED ON MODIFIED PROCTOR MAXIMUM DRY DENSITY.
   B. IN ROADWAY CUT AREAS, OR WHERE EMBANKMENT CONSTRUCTION REQUIRES LESS THAN 12 INCHES OF FILL PLACEMENT, COMPACT TO A MINIMUM OF 95 PERCENT OF THE MATERIAL'S MODIFIED PROCTOR MAXIMUM DRY DENSITY.
2. COMPACTED SUBGRADE:
   A. THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE TO IDENTIFY AREAS OF UNSTABLE SUBGRADE.
   B. IF PROOF ROLLING DETERMINES THAT THE SUBGRADE STABILIZATION CANNOT BE ACHIEVED, THE FOLLOWING ALTERNATIVES WILL BE IMPLEMENTED:
      a. REMOVE UNSUITABLE MATERIAL AND REPLACE WITH SUITABLE EMBANKMENT.
      b. SCARIFY, DRY, AND RECOMPACT SUBGRADE AND PERFORM ADDITIONAL PROOF ROLL.
      c. INCREASE ROAD BASE THICKNESS.
   C. PROVIDE 1 MOISTURE DENSITY COMPACTION TESTS FOR EVERY 1000 L.F. OF ROAD LENGTH. COMPACTED SUBGRADE MUST BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY AT ±3% OF OPTIMUM MOISTURE CONTENT FOR GRANULAR SOILS AND AT -1 TO +3% OF OPTIMUM MOISTURE CONTENT FOR COHESIVE SOILS.
3. AGGREGATE BASE:
   A. AGGREGATE BASE SHALL BE PROOF-ROLLED OVER THE ENTIRE LENGTH. PROVIDE 1 SIEVE ANALYSIS PER 2500 CY OF ROAD BASE PLACED.
      a. IF PROOF ROLLING DETERMINES THAT THE ROAD IS UNSTABLE, ADDITIONAL AGGREGATE SHALL BE ADDED UNTIL THE UNSTABLE SECTION IS ABLE TO PASS A PROOF ROLL.

TABLE 1: TESTING SCHEDULE SUMMARY

LOCATION	TEST	FREQUENCY
STRUCTURAL FILL	GRAIN SIZE ANALYSIS, MOISTURE CONTENT, ATTERBERG LIMITS ON FINES CONTENT, AND PROCTOR	1 PER MAJOR SOIL TYPE
	MOISTURE DENSITY	1 PER 2,000 CY OR MIN. 1 PER LIFT
COMPACTED SUBGRADE	PROOF-ROLL	ENTIRE LENGTH
	MOISTURE DENSITY TEST (NUCLEAR DENSITY)	1 PER 1,000 FT OR MIN. 5 FOR THE SITE
AGGREGATE BASE	PROOF-ROLL	ENTIRE LENGTH
	SIEVE ANALYSIS	1 PER 2,500 CY

GENERAL NOTES:

1. THE PLANIMETRIC FEATURES, GROUND SURFACE CONTOURS ON A LIDAR SURFACE PROVIDED NOAA.
2. NO GRADING OR SOIL DISTURBANCE IS PERMITTED OUTSIDE OF THE GRADING LIMITS IDENTIFIED ON THE PLANS.
3. GRADE ALL PROPOSED ROADS TO THE SLOPES PROPOSED ON THE PLANS.
4. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONSTRUCTION ACTIVITIES SHALL NOT BLOCK THE NATURAL OR MANMADE CREEKS OR DRAINAGE SWALES CAUSING RAINWATER TO POND. ADDITIONAL CULVERTS IN EXCESS OF THOSE ON THE PLANS MAY BE REQUIRED AS APPROVED BY THE ENGINEER.
5. THE CONTRACTOR SHALL NOTIFY DIGSAFE AT LEAST 48 HOURS BEFORE EXCAVATION ACTIVITIES COMMENCE.
6. WETLAND INFORMATION SHOWN ON THE PLAN WAS PROVIDED BY ROB HELLSTROM LAND SURVEYING AND FLAGGED BY HIGHLANDS SOILS. THE GENERAL CONTRACTOR SHALL VERIFY THAT ALL WETLAND PERMITS HAVE BEEN SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION COMMENCING.
7. ELECTRICAL COLLECTION SYSTEM SHOWN ON THE PLAN SHALL BE CONSIDERED PRELIMINARY. CONTRACTOR SHALL REFER TO FINAL ELECTRICAL DESIGN PLANS FOR ACTUAL DESIGN LOCATIONS.

STORMWATER POLLUTION PREVENTION PLAN (SWPCP):

1. REFER TO THE SWPPP BOOKLET FOR SEDIMENT AND EROSION CONTROL PROCEDURES, LOCATIONS OF BMPs, DETAILS, AND INSPECTION INFORMATION.
2. ALL AREAS DISTURBED DURING CONSTRUCTION ACTIVITIES AND NOT COVERED BY ROAD SURFACING MATERIALS, SHALL BE SEEDED IN ACCORDANCE WITH THE SWPPP PLAN.
3. TEMPORARY EROSION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE TEMPORARY EROSION CONTROL PLAN SHALL BE IN ACCORDANCE WITH STATE OF CONNETICUT, THE EPA, AND THE SWPCP ON FILE.

SLOPE STABILIZATION:

ALL AREAS DESIGNATED ON THE PLAN FOR SLOPE STABILIZATION SHALL BE GRADED AND COMPACTED, SMOOTH AND CLEAN TO THE FINISH CONTOURS SHOWN ON THE PLAN, WITH A MINIMUM OF 4 INCHES OF TOPSOIL PLACED ON THE AREA. STABILIZATION SHALL BE ACHIEVED IN ONE OF TWO MANNERS:

EITHER: 1) HAND-PLACED RIPRAP
OR:
2) SEED WITH EROSION CONTROL AND REVEGITATION MAT (ECRM)

1. PLACEMENT OF RIP-RAP

   RIPRAP HAND PLACED. HAND-PLACED RIPRAP SHALL CONSIST OF ROUGH UNHEWN QUARRY STONES, APPROXIMATELY RECTANGULAR, PLACED DIRECTLY ON THE SPECIFIED SLOPES OR SURFACES. IT SHALL BE SO LAID THAT THE WEIGHT OF THE LARGE STONES IS CARRIED BY THE SOIL RATHER THAN BY ADJACENT STONES. STONES SHALL WEIGH BETWEEN 50 AND 150 LB. EACH AND AT LEAST 60 % OF THEM SHALL WEIGH MORE THAN 100 LB. EACH WHEN USED ON EMBANKMENT CONSTRUCTION. RIP RAP FOR BMPS SHALL BE 6"-8" DIA. PREPARATION FOR HAND-PLACED RIP RAP. BEFORE ANY RIP RAP IS PLACED, THE SURFACE TO BE COVERED SHALL BE FULLY COMPACTED AND GRADED TO THE REQUIRED SLOPE. PLACE MIRAFTM8 OR APPROVED EQUAL GEOTEXTILE ON SLOPE. RIP RAP ON SLOPES SHALL COMMENCE COMMENCE IN A TRENCH BELOW THE TOW OF THE SLOPE AND SHALL PROGRESS UPWARD, EACH STONE BEING LAID BY HAND PERPENDICULAR TO THE SLOPE WITH THE LONG DIMENSION VERTICAL, FIRMLY BEDDED AGAINST THE SLOPE AND AGAINST THE ADJOINING STONE, WITH ENDS IN CONTACT, AND WITH WELL-BROKEN JOINTS. SIMILAR METHODS SHALL BE USED WHEN LAYING RIPRAP ON STREAM BEDS, IN DITCHES, AND ON LEVEL SURFACES.

   THE FINISHED SURFACE OF THE RIPRAP SHALL PRESENT AN EVEN, TIGHT SURFACE, NOT LESS THAN 12 INCHES THICK, MEASURED PERPENDICULAR TO THE SLOPE.

   THE STONES WEIGHING MORE THAN 100 LB. SHALL BE WELL DISPERSED THROUGHOUT THE AREA WITH THE 50-100 LB. STONES LAID BETWEEN THEM IN SUCH A MANNER THAT ALL STONES WILL BE IN CLOSE CONTACT. THE REMAINING VOIDS SHALL BE FILLED WITH SPALLS OF SUITABLE SIZE AND WELL TAMPED TO PRODUCE A FIRM AND COMPACT REVETMENT.

2. STABILIZATION WITH EROSION CONTROL AND REVEGITATION MAT (ECRM)
   1) AREA MUST BE GRADED SMOOTH AND CLEAN TO FINISH GRADES, AND COMPACTED.

   2) SEED AND MULCH AREA. USE SEED MIX APPROVED BY THE ENGINEER.

   3) INSTALL ECRM PER MANUFACTURER'S INSTRUCTIONS, HOWEVER THESE MUST INCLUDE THE FOLLOWING MINIMUM REQUIREMENTS:

      A) GRADE GROUND TO FINISH CONTOURS. REMOVE ALL ROCKS, DIRT CLODS, STUMPS, ROOTS, TRASH, AND OTHER OBSTRUCTIONS LYING IN DIRECT CONTACT WITH THE SOIL SURFACE.

      B) DIG MAT ANCHOR TRENCHES (MINIMUM 12"DEEP, 6" WIDE) AT TERMINAL ENDS AND PERIMETER SIDES WHERE MAT IS TO BE INSTALLED.

      C) INSTALL MAT BY ROLLING UPHILL PARALLEL TO WATER FLOW, STARTING AT TRENCH. OVERLAP ROLLS BY MINIMUM OF 3". FASTEN TO GROUND WITH 18" PINS AND 1 1/2" WASHERS, OR EQUIVALENT. PIN MAT AT ENDS, AND EVERY 3' TO 5' ALONG OVERLAPS. DO NO STRETCH MAT. SPLICING ROLLS SHOULD BE DONE IN A CHECK SLOT. BACKFILL TO COVER ENDS AND FASTENERS, ROLLING MAT ACROSS BACKFILL AND PIN AGAIN.

   FOR MAT USE MIRAFI MIRAMAT TM8 OR EQUIVALENT.

INVASIVE SPECIES:

1. ALL EQUIPMENT SHALL BE INSPECTED UPON ARRIVAL. EQUIPMENT ARRIVING WITH OBSERVABLE SOIL OR PLANT FRAGMENTS WILL BE REMOVED AND CLEANED.
2. HAY BALES ARE NOT BE USED ON SITE; ONLY WEED-FREE STRAW BALES ARE APPROVED.
3. OFF-SITE TOPSOIL MUST BE FREE OF INVASIVE SPECIES. THE ENGINEER SHALL BE NOTIFIED OF THE TOPSOIL SOURCE 6 WEEKS BEFORE DELIVERY.

SEDIMENTATION AND EROSION CONTROL PLAN

CONTACT:
STEVE BROYER
ECOS ENERGY
222 SOUTH 9TH STREET
SUITE 1600
MINNEAPOLIS MN 55402

THE PURPOSE OF THIS PROJECT IS TO INSTALL APPROXIMATELY 8600 SOLAR MODULES AND ASSCOCIATED ELECTICAL EQUIPMENT FOR POWER GENERATION.

THE TOTAL AREA OF THE PROJECT SITE IS APPROXIMATELY 12.0 ACRES AND THE TOTAL AREA OF THE SITE THAT IS EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES IS 3.0 ACRES.

THE EROSION & SEDIMENTATION CONTROL PLAN AND DETAILS HAVE BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEEP.

IN THE AREAS OF SOLAR PANEL INSTALLATION, THERE ARE SEVERAL ACTIVITIES (SITE GRADING, FOOTING INSTALLATION, PANEL INSTALLATION, AND ELECTRICAL TRENCH WORK) THAT WILL DISTURB SOIL. SOIL MUST BE PROMPTLY STABILIZED AFTER EACH ACTIVITY.

THIS PROJECT WILL NOT BE PHASED. THE DEVELOPMENT WILL FOLLOW THE CONSTRUCTION SEQUENCE PROVIDED ON THIS PLAN.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL MEASURES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE SILT FENCE, HAY BALES, EROSION MAT, STONE CHECK DAMS, A CONSTRUCTION ENTRANCE, AND/OR OTHER EROSION CONTROL MEASURES AS NEEDED OR DIRECTED BY THE ENGINEER OR TOWN STAFF TO ADEQUATELY PREVENT SEDIMENT TRANSPORT.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE.

THE CONTRACTOR SHALL INSPECT, REPAIR AND/OR REPLACE EROSION CONTROL MEASURES EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT. SEDIMENT DEPOSITS MUST BE REMOVED BEFORE DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.

STAKED HAY BALE SILT BARRIERS OR SILT FENCE SHALL BE INSTALLED AROUND ANY TEMPORARYSTOCKPILE AREAS. TEMPORARY VEGETATIVE COVER MAY BE REQUIRED (SEE NOTE).

CONTINUOUS DUST CONTROL USING WATER OR APPROVED EQUAL SHALL BE PROVIDED FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS, SURFACES OF BACKFILLED TRENCHES AND GRAVELED ROADWAY SURFACES. THE USE OF CALCIUM CHLORIDE FOR DUST CONTROL SHALL NOT BE ALLOWED.

IF DEWATERING IS NECESSARY DURING ANY TIME OF CONSTRUCTION A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS SHOWN IN THE HAY-BALE BARRIER DEWATERING DETAIL OR ALTERNATE METHOD PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

ALL DISTURBED AREAS SHALL BE RESTORED PER THE SLOPE STABILIZATION AND PERMANENT VEGETATION DETAILS. ALL DISTURBED AREAS THAT ARE SLOPED LESS THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) SLOPE SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED PER THE PERMANENT VEGETATIVE COVER SPECIFICATIONS. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL DISTURBED AREAS THAT ARE SLOPED MORE THAN THREE HORIZONTAL TO ONE VERTICAL (3:1).

IF FINAL SEEDING OF DISTURBED AREAS IS NOT TO BE COMPLETED BEFORE OCTOBER 15, THE CONTRACTOR SHALL PROVIDE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY PERMANENT SEEDING.

WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISHED GRADED SHALL BE COMPLETED PRIOR TO OCTOBER 15.

ON EACH FRIDAY AND ALSO ON THE DAY BEFORE ANY RAIN FORECAST OF 0.5 INCHES OR MORE, THE CONTRACTOR SHALL HAY MULCH ALL EXPOSED SOIL.

ANY EROSION WHICH OCCURS WITHIN THE DISTURBED AREAS SHALL BE IMMEDIATELY REPAIRED AND STABILIZED. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT SHALL BE RETURNED TO THE SITE. POST SEEDING, INTERCEPTED SEDIMENT, IF ANY, SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE TOWN AND ENGINEER.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION IS RE-ESTABLISHED OR SLOPES ARE STABILIZED AND REMOVAL IS APPROVED BY THE ENGINEER.

UNFORESEEN PROBLEMS WHICH ARE ENCOUNTERED IN THE FIELD SHALL BE SOLVED ACCORDING TO THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEEP.

THE CONTRACTOR SHALL PROVIDE THE NAME AND EMERGENCY CONTACT INFORMATION FOR THE PROJECT PERSONNEL RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROLS PRIOR TO THE START OF CONSTRUCTION.

THE OWNER WILL EMPLOY A CERTIFIED SOIL SCIENTIST TO PERFORM WEEKLY EROSION & SEDIMENTATION CONTROL INSPECTION.
A. ROUTINE REPAIRS OR MODIFICATIONS SHALL BE COMPLETED BY THE CONTRACTOR WITHIN 48 HOURS AFTER DIRECTION BY THE INSPECTOR.
B. EMERGENCY REPAIRS SHALL BE COMPLETED IMMEDIATELY UPON DIRECTION BY THE INSPECTOR.

THE WETLANDS ENFORCEMENT OFFICER SHALL BE NOTIFIED AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION TO INSPECT EROSION CONTROLS.

THE WETLAND ENFORCEMENT OFFICER SHALL BE NOTIFIED AT THE COMPLETION OF WORK FOR FINAL INSPECTION AND SIGN OFF OF PERMIT COMPLIANCE.

LOCAL STATE AND FEDERAL PERMITS REQUIRED: THIS PROJECT REQUIRES AN INLAND WETLANDS PERMIT AND A PERMIT FROM THE STATE OF CONNECTICUT SITING COUNCIL.

THE FOLLOWING DOCUMENTS ARE CONSIDERED TO BE PART OF THIS EROSION AND SEDIMENTATION CONTROL PLAN: THE COMPLETE SITE PLANS, THE DRAINAGE NARRATIVE PREPARED BY CLA ENGINEERS, AND THE CTDEEP 2002 MANUAL.

EROSION AND SEDIMENTATION CONTROL SEQUENCE TO BE FOLLOWED FOR THE NORTH, CENTRAL AND SOUTH PARCELS

1. BEFORE ANY WORK TAKES PLACE CONTACT CALL BEFORE YOU DIG 1-800-922- 4455 TO MARK UTILITIES.
2. NOTIFY THE TOWN OF START OF CONSTRUCTION A MINIMUM OF 48 HOURS IN ADVANCE.
3. HAVE LICENSED SURVEYOR STAKE OUT THE CLEARING LIMITS.
4. CUT TREES BUT DO NOT GRUB.
5. INSTALL CONSTRUCTION ENTRANCE AND PERIMETER EROSION AND SEDIMENTATION CONTROLS AND HAVE INSPECTED BY SITE INSPECTOR.
6. INSTALL ADDITIONAL E&S AS SHOWN ON PLANS INCLUDING TEMPORARY VEGETATED SWALES AND TEMPORARY SEDIMENT TRAPS AND HAVE THEM INSPECTED BY THE SITE INSPECTOR.
7. ANY DEWATERING WILL BE MONITORED BY A QUALIFIED ENVIRONMENTAL PROFESSIONAL TO MAINTAIN SUITABLE QUALITY OF DISCHARGE FROM THE DEWATERING AND TO ENSURE REMOVAL OF ACCUMULATED SEDIMENTS AT APPROPRIATE INTERVALS. SEDIMENTS WILL BE DISPOSED OF AT AN APPROPRIATE ON-SITE LOCATION. DEWATERING WILL DISCHARGE INTO TEMPORARY SEDIMENT TRAPS.
8. ROUGH GRADE SITE.
9. INSTALL CHAIN LINK FENCE AROUND PERIMETER.
10. INSTALL SOLAR PANELS, HYDROSEED OR SEED AND MULCH AROUND PANELS AND HYDROSEED OR MULCH AND SEED ANY EXPOSED SOIL AT THE END OF EACH WEEK AND BEFORE EVERY RAINFALL PREDICTED FOR 0.5 INCHES OR MORE.
11. TRENCH FOR AND INSTALL ELECTRIC LINES AND AT THE END OF EACH WEEK HYDROSEED OR MULCH AND SEED ANY EXPOSED SOIL AT THE END OF EACH WEEK AND BEFORE EVERY RAINFALL PREDICTED FOR 0.5 INCHES OR MORE.
12. INSTALL REMAINING ELECTRIC INFRASTRUCTURE AND AT THE END OF EACH WEEK HYDROSEED OR MULCH AND SEED ANY EXPOSED SOIL AT THE END OF EACH WEEK AND BEFORE EVERY RAINFALL PREDICTED FOR 0.5 INCHES OR MORE.
13. OVERSEED DISTURBED SOILS WHEN ALL SOLAR PANEL INSTALLTION IS COMPLETE.
14. CLEAN SEDIMENTS BASINS AND GRADE AND RE-SEED FOR USE AS STORMWATER BASINS WHEN SITE INSPECTOR DEEMS SOILS ARE STABILIZED.
15. INSTALL PLANTINGS
16. MAINTAIN E&S AND PROVIDE REPORTS TO TOWN AND CTDEEP

No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

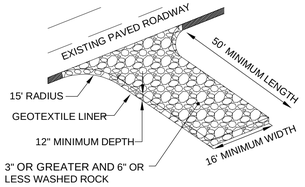
31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

CIVIL NOTES

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 10

CLA

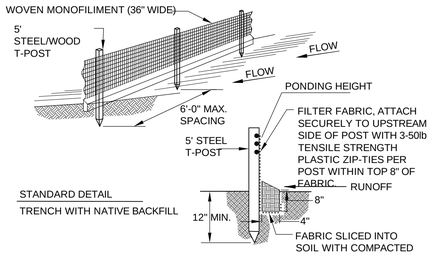


NOTE:

ROCK CONSTRUCTION ENTRANCE SHOULD BE A MINIMUM THICKNESS OF 1.0' AND CONTAIN MAXIMUM SIDE SLOPES OF 4:1. ROCK ENTRANCE SHOULD BE INSPECTED AND MAINTAINED REGULARLY. ROCK ENTRANCE LENGTH MAY NEED TO BE EXTENDED IN CLAY SOILS.

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

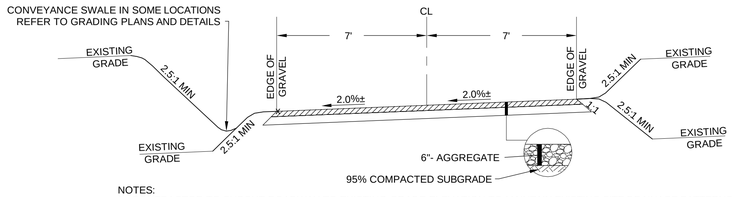


NOTE:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO 1/3 THE HEIGHT OF THE FABRIC OR MORE.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
4. ALL ENDS OF THE SILT FENCE SHALL BE WRAPPED UPSLOPE SO THE ELEVATION OF THE BOTTOM OF FABRIC IS HIGHER THAN "PONDING HEIGHT".

SILT FENCE

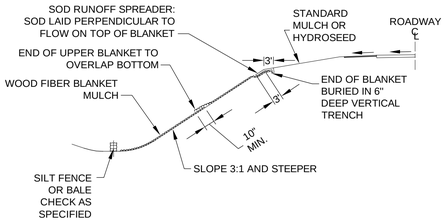
NOT TO SCALE



NOTES:
1. CONTRACTOR TO SUBCUT ROADWAY TO EXISTING GRADE ELEVATION TO MAINTAIN EXISTING SITE DRAINAGE PATTERNS WHEREVER POSSIBLE.
2. IN FILL LOCATIONS CONTRACTOR TO GRADE TOE OF SLOPE TO EXISTING GRADE, AND MAINTAIN NATURAL DRAINAGE PATTERNS.
3. IN CUT LOCATIONS CONTRACTOR TO CREATE SWALE ON DOWNSTREAM SIDE, REFER TO GRADING PLANS FOR DETAILS.
4. CONTRACTOR TO COMPACT AGGREGATE TO 95% MAXIMUM DRY DENSITY.
5. REFER TO GEOTECHNICAL RECOMMENDATIONS FOR ADDITIONAL ROADWAY SECTION DESIGN INFORMATION.

ACCESS ROAD DETAIL

NOT TO SCALE



EROSION CONTROL BLANKET INSTALLATION ON AN INSLOPE (WHEN REQUIRED)

CATEGORY	SLOPE	VELOCITY
1	FLAT	
2	3:1	< 5.0 fps
3	3:1	< 6.5 fps
4	2:1	< 7.0 fps

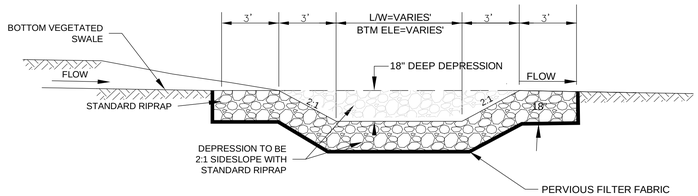
CATEGORY	ACCEPTABLE TYPES
1	STRAW RD 1S, WOOD FIBER RD 1S
2	STRAW 1S, WOOD FIBER 1S
3	STRAW 2S, WOOD FIBER 2S
4	STRAW/COCONUT 2S, WOOD FIBER HV 2S

THE LETTERING DESIGNATION SHALL BE DEFINED AS FOLLOWS:

1S - NETTING ON ONE SIDE
RD - RAPIDLY DEGRADABLE
2S - NETTING ON TWO SIDES
HV - HIGH VELOCITY

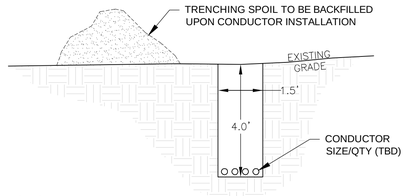
EROSION CONTROL BLANKET

NOT TO SCALE



RIP-RAP SPLASH PAD

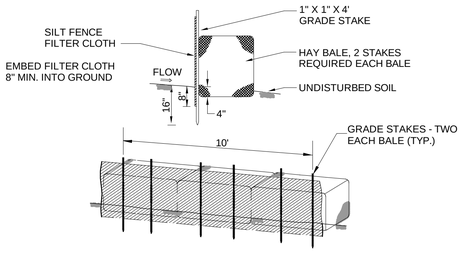
NOT TO SCALE



NOTES:
1. CONDUCTOR CLEARANCES DEPENDENT ON GEOTECHNICAL PARAMETERS AND ELECTRICAL DESIGN
2. CONDUCTOR SIZING AND QUANTITIES PER TRENCH DEPENDENT ON FINAL ELECTRICAL DESIGN TRENCH DIMENSIONS FOR EARTHWORK QUANTITIES ARE CONSERVATIVE.

TRENCHING DETAIL

NOT TO SCALE

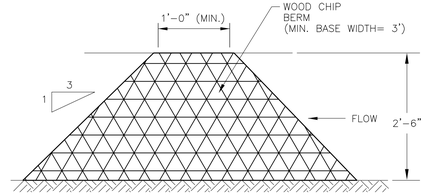


HAY-BALE / SILT FENCE EROSION PROTECTION

NOT TO SCALE

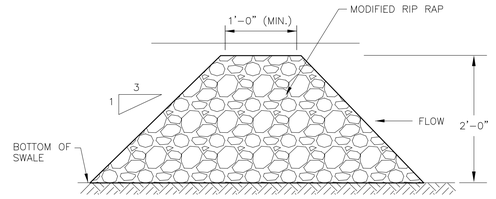
CONSTRUCTION NOTES:

1. SILT FENCE FILTER CLOTH TO BE SECURELY FASTENED TO GRADE STAKE WITH STAPLES, 6" ON CENTER.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN ONE ANOTHER THEY SHALL OVERLAP BY 6" AND BE FOLDED.
3. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.



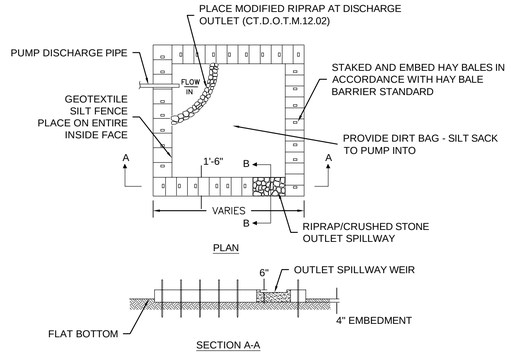
WOOD CHIP BERM

NOT TO SCALE



RIP-RAP CHECK DAM

NOT TO SCALE



DEWATERING SETTLING BASIN DETAIL

NOT TO SCALE

DEWATERING PLAN

IF DEWATERING IS NECESSARY DURING CONSTRUCTION A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS FOLLOWS:

A. THE PUMP INLET WILL BE WRAPPED IN FILTER FABRIC AND PLACED IN CRUSHED STONE WITHIN THE TRENCH.

B. THE PUMP OUTLET WILL DISCHARGE TO THE DEWATERING ENCLOSURE PER THE DETAIL FOR DEWATERING SETTLING BASIN TO BE LOCATED OUTSIDE OF THE 100' UPLAND REVIEW ZONE.

C. THE DISCHARGE FROM THE DEWATERING ENCLOSURE WILL BE MONITORED AND ADDITIONAL MEASURES EMPLOYED IF NECESSARY.

No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

STATE OF CONNECTICUT · ESTABLISHED 1915 · REGISTERED PROFESSIONAL ENGINEER

31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

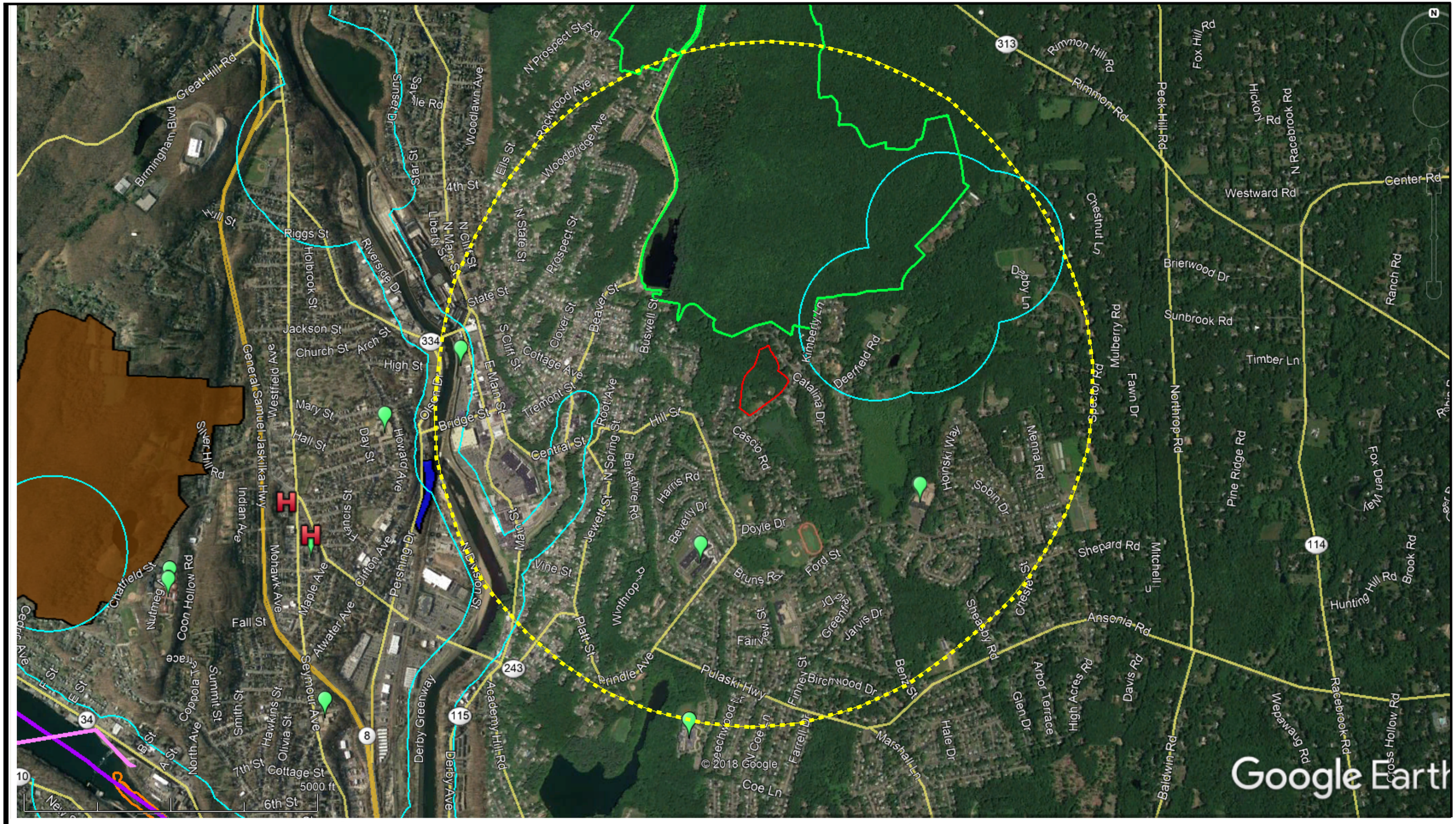
CIVIL DETAILS

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 11

CLA

Exhibit B

GIS Maps



Data Source: DEEP (2019)
Google Imagery (Accessed 2019)

Notes:
1. No historic areas within map extent.
2. No areas of geologic or archaeological interest within map extent.

Legend

- State Forest
- State Park
- Water Access
- Hospital
- Project Area
- 1 Mile Project Buffer
- County Border
- School
- Natural Diversity Area
- WMA
- Transmission Line
- Road

Critical Habitat

- Terrestrial Forested

Benz Solar

New Haven County, Connecticut

Vicinity Map

July 30, 2019

Litchfield County

Hartford County

Tolland County

Windham County

Middlesex County

New London County

New Haven County

Fairfield County

Benz Solar Project Area

Data Source(s): World Oceans Map via Esri WMS

Legend

- Project Area
- County Boundary
- State Boundary

U.S. Seismic Hazard 2% in 50 years PGA

Hazard (%g)		
0-2	8-10	30-40
2-4	10-14	40-80
4-8	14-20	> 80
	20-30	

N

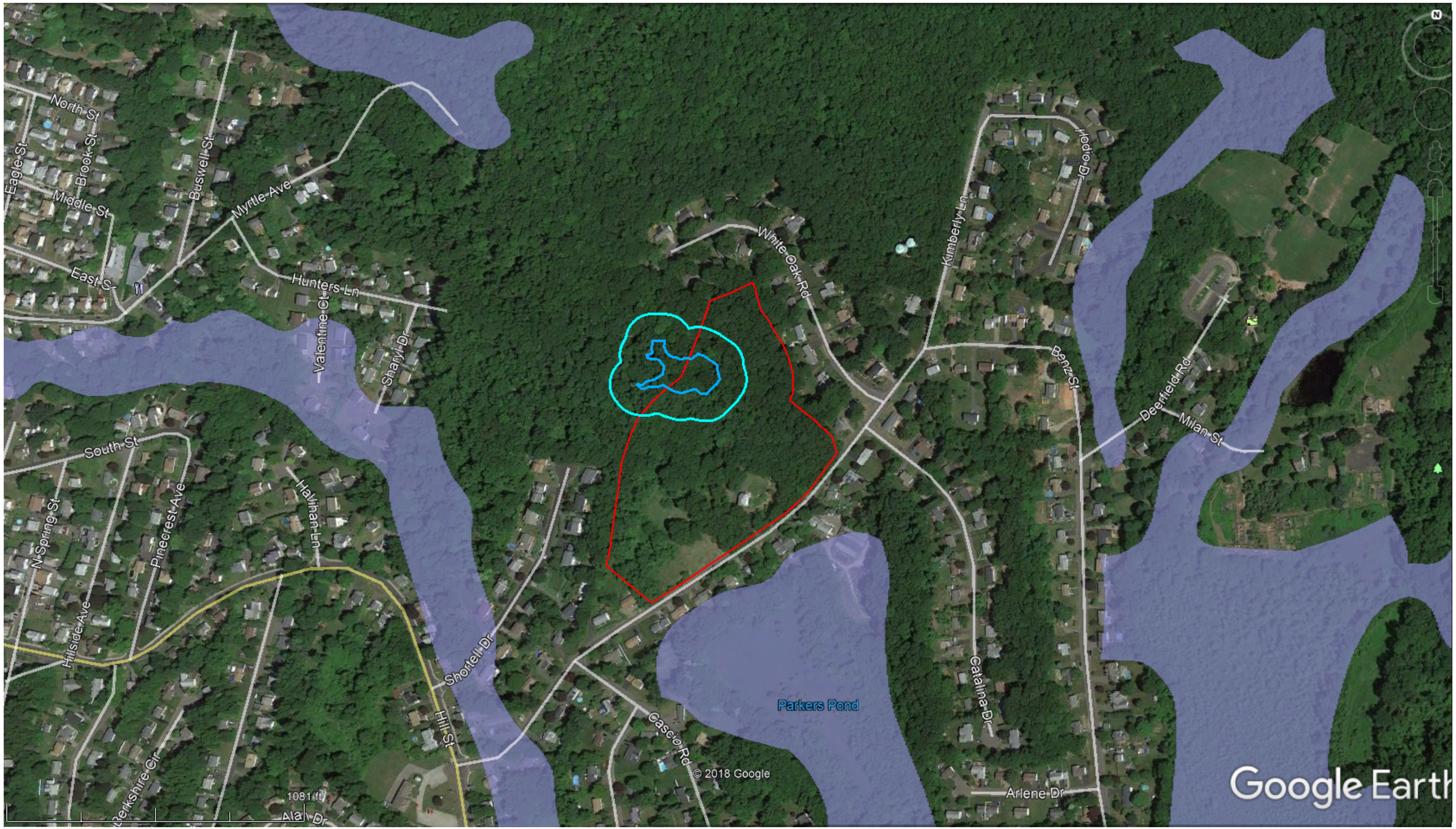
0 Miles 9

Benz Solar

New Haven County, Connecticut

2019 Connecticut Hazard Map

July 30, 2019



Notes:
1.Project site is not located within one mile of areas regulated under the Tidal Wetlands Act and Coastal Zone Management Act.

Data Source: DEEP (2019)

Legend

- Project Area

Inland Wetland Soils

- Poorly Drained and Very Poorly Drained Soils
- Alluvial and Floodplain Soils
- Wetland Delineated
- Wetland Buffer Delineated

Benz Solar

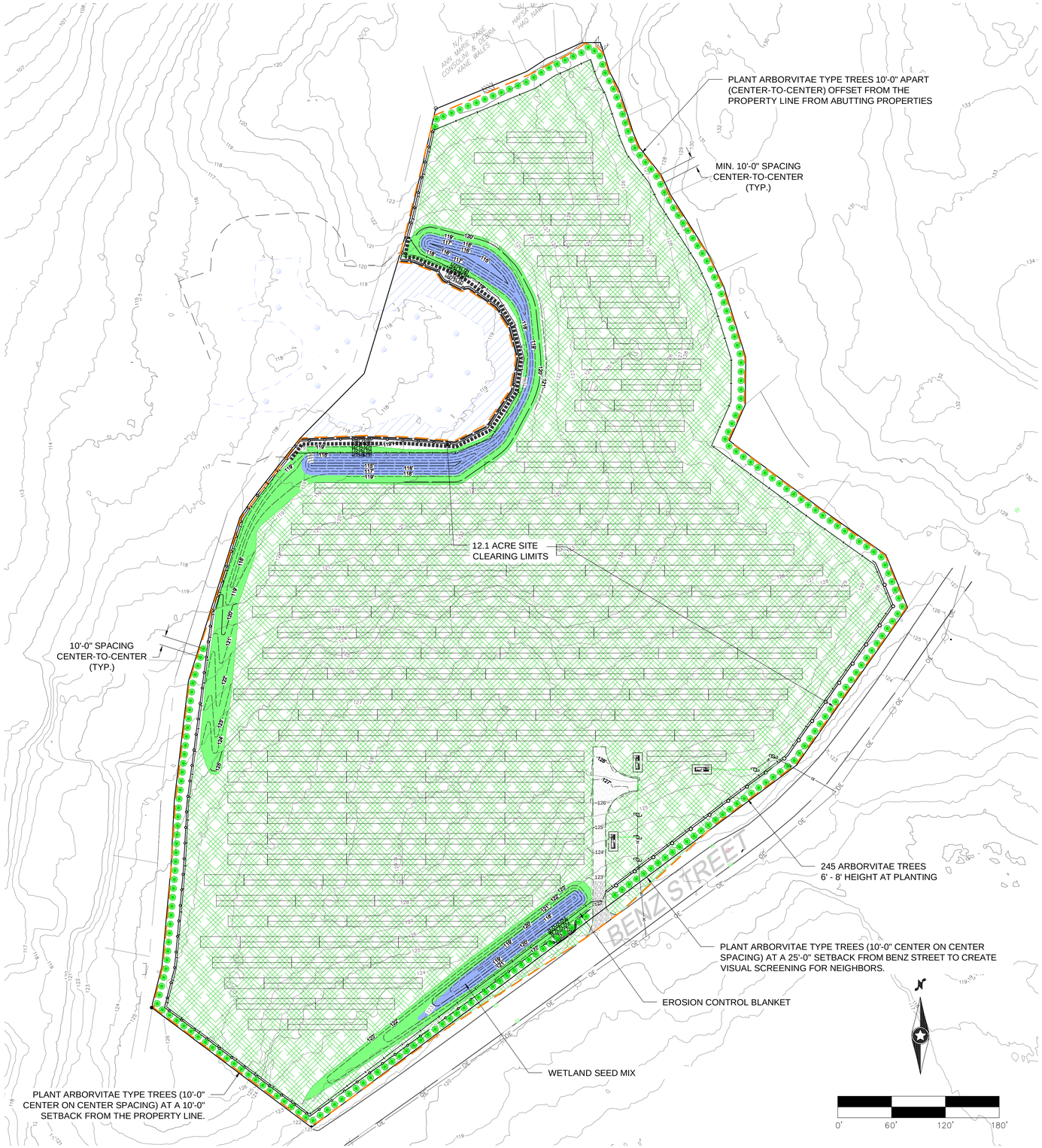
New Haven County, Connecticut

Soils and Delineated Wetlands

July 30, 2019

Exhibit C

Cross Section & Key Observation Point Plan



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CLEARING LIMITS
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

SEED LEGEND:

- STORMWATER BASIN SEED MIX (AREA = 0.29 AC)
- EROSION CONTROL BLANKET WITH SEED (AREA = 0.89 AC)
- SOLAR ARRAY SEEDING / HAY MULCH EROSION CONTROL (AREA = 10.3 AC)

SEED MIX FOR STORMWATER TREATMENT BASIN

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. IT IS AN EXCELLENT SEED MIX FOR ECOLOGICALLY APPROPRIATE RESTORATIONS ON MOIST SITES THAT REQUIRE QUICK STABILIZATION AS WELL AS LONG-TERM ESTABLISHMENT OF NATIVE VEGETATION. THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASIS THAT DO NOT NORMALLY HOLD STANDING WATER. SOME PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING.

SEEDING: THE MIX MAY BE APPLIED BY HYDROSEEDING, BY MECHANICAL SPREADER, BY HYDRO-SEEDING OR ON SMALL SITES IT CAN BE SPREAD BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, THEN LIGHTLY RAKE OVER. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH A SPRING OR EARLY FALL SEEDING. SUMMER AND LATE FALL SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.

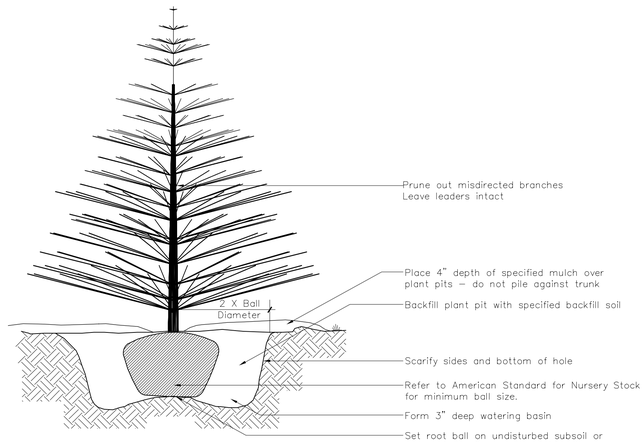
APPLICATION RATE: 35 LBS/ACRE (1250 SQ. FT./LB.)

SPECIES *: SWITCHGRASS (PANICUM VIRGATUM), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), CREEPING RED FESCUE (FESTUCA RUBRA), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS STOLONIFERA), SOFT RUSH (JUNCUS EFFUSUS), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), GRASS-LEAVED GOLDENROD (EUTHAMIA GRAMINIFOLIA), GREEN BULRUSH (SCIRPUS ATROVIRENS), BONESET (EUPATORIUM PERFOLIATUM), BLUE VERVAIN (VERBENA HASTATA) UPLAND BENTGRASS (AGROSTIS PERENNANS), BIG BLUESTEM, NIAGRA (ANDROPOGON GERARDII), SENSITIVE FERN (ONOCLEA SENSIBILIS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), WOOLGRASS (SCIRPUS CYPERINUS).

SEEDING NOTES:

1. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS ASSOCIATED WITH TREE AND ROCK REMOVAL AND SITE CLEARING. CONTRACTOR SHALL A INSTALL A 50% / 50% CLOVER / FESCUE MIX OR ENGINEER APPROVED ALTERNATE SEED MIXTURE.
2. ALL SEDIMENT TRAP SIDE SLOPES ARE 3:1 AND SHALL BE SEEDED AND BLANKETED

ARBORVITAE TREE DETAIL:



No.	Date	Revision
	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
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317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

LANDSCAPE PLAN

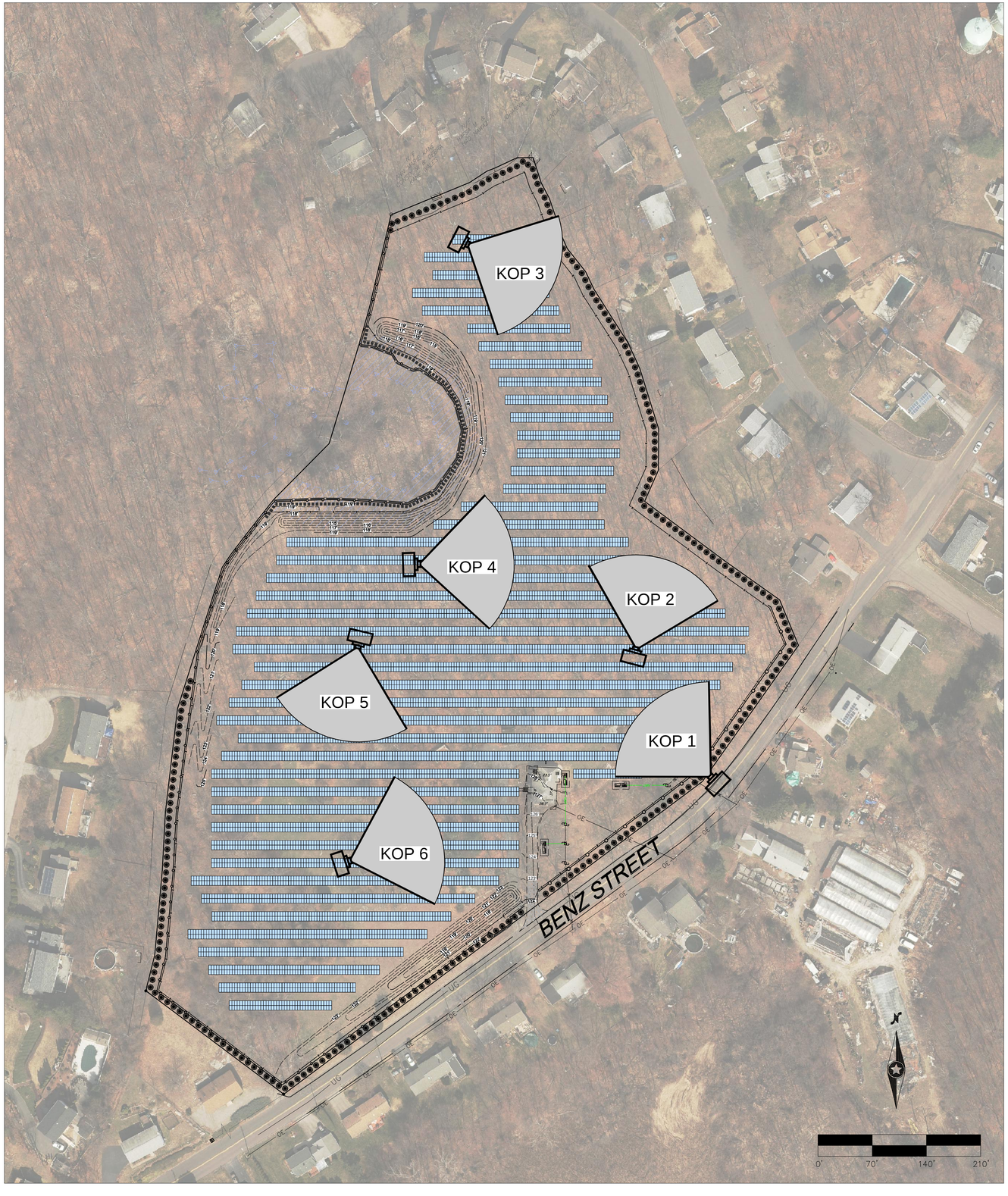
Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 7

CLA

KOP 4 - MIDDLE OF SITE LOOKING EAST

KOP 5 - EASTERN MIDDLE OF SITE LOOKING SOUTH

KOP 6 - SOUTH WEST OF SITE LOOKING EAST



KOP 3 - NORTHERN SITE, LOOKING SOUTH-EAST

KOP 2 - BENZ STREET LOOKING NORTH

KOP 1 - SOUTH OF BENZ STREET LOOKING NORTH-WEST

No.	Date	Revision
	2/11/20	CSC SUBMISSION

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31 BENZ STREET
PLAINFIELD, CT 06239

BENZ STREET SOLAR

KEY OBSERVATION POINTS

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 8

CLA

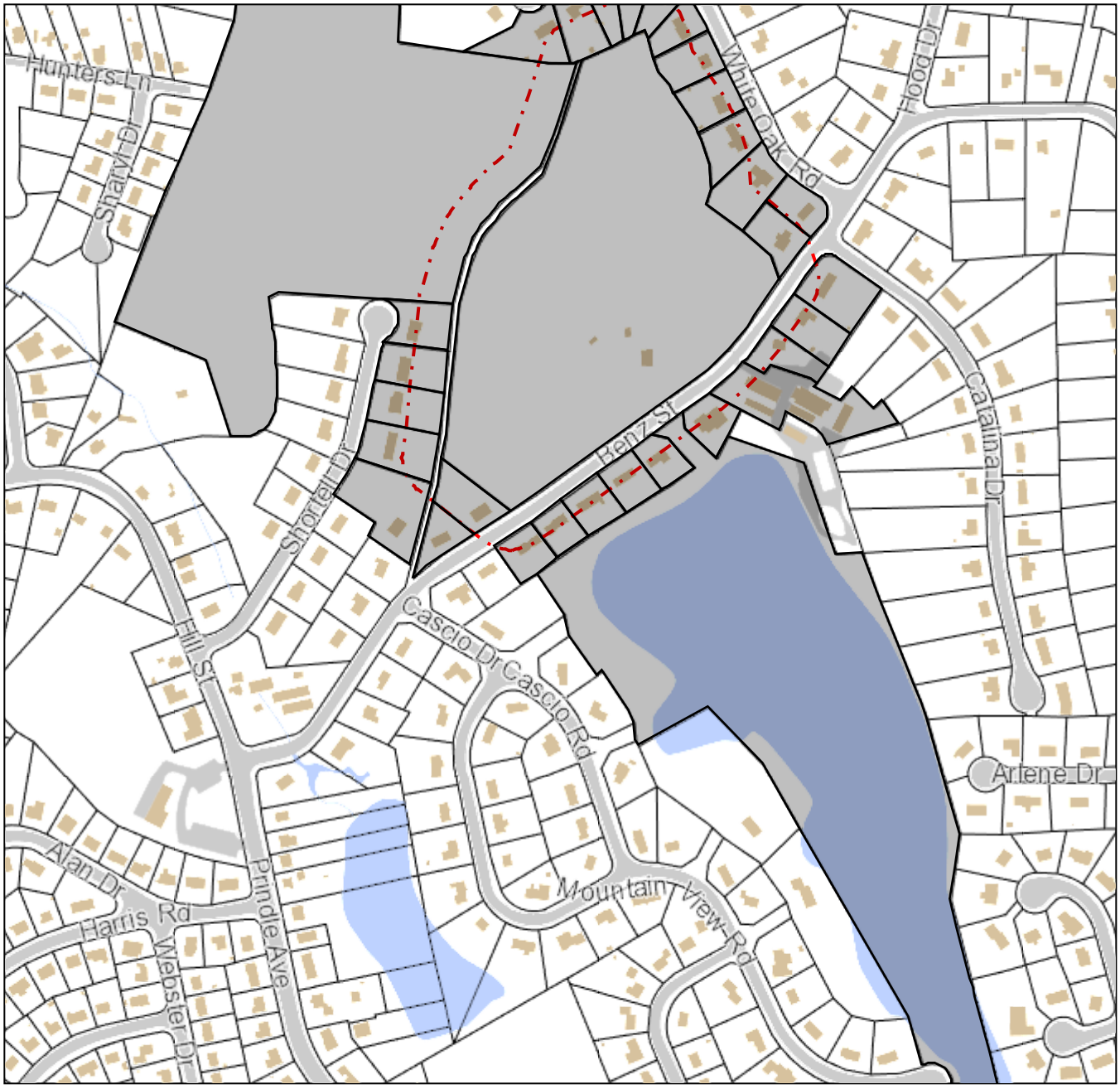
Exhibit D

Notice Service List

City of Ansonia

Geographic Information System (GIS)

Date Printed: 7/24/2019



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The City of Ansonia and its mapping contractors assume no legal responsibility for the information contained herein.

N
W E
S

Benz Solar

Abutters mailing List

Parcel ID	Site Address	Owner Name	Mailing Address	Mailing City	Mailing State	Mailing Zip
8700130110	32 BENZ ST	ARRUZZA DAVID & NANCY	32 BENZ ST	ANSONIA	CT	06401- 0000
8700120007	24 BENZ ST	JASON & MELISSA BIMMLER	24 BENZ ST	ANSONIA	CT	06401- 0000
8600160006	7 WHITE OAK RD	SIGLINGER LAURA	7 WHITE OAK RD	ANSONIA	CT	06401- 0000
8700070001	36 BENZ ST	HULL WARREN R &	36 BENZ ST	ANSONIA	CT	06401- 0000
8100140013	22 SHORTELL DR	VANN TOM	22 SHORTELL DR	ANSONIA	CT	06401- 0000
8600140007	9 WHITE OAK RD	CORCIA ROBERT & TAMMY L	9 WHITE OAK RD	ANSONIA	CT	06401- 0000
8700100009	28 BENZ ST	KOCYLA DENNIS F & SALLY J	28 BENZ ST	ANSONIA	CT	06401- 0000
8700040001	41 BENZ ST	REBOLLAR DONNA A & BRYANT DEBRA L & DENISE R PORIER	41 BENZ ST	ANSONIA	CT	06401- 0000
8600030012	21 WHITE OAK RD	FULTON THOMAS	21 WHITE OAK RD	ANSONIA	CT	06401- 0000
8100230001	7 BENZ ST	DEMIANCZYK ADAM AS TRUSTEE OF THE	7 BENZ ST	ANSONIA	CT	06401- 0000
8600120008	11 WHITE OAK RD	EVANS LINDA J	11 WHITE OAK RD	ANSONIA	CT	06401- 0000
8700060002	38 BENZ ST	FARIA MILDRED	38 BENZ ST	ANSONIA	CT	06401- 0000
8100140009	12 SHORTELL DR	IZZO JOHN JR & RAPUANO MADELYND	12 SHORTELL DR	ANSONIA	CT	06401- 0000
8100140011	18 SHORTELL DR	TYSZKA FRANCIS R &	18 SHORTELL DR	ANSONIA	CT	06401- 0000
8100140012	20 SHORTELL DR	THOMPSON EDWARD W JR	20 SHORTELL DR	ANSONIA	CT	06401- 0000
8700050003	40 BENZ ST	GESEK RONALD J	40 BENZ ST	ANSONIA	CT	06401- 0000
8100140010	16 SHORTELL DR	ARMISTEAD JOSHUA & LINDA	16 SHORTELL DR	ANSONIA	CT	06401- 0000
8600070010	17 WHITE OAK RD	NAWAZ HAQ & HAFSA M	17 CARRIAGE HILL RD	WOODBRIDGE	CT	06525 1037- 0000
8600040011	19 WHITE OAK RD	CONSOLINI ANN MARIE KANE &	3 HILL ST	WINSTEAD	CT	06098- 0000
8700030002	43 BENZ ST	KILEY CHRISTOPHER K & ISBERG PATRICIA	43 BENZ ST	ANSONIA	CT	06401- 0000
8700090003	34 BENZ ST	MARCUCIO JOHN N & LOUISE	34 BENZ ST	ANSONIA	CT	06401- 0000
8100230000	9 BENZ ST	SANTANDER BANK NA	601 PENN ST	READING	PA	19601- 0000
8700110008	26 BENZ ST	WISNIEWSKI GREGG & KIMBERLY	26 BENZ ST	ANSONIA	CT	06401- 0000
8100250006	22 BENZ ST	ROBILLARD EUCLID J & FRANCES	22 BENZ ST	ANSONIA	CT	06401- 0000
8600190005	5 WHITE OAK RD	BLACKSTOCK PETER G	5 WHITE OAK RD	ANSONIA	CT	06401- 0000
8600080009	15 WHITE OAK RD	GEORGIA JOHANNA	15 WHITE OAK RD	ANSONIA	CT	06401- 0000
8600200004	3 WHITE OAK RD	STONER JOHN D & PATRICIA	3 WHITE OAK RD	ANSONIA	CT	06401- 0000
8700020003	1 WHITE OAK RD	RAMOS CLAUDIA	1 WHITE OAK RD	ANSONIA	CT	06401- 0000
8100240005	20 BENZ ST	TORRES NEFTALI L/U AND	20 BENZ ST	ANSONIA	CT	06401- 0000
8700130000	30 BENZ ST	SEYMOUR LAND CONSERVATION TRUST	12 CHATFIELD ST	SEYMOUR	CT	06484- 0000
8100080001	135 HILL ST	MACHOWSKI CASIMIR	921 ST EDWARDS DR	AUSTIN	TX	78704- 0000

Benz Solar
Public Officials Mailing List

To Company Name	To Name	To Address Line 1	To Address Line2	To City	To State	To ZIP
Office of the Attorney General	William Tong, Attorney General	55 Elm Street		Hartford	CT	06106
Department of Public Health	Renee Coleman-Mitchell, Commissioner	410 Capitol Avenue	PO Box 340308	Hartford	CT	06134
Department of Agriculture	Bryan Hurlburt, Commissioner	450 Columbus Blvd	Suite 701	Hartford	CT	06103
Office of Policy and Management	Melissa McCaw, Secretary	450 Capitol Avenue		Hartford	CT	06106
Department of Transportation	Joseph Giuletti, Commissioner	2800 Berlin Turnpike	PO Box 317546	Newington	CT	06131
Department of Consumer Protection	Michelle Seagull, Commissioner	450 Columbus Blvd	Suite 901	Hartford	CT	06103
Department of Labor	Kurt Westby, Commissioner	200 Folly Brook Blvd		Wethersfield	CT	06106
Department of Energy & Environmental Protection	Katie Dykes, Commissioner	79 Elm Street		Hartford	CT	06106
Council on Environmental Quality	Susan D. Merrow, Chair	79 Elm Street		Hartford	CT	06106
Public Utilities Regulatory Authority	Marissa Gillett, Chairman	Ten Franklin Square		New Britain	CT	06051
Department of Economic and Community Development	David Lehman, Commissioner	450 Columbus Blvd		Hartford	CT	06103
Department of Emergency Services and Public Protection	James Rovella, Commissioner	1111 Country Club Road		Middletown	CT	06457
Department of Administrative Services	Josh Geballe, Commissioner	450 Columbus Blvd		Hartford	CT	06103
CT State Representative District 104	Kara Rochelle, State Representative	Legislative Office Building	Room 4000	Hartford	CT	06106
CT State Senate District S17	George Logan, State Senator	Legislative Office Building	Room 2102	Hartford	CT	06106
Town of Ansonia	Mayor	253 Main St		Ansonia	CT	06401
Town of Ansonia Zoning Board of Appeals	Claudia Degnan	253 Main St		Ansonia	CT	06401
Town of Ansonia Planning and Zoning Commission	Jared Heon, Chair	253 Main St		Ansonia	CT	06401
Town of Ansonia Land Use Department	Ronda Porrini	253 Main St		Ansonia	CT	06401
Twon of Ansonia Inland Wetlands Commission	Timothy Holman, Chair	253 Main St		Ansonia	CT	06401
Town of Ansonia Town Clerk	Janet Waugh	253 Main St		Ansonia	CT	06401
Town of Ansonia Conservation Commission	Frank Pergola	253 Main St		Ansonia	CT	06401
Naugatuck Valley Council of Governments	Rick Dunne, Executive Director	49 Leavenworth ST	3rd Floor	Waterbury	CT	06702

Exhibit E

Phase I & II Environmental Site Assessment

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
31 BENZ STREET
ANSONIA, CONNECTICUT

Prepared for:
Mr. Christopher Little
Ecos Energy
222 South 9th Street, Suite 1600
Minneapolis, MN 55402

Prepared by:
NORTHSTAR ENVIRONMENTAL MANAGEMENT, LLC
800 Village Walk No. 325
Guilford, CT 06437

Date of Issue: November 8, 2018

Project No: 181003

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

November 8, 2018

Mr. Christopher Little
Ecos Energy
222 South 9th Street, Suite 1600
Minneapolis, MN 55402

RE: Phase I Environmental Site Assessment
31 Benz Street
Ansonia, Connecticut
NorthStar Project No. 181003

Dear Mr. Little

NorthStar Environmental Management, LLC is pleased to submit herewith our Phase I Environmental Site Assessment for the above-referenced site. We trust that this report will be responsive to your needs.

We appreciate the opportunity to be of continued service to your office. Please feel free to call if you have any questions or if you would like to discuss this report.

Very truly yours,
NorthStar Environmental Management, LLC

Kristie A. Ferreira, LEP
Principal

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

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NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

I. INTRODUCTION

NorthStar Environmental Management, LLC (NorthStar) was retained by Ecos Energy to conduct a Phase I Environmental Site Assessment (ESA) for the property located at 31 Benz Street, Ansonia, Connecticut. The purpose of the Phase I ESA is to identify potential existing and former sources of hazardous materials and substances that could pose a risk to or adversely impact the site environment. This Phase I Environmental Site Assessment was conducted in accordance with the Transfer Act Site Assessment Guidance Document (TASA) published by the Connecticut DEEP (June 1989 and revised November 1991). In addition, this site assessment generally conforms with the American Society for Testing and Materials (ASTM) Standard E 1527-13. We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. The following scope of services was performed by NorthStar in preparation of this Phase I ESA:

- The subject site was visually observed for evidence of hazardous substances and wastes in the environment.
- A computerized environmental regulatory database report which meets or exceeds ASTM standards for a regulatory file search was obtained.
- Connecticut DEEP files were reviewed for information pertaining to the presence of hazardous substances and wastes in the environment at the subject site and adjoining properties.
- Available ownership records and historical information were reviewed to aid in establishing current and prior site usage.
- The general hydrogeological and topographic setting was characterized based on field observations and published information.
- This report was prepared to summarize the work performed and to present our opinion regarding the presence of Recognized Environmental Conditions at the subject property.

This report is subject to the limitations contained in Appendix A. This study was performed and the report prepared on behalf of, and for the exclusive use of Ecos Energy, solely for use in a preliminary environmental evaluation of the above-referenced site. This report and findings shall not, in whole or in part, be disseminated or conveyed to any other party, nor used or relied on by any other party, in whole or in part, without prior written authorization from this office. NorthStar acknowledges and agrees that the report may be conveyed to the lender, title insurer and legal counsel associated with the proximate transaction of the site. The work was undertaken to assess environmental conditions specifically on the subject property in accordance with generally accepted engineering and hydrogeological practices. No other warranty, expressed or implied, is made. Absolute assurance that any and all possible contamination at the site will be identified cannot be provided. The study is based, in part, on information provided by the client, their agents, or third parties, including state or local officials. NorthStar assumes no responsibility for the accuracy and completeness of this information.

We trust that the report presented herein will satisfy your current requirements. Should you have any questions or comments, please do not hesitate to contact the undersigned.

Very truly yours,
NorthStar Environmental Management, LLC

Kristie Ferreira

Kristie A. Ferreira, LEP
Principal

II. SITE DESCRIPTION

A. GENERAL INFORMATION

PROJECT ADDRESS:	31 Benz Street, Ansonia, CT
PROJECT NUMBER:	181003
CONDUCTED BY:	Jean Bissonnette Kristie A. Ferreira, LEP
DATE OF SITE VISIT:	November 05, 2018
WEATHER:	Light rain, mild
SITE CONTACT:	Ms. Heidie Kassery Broker Coldwell Banker 71 Oxford Road, Oxford, CT 06478 Phone/Text 203-414-4554
SITE CONTACT:	Ms. Terry Harris, Occupant 31 Benz Street, Ansonia, CT

B. SITE CONSTRAINTS

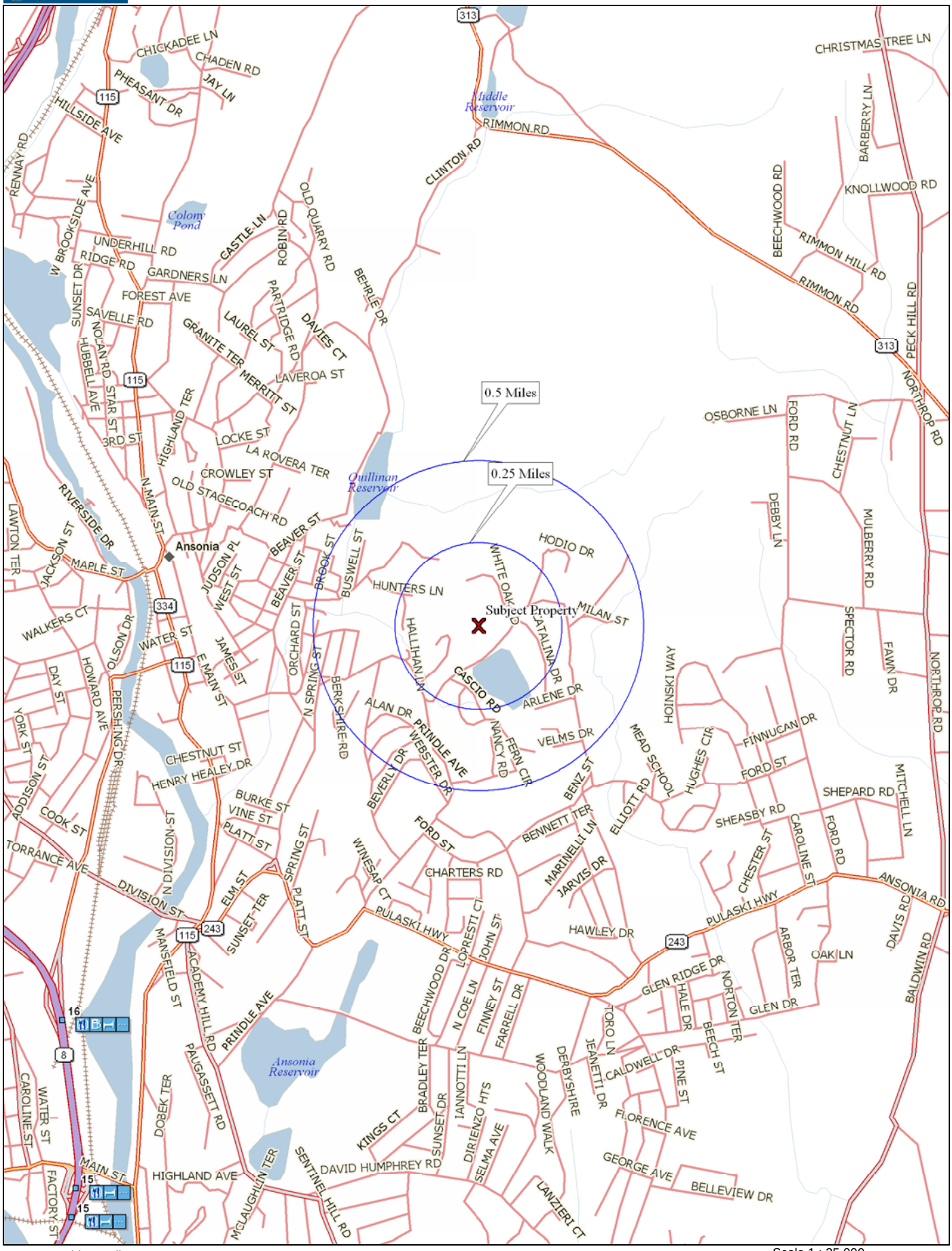
None

C. SITE DESCRIPTION

Size of Property and Number of Buildings: The subject property is 11.75 acres and contains a two story single family residence, a dilapidated tractor shed and the foundation of an old barn. The location of the subject property is shown in Figure 1. The general layout of the property is illustrated in Figure 2, the Site Aerial Photograph.

Date of Construction and Description: According to the Assessor's field card for the property, the two-story dwelling was constructed circa 1930 with hardwood floors, plaster walls and a peaked asphalt shingled roof. The subject building is two stories with a full unfinished basement. The dwelling occupies a foot print area of approximately 1,200 square feet. Total living area is 2,428 sq. feet. The Assessor's field card for the property is included in Appendix B.

Current Site Occupancy and Operations: The subject building is currently occupied by the Harris family.



TN

MN (13.3°W)

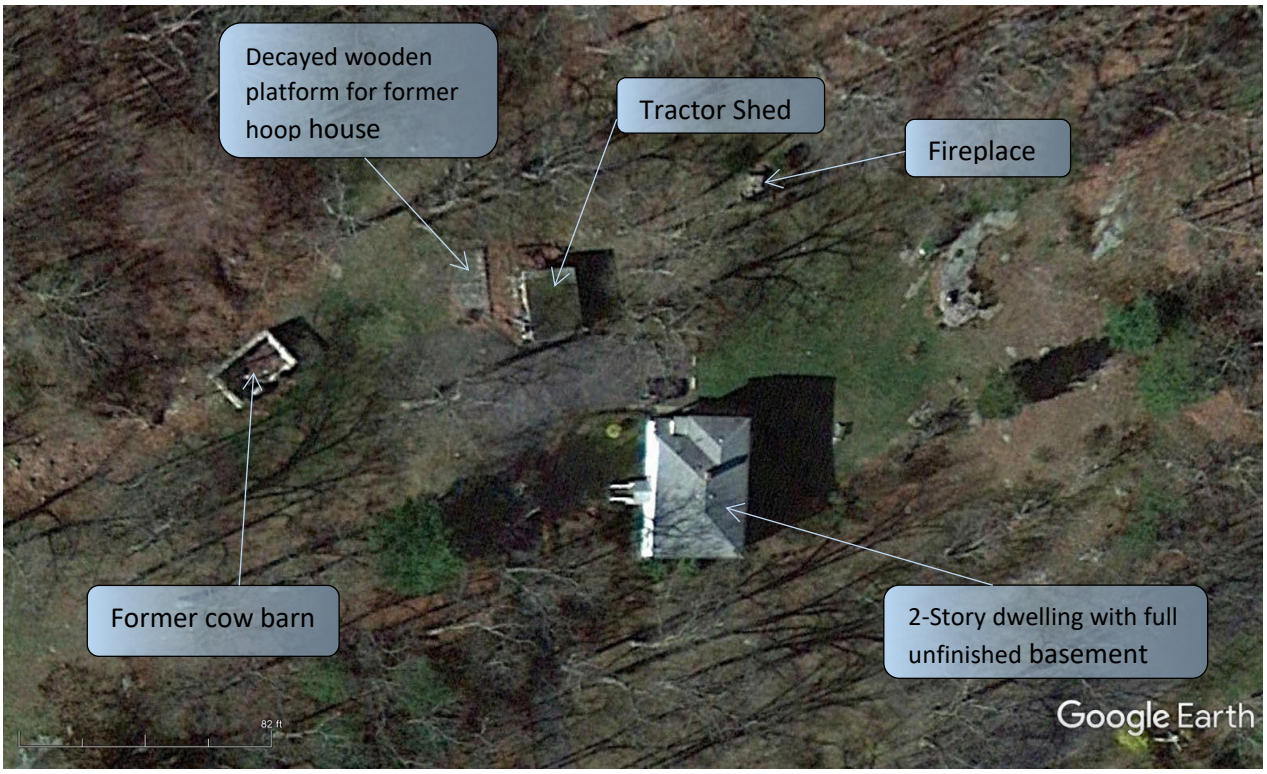
Scale 1 : 25,000

0 600 1200 1800 2400 3000 ft

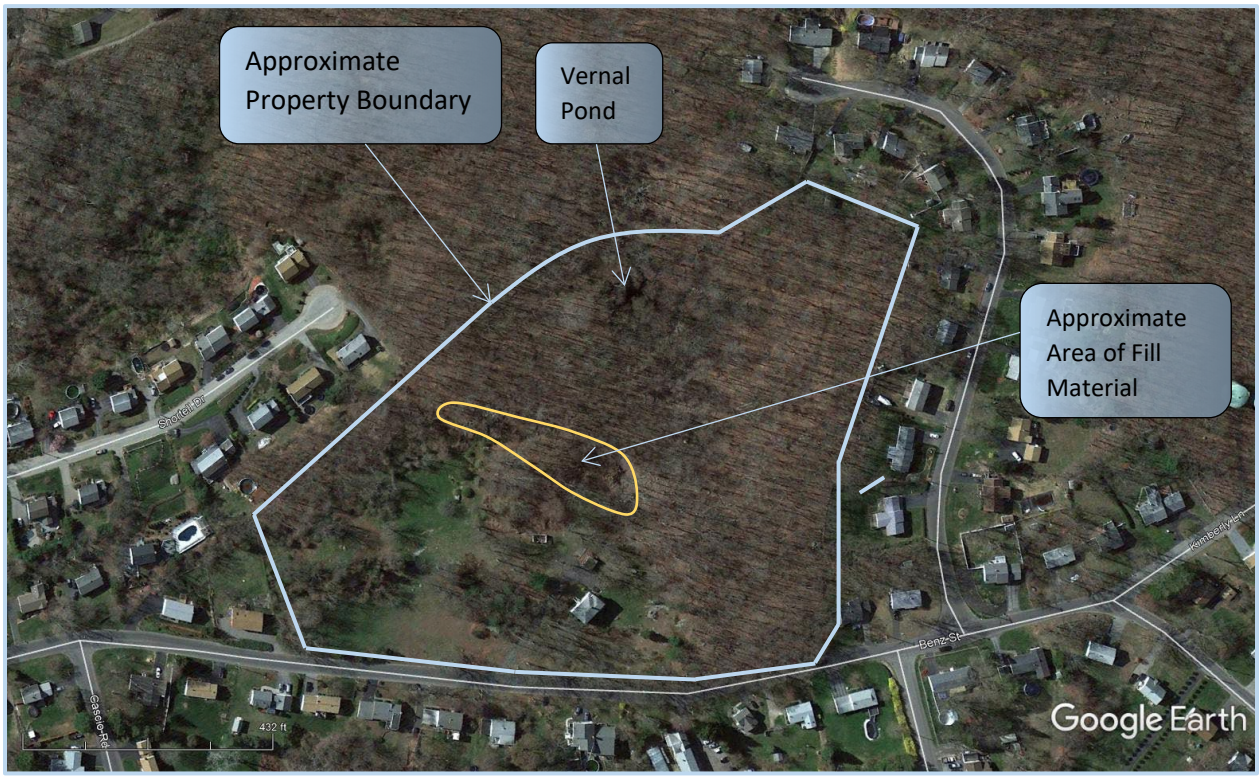
0 200 400 600 800 1000 m

1" = 2,083.3 ft

Data Zoom 13-0



Occupied Area of Subject Property



Whole Property View

Figure 2. Site Aerial Photograph.
(Closeup of Occupied Areas and Whole Property View)

D. HEATING SYSTEM & SITE UTILITIES

Heating System		Site Utilities	
	Fuel Oil	✓	**Electricity**
✓	**Natural Gas**	✓	**Natural Gas**
	Propane		**Municipal Water**
	Electric	✓	**Municipal Sewer**
	Other		**Municipal Storm Water Sewer**

Note: The subject property is serviced by the municipal sanitary sewer systems. Drinking water is provided by an onsite drinking water well. Storm water is controlled by overland runoff. No storm water catch basins were observed on site. The building is heated by a natural gas fired boiler located in the basement. The adjacent hot water heater in the basement is also natural gas fired.

E. ADJACENT PROPERTIES

The subject property is located in a residential area of Ansonia, Connecticut. The following properties abut the subject site:

North:	Single-family residences on White Oak Road and undeveloped wooded land.
West:	Single-family residences on Benz Street and Shortell Drive, and undeveloped wooded land.
South:	Benz Street across which are single-family residences.
East:	Single-family residences on White Owl Road

F. WATER SUPPLY

Type of Water Supply:	On site artesian drinking water well located north northeast of residence. A second well, located in the woods, was capped in the 1950's because of lack of water pressure during drought times.
Community Water Supply Wells Within A One-Mile Radius:	No community water supply wells are located within a mile of the subject property.
Groundwater Monitoring Wells:	None observed or reported
Abandoned Wells:	None observed or reported

III. SITE HISTORY

A. HISTORICAL DESCRIPTION

The subject property has been a single-family residence since the dwellings construction circa 1930. The original dwelling was visible in the 1934 historic aerial photograph on file at the Connecticut State Library. According to Ms. Terry Harris, the house was purchased by her grandparents in 1947. At that time, it was a rather small and quaint, ordinary dwelling. Her grandparents expanded not only the house to its current state, but also expanded the amount of cleared land. The Abate Family Living Trust was set up October 22, 1998, due to the grandparents' increasingly deteriorating health. In 2005, Ms. Harris's grandfather, Joseph Abate, passed. At that point, from July 24, 2005 to August 15, 2011, Ms. Harris's grandmother, Helen Abate, was the legal representative of the trust. Upon her death on August 15, 2011, Terry's mother, Joyce A. Harris, became the legal trustee of the property - as legally designated by the grandparents, Joseph and Helen Abate, in the Abate Family Living Trust. Ms. Terry Harris indicated that her grandparents grew their own vegetables, and raised a cow, a hog and chickens. The farm was for family use only and was never operated for commercial purposes.

B. RECORD OF TRANSFER

Owner of Record	VOLUME	PAGE	DATE
Abate Family Living Trust	427	423	08/23/2005
Abate Joseph & Helen	71	579	09/19/1947

Note: The above ownership history was obtained from the assessor's field card and should not be relied upon as a legal title search.

C. AERIAL PHOTOGRAPH REVIEW

Date	Observation
1934	Most of the subject property was wooded undeveloped land. The existing residence was visible in the photograph as were the tractor shed and the barn.
1965	The 1965 photograph is much the same as the 1934 photo with the addition of the dwellings on the abutting properties.
1985	The subject property contained small out buildings as would be expected of a working farm.
1995	The property and the area as a whole appeared to be much like the present.

D. CITY DIRECTORY REVIEW

Year	Address	Occupant

Note 1: The property has always been residential. The current family (children, parents and grandparents) purchased the property in 1947.

E. SANBORN INSURANCE MAPS

Date	Observations

Note: The area of the subject property was not covered by the Sanborn Insurance Maps.

IV. PHYSICAL SETTING

A. PHYSICAL SITE DESCRIPTION

The subject property slopes in both a northwesterly and southeasterly direction. Groundwater is believed to flow primarily northwesterly towards Beaver Brook and southeasterly toward Parkers Pond. The property is located in a residential neighborhood just south of the Naugatuck State Forest and the Quillinan Reservoir Block. Area topography is illustrated in Figure 3.

B. GROUNDWATER CLASSIFICATION

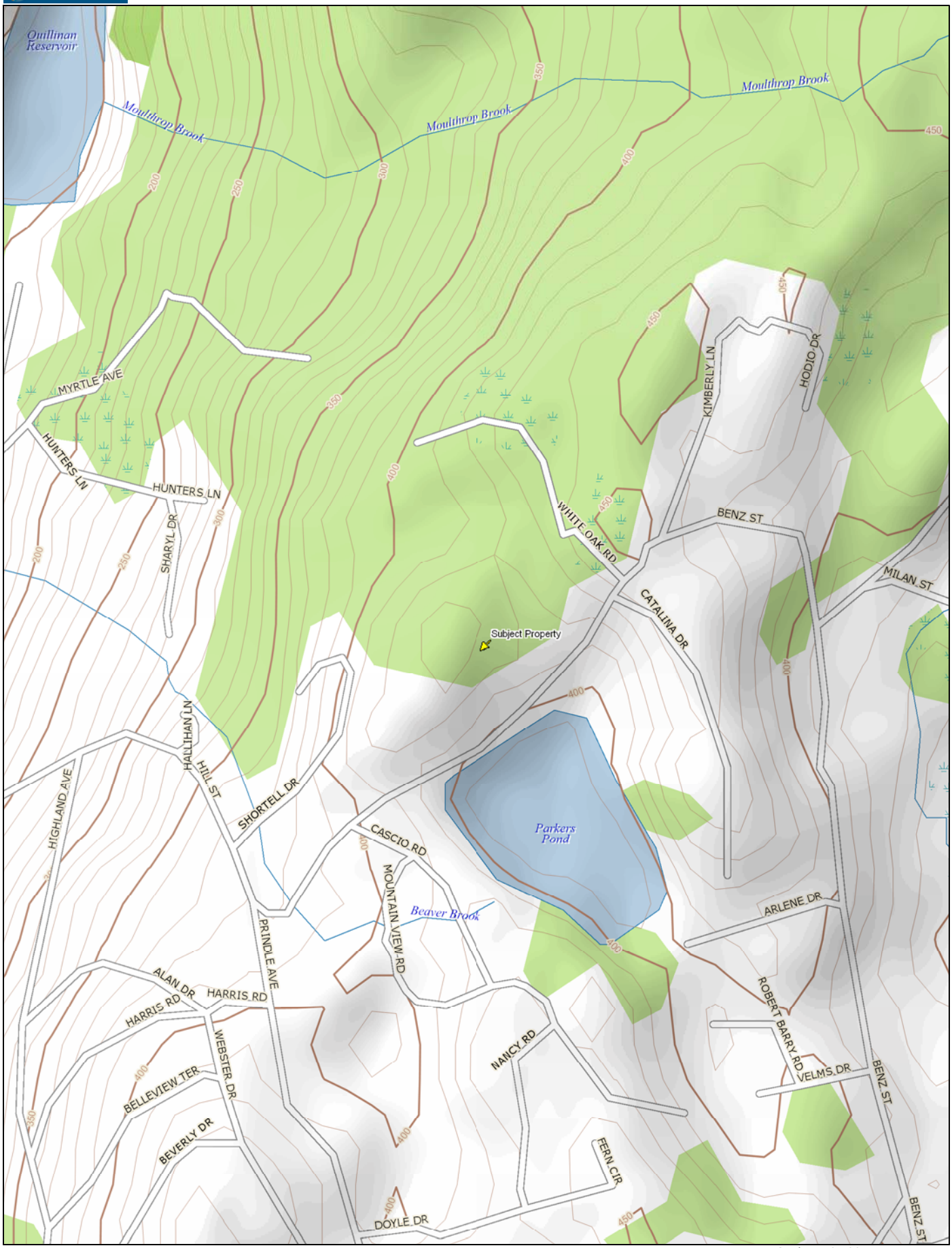
Groundwater in the area of the subject property is classified **GA**. This classification denotes ground waters within the area of influence of private and potential public water supply wells. The groundwater is presumed to be suitable for direct human consumption without the need for treatment. The State's goal is to maintain the drinking water quality Class GA. Designated uses are existing private and potential public drinking water supply.

C. SURFACE WATER CLASSIFICATION

The Parkers Pond, which is located approximately 200 feet south and down gradient of the subject property, has a surface water classification of **A**. This classification denotes surface waters that are known or presumed to meet water quality criteria which support designated uses. These surface waters are designated for fish and wildlife habitats, potential drinking water supplies, recreation, navigation, and water supply for industry and agriculture.

D. LEVEL B AQUIFER PROTECTION AREA

Based on the Connecticut DEEP's Aquifer Protection Areas map the subject property is not located in an aquifer protection area.



TN

MN (13.3°W)

Scale 1 : 6,400

1" = 533.3 ft

Data Zoom 15-0

E. SITE FEATURES

Site Elevation:	400 feet to 456 feet	**Slope Direction:**	South southeast
Tidal:	No	**Flood Plain:**	No
Coastal Wetland:	No	**Inland Wetland:**	Areas of inland wetlands
Coastal Low Land:	No	**Valley Bottom:**	No
Up Land:	Yes	**Hill Side:**	Yes

F. GROUND COVER (PERCENT)

Grass:	30	**Woods**	60
Pavement:	Driveway	**Weeds:**	Present
Bare Soil:		**Boulders:**	
Bedrock Outcrops:	Numerous visible	**Buildings:**	House, tractor shed and barn
Brush/Briars:	Present	**Surface Water:**	Vernal pool

G. MAPPED SURFICIAL MATERIALS

Surficial materials at the subject property are mapped as **Glacial Ice-laid Deposits (Till)**, which consist of non-sorted, generally non-stratified mixtures of grain-sizes ranging from clay to large boulders. The matrix of most tills is composed dominantly of sand and silt. Boulders within and on the surface of tills range from sparse to abundant. At the subject site the till appears to be thin till in which the till is less than 10-15 feet thick.

H. MAPPED BEDROCK

Bedrock in the area of the subject property is mapped as **Harrison Gneiss** which is a gray to spotted medium to coarse grained foliated gneiss.

V. SITE OBSERVATIONS

A. GENERAL SITE OBSERVATIONS

The subject property consists of an 11.75-acre lot with a 1930's farm house, a dilapidated tractor garage and the foundation remains of a cow barn. A current aerial photograph of the subject property is presented as Figure 2. The Colonial-style Farm House was constructed with wood-framing, a mixture of hardwood floors, carpeting and resilient floor coverings, plaster walls and ceilings, vinyl siding, asphalt-shingled hip roof, and a full unfinished basement with a mostly concrete floor and natural stone walls with concrete grout. The house consists of approximately five bedrooms, two bathrooms, a kitchen, a dining room, a living room, and a utility room/office. The building is heated by a natural-gas-fired boiler located in the basement. Hot water is provided by a natural-gas-fired hot water heater in the basement. Both appliances are in good condition. Ms. Terry Harris, indicated that she is not aware that the property ever used oil for heating purposes and that there had never been, to the best of her knowledge, an underground oil tank on the property. NorthStar did not observe any evidence (feed or return lines, vent or fill pipes) of a former aboveground or underground heating oil storage tank at the site.

The exterior grounds consist of woodland areas, open fields and manicured lawn, and a vernal pond near the northwest portion of the property. Thirty feet northwest of the house is a dilapidated garage that is currently used for storage of lawn furniture and other dry goods, and had originally been used to store a tractor. No hazardous materials or staining were observed inside the shed. Around the shed were seven empty 55-gallon drums; which according to Ms. Terry Harris, were used to store sand for treating the relatively steep driveway during winter snow and ice storms. Adjacent to the Tractor Shed was a dilapidated wooden platform that once held a hoop house. Approximately 20 yards west of the tractor shed was the remains of a foundation that once supported the former cow barn. According to Ms. Harris, the barn was used to house the family cow, as well as, storage of dry goods and hay. The foundation is currently used to enclose a small family garden. A fenced-in area behind the former barn was used to pen the former family hog. The area was mostly over grown with brush and briars.

North northwest of the tractor shed and former barn is a filled area that encloses an area of approximately 1,500 square yards. Materials within the fill that could be readily observed during the walk over included rock and soil, concrete blocks, sections of brick and concrete walls, chunks of asphalt, stumps, small amounts of rubbish such as a hose, a couple plastic buckets and metal pipes.

Further north on the property beyond the fill area the property consisted of mature woodland with little undergrowth and an apparently healthy vernal pond.

B. VIRGIN PETROLEUM AND CHEMICALS OBSERVED OR REPORTED TO BE PRESENT ON SITE

Material	Container Size & Type	Number	Condition/ Age	Observations
Gasoline	5 gallon steel	1	Fair	Located adjacent to the tractor shed. Likely used for lawn equipment.
Household paints and cleaning agents	Pint, qrt, and gallon containers	10-20	Fair	Located in house basement

UST = Underground Storage Tank AST = Aboveground Storage Tank

C. WASTE PETROLEUM AND CHEMICALS OBSERVED OR REPORTED TO BE GENERATED ON SITE

Material	**Container Size & Type**	**Number**	**Condition/ Age**	**Observations**
None				
Waste Transporter:				
Destination:				

UST = Underground Storage Tank AST = Aboveground Storage Tank

D. UNDERGROUND STORAGE TANKS OBSERVED AND REPORTED TO BE PRESENT ON SITE

Tank Size	**Composition**	**Content**	**Date Installed**	**Status**
None observed or reported				

Notes:

E. POTENTIAL CONTAMINANT PATHWAYS

On-site Septic System:	No. The property is serviced by municipal sanitary sewer.
Discharges to air, ground or water:	None observed or reported
Lagoons:	None observed or reported
Dry wells:	None observed or reported
Floor drains:	None observed or reported
Cracks or open seams in concrete floor:	None observed or reported
Storm water system:	None observed or reported
Other:	None observed or reported

F. INDICATORS OF CONTAMINATION

LAND		**SURFACE WATER**	
Stained soil	None observed	**Petroleum sheen**	None observed
Stained pavement	None observed	**Discoloration**	None observed
Odors	None detected	**Notable absence of water bugs**	Not observed
Distressed vegetation/ areas of bare soil	None observed	**Foaming**	None observed
Seeps/leachate	None observed	**Dead fish**	None observed
Other		**Notable absence of aquatic vegetation**	Not observed

Note: An area of fill material was observed on the subject property. The origin of the fill material and its quality is not known.

G. LEAD-BASED PAINT:

Lead was banned from use in building paints in 1978. Therefore, buildings constructed after 1978 are not likely to contained lead-based paint. Considering that the subject building was constructed prior to 1978, there is a possibility that at least some painted surfaces contain lead-based paint. Lead-based paint is a concern primarily for residences with children under the age of 6 years, and buildings that are undergoing renovation or demolition.

H. ASBESTOS-CONTAINING MATERIALS:

Asbestos in building materials reached its height of use during the period 1940 through 1970. Consequently, buildings constructed during this period have a high possibility of having been constructed with asbestos-containing building materials. Since the 1970s, the U.S. Environmental Protection Agency (EPA) has stepped in with bans of certain asbestos-containing materials and regulation of others. Many of the asbestos-containing construction materials used through 1980 remain in older buildings as a potential health hazard. Buildings that were constructed after 1980 have a lower likelihood of containing asbestos. Because the ban that the EPA placed on many asbestos products in 1989 under the Toxic Substance Control Act, was overturned on appeal by the Fifth Circuit court in 1991, asbestos can still be present in some building materials today. The materials that remain banned are asbestos-containing corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and new uses of asbestos. Considering that the subject building was built circa 1930, it is possible that asbestos-containing materials were used in its construction. No readily apparent friable asbestos-containing materials were observed during the site walkover.

A wide array of building materials can contain asbestos including resilient floor coverings, mastics, gypsum wall board systems, plaster, ceiling tiles, window glazing and caulking, roofing materials, surface coverings, textured paints, and various insulating materials. A full asbestos-inspection with destructive sampling would be needed in order to identify all asbestos-containing materials in and on the subject building. It is recommended that prior to any major renovations of the subject building, an asbestos inspection be completed to identify all asbestos-containing materials. (State and federal law requires an asbestos inspection prior to renovation or demolition activities on all commercial buildings and all residential buildings with more than four units). If any asbestos-containing materials are to be removed, a licensed asbestos abatement contractor should be contracted.

I. POLYCHLORINATED BIPHENOLS IN BUILDING MATERIALS

Polychlorinated Biphenyls (PCBs) were domestically manufactured from 1929 until their manufacture was banned in 1979. PCBs have been demonstrated to cause cancer, as well as a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system. PCBs were used in hundreds of industrial and commercial applications. Products manufactured between 1929 and 1979 that may contain PCBs include: transformers and capacitors; other electrical equipment including voltage regulators, switches, reclosers, bushings, and electromagnets; oil used in motors and hydraulic systems; fluorescent light ballasts; cable insulation; thermal insulation material including fiberglass, felt, foam, and cork; adhesives and tapes; oil-based paint; window and building caulking; plastics; carbonless copy paper and floor finish. At the subject property, NorthStar did not observe any materials that would obviously be PCB-containing.

J. ENVIRONMENTAL SENSITIVE AREAS / POTENTIAL RECEPTORS

Groundwater at the subject property is classified **GA**. This classification denotes ground waters within the area of influence of private and potential public water supply wells. Groundwater in this area is presumed to be suitable for direct human consumption without the need for treatment. The groundwater can be considered an environmentally sensitive area and potential receptor. The Parker's Pond wetland area, located down gradient of the subject property, would also be considered a potential sensitive area and receptor. The Quillinan Reservoir is located approximately 0.3 to 0.4 miles northwest of the subject property.

VI. STATE AND FEDERAL DATABASE REVIEW

NorthStar conducted a review of files maintained at the CT DEEP in Hartford, CT. Findings of the review are presented in Section VI A. A computerized file search of State and Federal Environmental Databases was conducted in accordance with ASTM Standard Practice for Environmental Site Assessments, E 1527. Section VI B. presents a summary of the State and Federal Environmental Database Listings. The database search report is included in Appendix C.

A. CT DEEP BUREAU OF WATER MANAGEMENT and WASTE MANAGEMENT

NorthStar contacted the Connecticut DEEP on November 6, 2018. No information related to the subject property was on file at the Waste or Water Management Bureaus.

B. STATE AND FEDERAL ENVIRONMENTAL DATABASE SUMMARY

Database	Search Radius (miles)	Subject Property	No. of Sites Within Search Radius	Potential off-site sources of contamination
National Priority List (NPL)	1.0	No	0	0
Proposed NPL	1.0	No	0	0
NPL liens	TP	No	0	0
Delisted NPL	1.0	No	0	0
Federal Facility	1.0	No	0	0
SEMS	0.5	No	0	0
SEMS-Archive	0.5	No	0	0
Corrective Action Report (CORRACTS)	1.0	No	0	0
RCRA-TSDF	0.5	No	0	0
RCRA Lg. Quan. Gen.	0.25	No	0	0
RCRA Sm. Quan. Gen.	0.25	No	0	0
Lucis	0.5	No	0	0
US ENG CONTROLS	0.5	No	0	0
US INST CONTROL	0.5	No	0	0
Conditionally Exempt RCRA-CESQG	0.25	No	0	0

B. STATE AND FEDERAL ENVIRONMENTAL DATABASE SUMMARY (Continued)

Database	Search Radius (miles)	Subject Property	No. of Sites Within Search Radius	Potential off-site sources of contamination
Emergency Response Notification System (ERNS)	TP	No	0	0
State Hazardous Waste Sites (SHWS)	1.0	No	0	0
Site Discovery and Assessment Database (SDADB)	0.5	No	0	0
Solid Waste Facilities/Landfill Sites (SWF/LF)	0.5	No	0	0
Leaking Underground Storage Tank list (LUST)	**0.5**	**No**	**1**	**0**
INDIAN LUST	0.5	No	0	0
FEMA UST	0.25	No	0	0
Registered Storage Tanks (UST)	0.25	No	0	0
AST	0.25	No	0	0
INDIAN UST	0.25	No	0	0
CT Eng Controls	0.5	No	0	0
Environmental Land Use Restriction (AUL)	0.5	No	0	0
Voluntary Cleanup Priority (VCP)	0.5	No	0	0
INDIAN VCP	0.5	No	0	0
BROWNFIELDS	0.5	No	0	0
US BROWNFIELDS	0.5	No	0	0
Solid Waste Recycling Facilities (SWRCY)	0.5	No	0	0
INDIAN ODI	0.5	No	0	0
Debris Region 9	0.5	No	0	0
Open Dump Inventory (ODI)	TP	No	0	0
Clandestine Drug labs US (CDL)	0.5	No	0	0
CT CDL	TP	No	0	0
US CDL	0.5	No	0	0
HIS Open Dumps	0.5	No	0	0

B. STATE AND FEDERAL ENVIRONMENTAL DATABASE SUMMARY (Continued)

Database	Search Radius (miles)	Subject Property	No. of Sites Within Search Radius	Potential off-site sources of contamination
Connecticut Property Transfer Filing	TP	No	0	0
CT Liens	TP	No	0	0
LIENS 2	TP	No	0	0
Hazardous Material Information Reporting System (HMIRS)	TP	No	0	0
Connecticut Oil and Chemical Spills (1991 to present)	TP	No	0	0
CT Spills 90	TP	No	0	0
RCRA Non-Gen	0.25	No	0	0
Formerly Used Defense Sites (FUDS)	**1.0**	**No**	**1**	**0**
Department of Defense (DOD)	1.0	No	0	0
SCRD DRYCLEANERS	0.5	No	0	0
US FIN Assurance	TP	No	0	0
EPS Watch List	TP	No	0	0
2020 Cor Action	0.25	No	0	0
Toxic Substance Control Act (TSCA)	TP	No	0	0
Toxic Chemical Release Inventory System (TRIS)	TP	No	0	0
SSTS	TP	No	0	0
Record of Decision (ROD)	1.0	No	0	0
RMP	TP	No	0	0
RAATS	TP	No	0	0
PRP	TP	No	0	0
ICIS	TP	No	0	0
FTTS	TP	No	0	0
MLTS	TP	No	0	0
PADS	TP	No	0	0

B. STATE AND FEDERAL ENVIRONMENTAL DATABASE SUMMARY (Continued)

Database	Search Radius (miles)	Subject Property	No. of Sites Within Search Radius	Potential off-site sources of contamination
Coal Ash (DOE)	TP	No	0	0
Coal Ash (EPA)	0.5	No	0	0
PCB Transformer	TP	No	0	0
RADINFO	TP	No	0	0
HIST FTTS	TP	No	0	0
Department of Pipe Line Safety (DOT OPS)	TP	No	0	0
Consent	1.0	No	0	0
INDIAN RESERV	1.0	No	0	0
FUSRAP	1.0	No	0	0
Uranium Mill Tailing Sites (UMTRA)	0.5	No	0	0
Lead Smelters	TP	No	0	0
US AIRS	TP	No	0	0
MINES	0.25	No	0	0
Abandoned Mines	0.25	No	0	0
Facility Index System (FINDS)	TP	No	0	0
ECHO	TP	No	0	0
Docket HWC	TP	No	0	0
UXO	TP	No	0	0
Fuels Program	0.25	No	0	0
CT AIRS	TP	No	0	0
Contaminated or Potentially Contaminated Sites (CPCS)	**0.5**	**No**	**1**	**0**
DRY CLEANERS	0.25	No	0	0
ENF	TP	No	0	0
CT LEAD	TP	No	0	0
CT Financial Assurance	TP	No	0	0

B. STATE AND FEDERAL ENVIRONMENTAL DATABASE SUMMARY (Continued)

Database	Search Radius (miles)	Subject Property	No. of Sites Within Search Radius	Potential off-site sources of contamination
Leachate and Wastewater Discharge Sites (LWDS)	1.0	No	0	0
CT MANIFEST	0.25	No	0	0
NY MMANIFESTS	0.25	No	0	0
NPDES	TP	No	0	0
CT SEH	0.5	No	0	0
EDR MGP	1.0	No	0	0
EDR Hist Auto	0.125	No	0	0
EDR Hist Cleaner	0.125	No	0	0
CT RGA HWS	TP	No	0	0
CT RGA LUST	YP	No	0	0
LUCIS	0.5	No	0	0

TP = Database Search Conducted for Target Property Only; **Bold = Property was identified within ASTM search radius; *Bold & Italicized = Subject property identified in database.***

Environmental Database Report – Additional Findings

Subject Property:

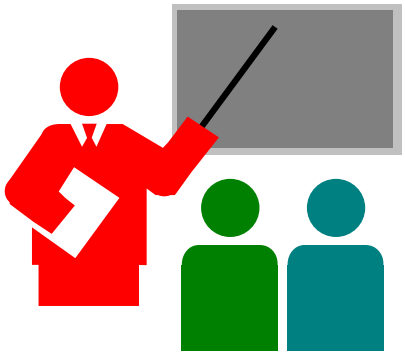
The subject property was not listed in any of the above State or Federally regulated databases.

Potential Off Site Source of Contamination:

No environmental sites of concern were listed in the vicinity of the subject property that would be considered a potential off site source of contamination. The only two properties listed in the database review were located more than a quarter mile from the subject site, at a lower elevation and across a hydraulic barrier.

VII. CONNECTICUT TRANSFER ACT STATUS

NorthStar found no information to indicate that the subject property would be classified as a Connecticut Transfer Act Establishment as defined in the Connecticut General Statutes Sections 22a-134a to 22a-134d as amended by Public Act 95-183.



An "Establishment" means 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 activities, more than one hundred kilograms of hazardous waste in any one month, (B) hazardous waste generated by another person or municipality 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 shop or vehicle painting shop is or was located on or after May 1, 1967.

According to Connecticut General Statutes, Sec. 22a-134a, "Prior to transferring an "Establishment", the transferor shall submit to the transferee a Form I or a Form II and, no later than ten days after the transfer, shall submit a copy of such Form I or Form II to the commissioner (of the DEEP). If the transferor is unable to submit a Form I or a Form II to the transferee, the certifying party shall, prior to the transfer, prepare and sign a Form III or Form IV, and the transferor shall submit a copy of such Form III or Form IV to the transferee and, no later than ten days after the transfer, shall submit a copy of such Form III or Form IV to the commissioner."

In addition, "Any person submitting a Form III or Form IV to the commissioner shall simultaneously submit to the commissioner a complete environmental condition assessment form and shall certify to the commissioner, in writing, that the information contained in such form is correct and accurate to the best of his knowledge and belief."

VIII. MUNICIPAL FILE REVIEW

Assessor's Office:	The Assessor's Office Field Card is presented in Appendix B.
Planning & Zoning Department:	No pertinent environmental information was found on file at the Ansonia Planning and Zoning Department.
Building Department:	No pertinent environmental information was found on file at the Ansonia Building Department.
Fire Marshal's Office:	The Ansonia Fire Marshall's office had no file on the subject property.

IX. RECOGNIZED ENVIRONMENTAL CONDITIONS (REC)/ AREAS OF ENVIRONMENTAL CONCERN (AOC)

REC 1:	A portion of the subject property was filled with solid waste materials including masonry blocks, concrete, sections of brick wall, stumps, and natural soil and rock material. The origin and quality of this material is unknown but was likely considered clean fill when place on the property. No coal ash, slag, obvious asbestos-containing debris, or other materials that are known to cause significant contamination were observed on the ground surface. This fill material was likely considered a clean fill when first placed on the property and providing it is not contaminated with volatile and semi-volatile organic compounds, metals, or PCBs, it could probably remain on site. Today, the material would likely be considered by proposed regulation to be a regulated fill material especially because of the asphalt. Following testing of the material, additional regulatory assessment of the material would be needed.

X. RECOGNIZED ENVIRONMENTAL CONDITIONS – HISTORICAL AND CONTROLED

No Historical or Controlled Recognized Environmental Conditions were identified at the subject property.

XI. CONCLUSIONS AND RECOMMENDATIONS

A. FINDINGS AND CONCLUSIONS

1) NorthStar Environmental Management, LLC (NorthStar) was retained by Ecos Energy to conduct a Phase I Environmental Site Assessment (ESA) for the property located at 31 Benz Street, Ansonia, Connecticut.

2) The subject property consists of an 11.75-acre lot with a 1930's farm house, a dilapidated tractor shed and the foundational remains of a cow barn. The Colonial style Farm House was constructed with wood-framing; areas of hardwood floors and floors with carpeting, vinyl and linoleum coverings; plaster walls and ceilings; vinyl siding; an asphalt-shingled hip roof; and a full unfinished basement with a mostly concrete floor and natural stone walls with concrete grout. The house consists of approximately five bedrooms, two bathrooms, a kitchen, a dining room, a living room, and a utility room/office. The building is heated by a natural-gas-fired boiler located in the basement. Hot water is provided by a natural-gas-fired hot water heater in the basement. Both utilities are in good condition. Ms. Terry Harris, indicated that she is not aware that the property ever used oil for heating purposes and that there had never been to the best of her knowledge an underground oil tank on the property. NorthStar did not observe any evidence (feed or return lines, vent or fill pipes) of a former aboveground or underground heating oil storage tank at the site. The dwelling occupies a foot print area of approximately 1,200 square feet. Total living area is 2,428 sq feet. The subject building is currently occupied by the Harris family.

3) The exterior grounds consist of woodland areas, open fields and manicured lawn, and a vernal pond near the northwest portion of the property. Thirty feet northwest of the house is a dilapidated tractor shed that is currently used for storage of lawn furniture and other dry goods and had originally been used to store a tractor. No hazardous materials or staining were observed inside the shed. Around the shed were seven empty 55-gallon drums; which according to Ms. Terry Harris, were used to store sand for treating the relatively steep driveway during winter snow and ice storms. Adjacent to the Tractor Shed was a dilapidated wooden platform that once held a hoop house. Approximately 20 yards west of the tractor shed was the foundation remains of a former three-story barn. According to Ms. Harris, the barn was used to house the family cow, as well as, storage of dry goods and hay. The foundation is currently used to enclose a small family garden. A fenced-in area behind the former barn was used to pen the former family hog. The area was mostly over grown with brush and briars.

4) North and northwest of the tractor shed and former barn is a filled area that is approximately 1,500 square yards in extent. Materials within the fill that could be readily observed during the walk over included rock and soil, concrete blocks, sections of brick and concrete walls, chunks of asphalt, stumps, small amounts of rubbish such as a hose, a couple plastic buckets and metal pipes. Further north on the property beyond the fill area the property consisted of mature woodland with little undergrowth and an apparently healthy vernal pond.

5) The subject property is serviced by the municipal sanitary sewer systems. Drinking water is provided by an onsite drinking water well. Storm water is controlled by overland runoff. No storm water catch basins were observed on site. The building is heated by a natural gas fired boiler located in the basement. The adjacent hot water heater in the basement is also natural gas fired.

A. FINDINGS AND CONCLUSIONS (CONTINUED)

6) The subject property is located in a residential area of Ansonia, Connecticut. The site is abutted to the north by single-family residences on White Oak Road and undeveloped wooded land; to the west by single-family residences on Benz Street and Shortell Drive, and undeveloped wooded land; to the south by Benz Street across which are single-family residences; and to the east by single-family residences on White Owl Road.

7) Groundwater in the area of the subject property is classified **GA**. This classification denotes ground waters within the area of influence of private and potential public water supply wells. The groundwater is presumed to be suitable for direct human consumption without the need for treatment. The State's goal is to maintain the drinking water quality Class GA. Designated uses are existing private and potential public drinking water supply.

8) Parkers Pond, which is located approximately 200 feet south and down gradient of the subject property, has a surface water classification of **A**. This classification denotes surface waters that are known or presumed to meet water quality criteria which support designated uses. These surface waters are designated for fish and wildlife habitats, potential drinking water supplies, recreation, navigation, and water supply for industry and agriculture.

9) Surficial materials at the subject property are mapped as **Glacial Ice-laid Deposits (Till)**, which consist of non-sorted, generally non-stratified mixtures of grain-sizes ranging from clay to large boulders. The matrix of most tills is composed dominantly of sand and silt. Boulders within and on the surface of tills range from sparse to abundant. At the subject site the till appears to be thin till in which the till is less than 10-15 feet thick. Numerous bedrock outcrops were observed on the developed portion of the site and numerous boulders were present in the wooded area.

10) NorthStar contacted the Connecticut DEEP on November 6, 2018. No information related to the subject property was found on file at the Waste or Water Management Bureaus.

11) The subject property was not listed in any State or Federal environmental databases. No environmental sites of concern were listed in the vicinity of the subject property that would be considered a potential off site source of contamination. The only two properties listed in the database review were located more than a quarter mile from the subject site, at a lower elevation and across a hydraulic barrier.

12) No pertinent environmental information was found on file at the Ansonia Planning and Zoning Department, Building Department or Fire Department.

13) A portion of the subject property was filled with solid waste materials including masonry blocks, concrete, sections of brick wall, stumps, and natural soil and rock material. The origin and quality of this material is unknown. No coal ash, slag, obvious asbestos-containing debris, or other materials that are known to cause significant contamination were observed on the ground surface. This fill material was likely considered a clean fill when first placed on the property and providing it is not contaminated with volatile and semi-volatile organic compounds, metals, and PCBs, it could probably remain on site. Today, the material would likely be considered by proposed regulation to be a regulated fill material especially because of the asphalt. Following testing of the material, additional regulatory assessment of the material would be needed.

A. FINDINGS AND CONCLUSIONS (CONTINUED)

14) NorthStar found no information to indicate that the subject property would be classified as a Connecticut Transfer Act Establishment as defined in the Connecticut General Statutes Sections 22a-134a to 22a-134d as amended by Public Act 95-183.

B. RECOMMENDATIONS

Based on the findings and conclusions of this Phase I Environmental Site Assessment, NorthStar offers the following recommendations:

1) NorthStar recommends that test pit explorations be conducted in the area of the fill material to better assess the makeup of the fill material and to collect and analyzed soil samples for analysis of volatile and semi-volatile organic compounds, total petroleum hydrocarbons, metals, and polychlorinated biphenyls. Additional regulatory assessment of the material should be made once it has been more fully characterized.

X. EXCEPTIONS/DELETIONS FROM ASTM PRACTICE E-1527-13

The Phase I ESA presented herein includes the following exceptions to or deletions from ASTM Practice E-1527-13: None

XII. INFORMATION SOURCES SUMMARY

A. INDIVIDUALS CONTACTED:

✓	Property Occupant, Ms. Terry Harris
✓	Real Estate Agent, Ms. Heidie Kassery
✓	Assessor's Office
✓	Planning and Zoning Department
	Public Works
✓	Building Department
✓	Fire Marshal's Office
✓	Health Department

B. DOCUMENTS REVIEWED

✓	CT DEEP Bureau of Waste Management files (November 6, 2018)
✓	CT DEEP Bureau of Water Management files (November 6, 2018)
✓	Environmental Data Resources Radius Map Report (November 5, 2018)
✓	PCB Unit files
✓	Community Water Systems in Connecticut A 1984 Inventory
✓	Delorme TOPO USA 6.0 Topographic mapping software
✓	Water Quality Classifications Map of Connecticut, March 2011
✓	Bedrock Geological Map of Connecticut by John Rodgers, 1985
✓	Surficial Geological Map of Connecticut by Janet Stone, 1992
✓	Environmental GIS Data for Connecticut 2003 Edition DEEP Bulletin 37
✓	Aerial Photographs on file at the Connecticut State Library
✓	Sanborn Fire Insurance Maps on file at the Connecticut State Library

✓= Information source contacted or reviewed

XIII. GLOSSARY

ACRONYM / TERM	DEFINITION
ACBM	Asbestos-containing building materials. Material is classified as ACBM when it contains more than 1% asbestos. The EPA prohibited the spraying of asbestos for fireproofing and insulation in 1973 and for nearly all other purposes in 1978.
Aquifer	A geologic unit that is capable of transmitting water. Aquifers must be both porous and permeable.
ASTM	American Society for Testing Materials. ASTM publishes standard practice guidelines for Phase I Environmental Site Assessments and Transaction Screen processes for commercial real estate transactions.
Bedrock	Any solid rock that underlies unconsolidated material on the earth's surface.
Best Management Practices	Practices or procedures which reduce or eliminate the generation of wastes and wastewaters, spills or leaks, and other releases to the environment. (Excerpt from Best Management Practices for the Protection of Groundwater, 1992)
CERCLA	The Comprehensive Environmental Response Compensation and Liability Act of 1980. It is also referred to as "Superfund". The main purpose of this act is to provide funding and enforcement for the cleanup of hazardous waste sites. CERCLA is also responsible for responding to hazardous waste spills. All CERCLA sites are listed on the CERCLIS (Comprehensive Environmental Response Compensation and Liability Information System).
CERCLIS	The Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) is a database listing all CERCLA sites and is maintained by the Environmental Protection Agency.
Connecticut Transfer Act	Defined in the Connecticut General Statutes Sections 22a-134a to 22a-134d as amended by Public Act 95-183. The Connecticut Transfer Act protects purchasers of "establishments" by requiring, prior to the transfer, the completion of an environmental condition assessment.
Criteria	Elements of Connecticut's Water Quality Standards, expressed in parameters and their constituent concentrations, levels, or by narrative statements, representing a quality of water that supports a particular designated use. (As defined in CT Water Quality Standards and Criteria)
CT DEEP	Connecticut Department of Environmental Protection. The DEEP is a state agency that enforces environmentally related regulations and protects Connecticut's natural resources.
CT DHS	Connecticut Department of Health Services. The DHS is a state agency designated to protect the health of Connecticut residents.
Dry well	A well or borehole that does not extend into the zone of saturation and is typically used for the containment of industrial discharged wastewaters. A dry well can also be a well completed within the saturated zone that does not yield water to wells.
DOCKET	DOCKET tracks civil judicial cases against environmental polluters.

ACRONYM / TERM	DEFINITION
Environmental Site Assessment	An Environmental Site Assessment (ESA) is the process by which a person or entity seeks to determine if a particular parcel of real property is subject to recognized environmental conditions. (Excerpt from ASTM Standards 2nd edition)
Environmental Conditions - Recognized	REC = Recognized Environmental Conditions — the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any 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. De minimis conditions are not recognized environmental conditions (De minimis condition = does not represent a threat to human health or the environment; and the condition would not be subject to enforcement action if brought to the attention of regulatory agency).
Environmental Conditions - Historical	HREC = an environmental condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. The final decision rests with the EP and will be influenced by the current impact of the HREC on the property. If a past release of any hazardous substance or petroleum products has occurred in connection with the property and has been remediate, with such remediation accepted by the responsible regulatory agency (for example, as evidence by the issuance of a no further action letter or equivalent), this condition shall be considered a HREC and included in the findings section of the P1 ESA report… (EP opinion statement)… If this HREC is determined to be a REC at the time the P1 ESA is conducted, the condition shall be identified as such and listed in the conclusions section of the report."
Recognized Environmental Conditions - Controlled	CREC = "a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA 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 (e.g., property use restrictions, AULs, institutional controls, or engineering controls)…. A CREC shall be listed in the Findings Section of the Phase I ESA report and as a REC in Conclusions Section of the … report."
EPA	Environmental Protection Agency. The EPA is a federal agency, which mandates environmental policies throughout the United States.
Establishment	An "Establishment" is 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 activities, more than one hundred kilograms of hazardous waste in any one month, (B) hazardous waste generated by another person or municipality 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 shop or vehicle painting shop is or was located on or after May 1, 1967.

ACRONYM / TERM	DEFINITION
Floodplain	A flat surface of land adjacent to a river (or stream) which is formed from the deposition of river sediments.
Gradient	The slope of a streambed which is measured in feet of elevation loss per mile of horizontal distance.
Groundwater Classification	The groundwater classification goal or the groundwater classification, whichever is more stringent, as established in the Water Quality Standards. (Ref: CT Remediation Standard Regulations)
Hazardous Waste	Any waste or a combination thereof that is a hazard or potential hazard to human health.
Manifest	A shipping document ,which is required each time a hazardous waste is transferred from one location to another. A manifest is also known as a chain of custody.
mg/L	Milligrams per liter.
Monitoring well	A well which is used for the purpose of extracting groundwater. Typically, wells are made of PVC materials and can be 2 ½ inches to 4 inches in diameter. Monitoring wells are used to obtain groundwater samples over a long period of time or for measuring water levels.
MSDS	Material Safety Data Sheets contain information for chemicals used and/or stored on-site regarding safety and emergency procedures. OSHA (Occupational Safety and Health Administration) requires all establishments that handle or generate chemicals or hazardous materials to have MSDS in an easily accessible area for all employees at all times.
NPL	National Priority List. A list maintained by the EPA in order to prioritize the cleanup of severely contaminated sites. Currently, there are approximately 1,300 NPL sites in the United States.
PCB	Polychlorinated biphenyls. PCBs were banned under the Toxic Substances Control Act of 1976. They were commonly used in electrical transformers and capacitors as well as other industrial machinery where chemical stability was required. PCBs are chemically inert, do not breakdown at high temperatures and are soluble in water.
RCRA	The Resource Conservation and Recovery Act of 1976 established the first comprehensive federal regulatory program for controlling hazardous waste and providing grants and technical assistance to the states to help improve waste management techniques.
Remediation	The containment, removal, mitigation or abatement of pollution, a potential source of pollution, or a substance which poses a risk to human health or the environment, and includes but is not limited to the reduction of pollution by natural attenuation. (Ref. CT. Remediation Standard Regulations)
Solid Waste	The term solid waste refers to any discarded material such as garbage, refuses, and sludge from a waste treatment plant, or other materials in a solid, liquid, or contained gaseous form.

ACRONYM / TERM	DEFINITION
Superfund	The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) was passed by Congress in 1980. This act was passed in order to address sites contaminated by hazardous substances that pose a threat to both public health and the environment. The Environmental Protection Agency manages Superfund sites.
Surface Water	Any water that resides on the surface of the earth such as inland surface waters including freshwater rivers, streams, lakes and ponds, Coastal and marine surface waters include areas such as saline waters, brackish waters, harbors, and estuaries.
TCLP	Toxicity Characteristic Leaching Procedure. It is an analytical procedure (EPA Method 1311) used to determine whether a solid waste is a hazardous waste under RCRA.
Test Boring	Also called a test hole, a test boring is a borehole, which is used to acquire current geological or hydrological conditions at a designated location.
TSCA	The Toxic Substances Control Act (TSCA) was enacted in 1976 in order to allow the EPA to test the safety of chemicals before they are manufactured or distributed to the public. Since TSCA has been introduced, the EPA has instituted bans on three products: polychlorinated biphenyls (PCBs), asbestos and chlorofluorocarbons (CFCs).
TRIS	Toxic Release Inventory System (TRIS). TRIS contains information from facilities on the amounts of over 300 listed toxic chemicals that facilities release directly to the air, water, land or that are transported off site.
TSDF	Treatment Storage and Disposal Facility. A facility that is permitted to treat, store or dispose of hazardous waste under RCRA. TSDFs include but are not limited to landfills, incinerators and hazardous waste tanks.
UST	An underground storage tank (UST) is used to contain hazardous substances or petroleum products. A tank is classified as an (UST) if 10% or more of the tank is located beneath the surface of the ground. UST's are often criticized due to the fact that corrosion can occur over time causing leaking tanks which can go undetected for long periods of time.
VOC	A Volatile Organic Compound (VOC) is either a liquid or a solid organic that exhibits a tendency to pass into the vapor state.
Wastewater	Water that has been used in an industrial or manufacturing process.
Water Quality Standards	Provisions of state and federal law that consist of designated use or uses for the state's waters and water quality criteria that will support those uses.
Water Table	The zone at which unsaturated material meets saturated material. The water table can be measured by installing shallow wells into the zone of saturation then measuring the water level in the wells.
Wetlands	Those areas that are saturated by water at frequent intervals and are characterized by vegetation typically adapted for life in saturated soil conditions. A wetland refers to land that borders coastal or inland marshes or estuaries, swamps, rivers and their associated water saturated areas.

XIV. COMMON AOCs AND LIKELY RELEASE LOCATIONS

Common AOCs	Possible Release Mechanisms	Examples of Likely Release Locations Appropriate for Phase II Investigation Sampling and Analysis
Aboveground Storage Tanks	Tank leak	Beneath and/or near tank at nearest down slope, low lying, pervious area
	piping/valve/dispenser leaks	At/beneath fittings and pipe segments subject to leakage
	Overfills	Beneath and/or adjacent to the till pipe/dispenser, at nearest down slope, low lying, pervious area
Underground Storage Tank Systems	Tank leak	Underlying native soil at each end of tank, sidewall samples at depth of tank bottom
	piping/valve/dispenser leaks	In the vicinity of buried pipe fittings and swing joints, beneath product lines along the piping run, beneath the dispenser island, particularly when no dispenser pans are present
	Overfills	Beneath and/or adjacent to the fill pipe/vent pipe/dispenser, at nearest downslope, low-lying, pervious area
Interior Chemical Storage Areas	Leaks, spills from overfill containers, leaks from spigots, accidental container punctures	Beneath stains on the floor, and/or in the immediate area of the stored materials Beneath joints or cracks in the floor through which released substances may have preferentially migrated (e.g., joint between the building wall and floor)
Exterior Chemical Storage Areas	Leaks, spills from overfull containers, leaks from spigots, accidental container punctures	Beneath and/or near storage area at nearest downslope, low lying, pervious area, near entrances Beneath joints or cracks through which released substances may have preferentially migrated
Transformers, Capacitors and other Equipment with Polychlorinated Biphenyls	Leaks, explosions, spillage	Beneath and/or near equipment, at nearest downslope, low lying, cracks/joints, pervious area
Dumpster, Waste Containers	Leaks, overfills, spillage	Beneath and/or near equipment, at nearest downslope, low lying, cracks/joints, pervious area
Septic Tanks, Leaching Fields, Drywells, Wastewater Treatment Facilities	Leaks from septic tanks, piping and distribution boxes	Beneath and/or directly adjacent to the tanks, solid piping and distribution boxes, and at pipe fittings and bends
	Designed discharges to leaching beds, galleries, drywells	Beneath and/or directly adjacent to leaching components and drywells
Buried and Above Ground Piping (e.g., sewer, process)	Pipe leaks	Beneath and/or adjacent to the piping, at fittings, bends, and segments subject to corrosion
	pipe discharge points to ground surface or surface water	At the discharge point
Floor Drains, Trenches and Sumps	Leaks through cracks, joints, or pervious sections of drains, and through pipe fittings and bends	Beneath and/or adjacent to the drain, trench, or sump at cracks, joints, and pervious sections, and beneath and/or adjacent to pipe fittings and bends

COMMON AOCs AND LIKELY RELEASE LOCATIONS (CONTINUED)

Common AOCs	Possible Release Mechanisms	Examples of Likely Release Locations Appropriate for Phase II Investigation Sampling and Analysis
Door/Window Disposal Areas	Spills and waste "dumping"	At nearest downslope, low lying, cracks/joints, pervious area, likely disposal areas
Loading Docks and Delivery Areas	Spills	Areas of stained soil and/or stressed vegetation
Interior Material Handling/Use Areas (e.g., metal machining, degreasing, plating)	Chronic drips, spills and leaks to floor	Beneath and/or adjacent to handling/use areas at stained floors, cracks, or joints
	Leaks through associated floor drains, trenches, piping, and sumps	Beneath and/or adjacent to the drain, trench or sump at cracks, joints and pervious sections, and beneath and/or adjacent to pipe fittings and bends
Roof drains, air vents	Fallout of airborne COCs and/or condensation from process exhaust vents directly to ground or to roof tops and with subsequent entrainment into roof runoff	Beneath and/or downslope of nearest vents and/or roof drain outlets, taking into consideration air flow and runoff patterns
Landfills, waste piles, pits, trenches lagoons, and fill areas	Intentional placement, often in accordance with acceptable practice during a prior time period	Within the placed materials

APPENDIX A

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

PROJECT LIMITATIONS

All work performed and the report provided by NorthStar Environmental Management, LLC (NorthStar) in connection with the performance of this Environmental Site Assessment are subject to the following limitations:

1. The observations described in the report were made under the conditions stated therein. The conclusions presented in the report are based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the client.

2. In preparing this report, NorthStar has relied upon certain information provided by State and Local Officials, on information contained in the files of State and/or Local Agencies made available to NorthStar at the time of this writing, and upon information provided by and representations made by other parties referenced therein. To the extent that such files are missing, incomplete or not provided to NorthStar, NorthStar is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, NorthStar did not attempt to independently verify the accuracy or completeness of all information reviewed during the course of this project.

3. If the conclusions and recommendations contained in this report are based in part upon data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations; then the nature and extent of variations between these explorations may not become evident until further explorations. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

4. Except as noted within the text of the report, no qualitative laboratory testing was performed as part of the project. Where such analyses have been conducted by an outside laboratory, NorthStar has relied upon the data provided, and has not conducted an independent evaluation of the reliability of the test data.

5. Chemical analyses may have been performed for specific parameters during the course of this project, as described in the text. However, it should be noted that additional chemical constituents, which were not searched for during the current project, may be present in soil and/or groundwater at the site.

6. If the conclusions and recommendations contained in this report are based, in part, upon various types of chemical data; then the conclusions and recommendations are contingent upon the validity of such data. The data has been reviewed and interpretations made in this report. If indicated within the report, some of this data may be preliminary "screening" level data and should be confirmed with quantitative analysis if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, it is recommended that the data be reviewed by NorthStar and the conclusions and recommendations presented herein be modified accordingly.

7. It is recommended that NorthStar be retained to provide further consulting services during the construction and/or implementation of any remedial measures recommended in this report. This is to allow NorthStar to observe compliance with the concepts and recommendations contained herein, and to allow the development of changes to the remedial program in the event that subsurface conditions or other conditions differ from those anticipated.

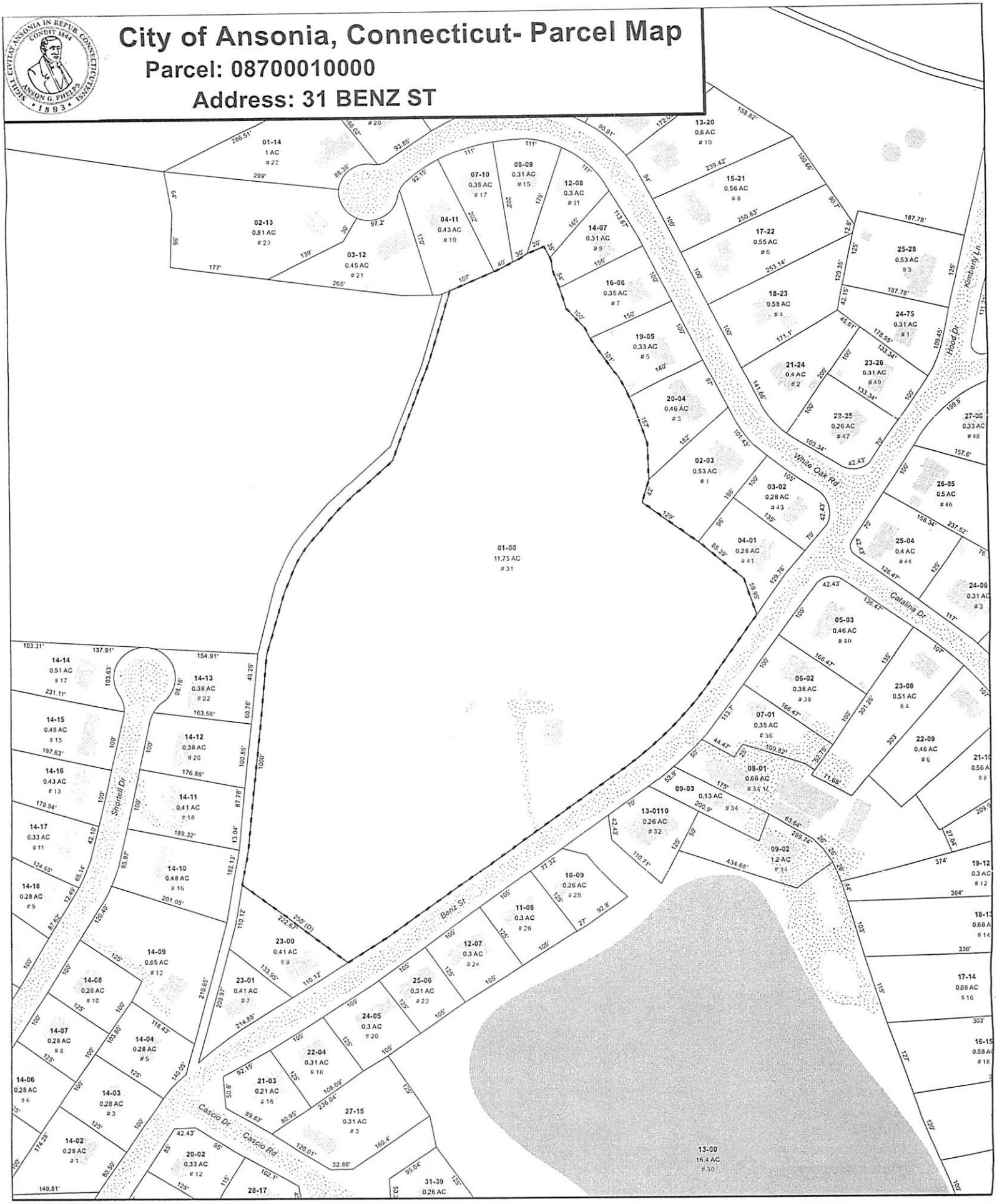
8. Plot, plans, sketches and other illustrative materials in this report are included to assist the reader in visualizing the site and are not drawn to scale unless otherwise noted.

APPENDIX B
TOWN INFORMATION

City of Ansonia, Connecticut- Parcel Map

Parcel: 08700010000

Address: 31 BENZ ST



Approximate Scale: 1 inch = 200 feet

0 110 220 330 440 Feet

Map Produced: October 2014

Disclaimer: This map is for informational purposes only All information is subject to verification by any user. The City of Ansonia and its mapping contractors assume no legal responsibility for the information contained herein.

ZONING PERMIT

City of Ansonia

253 Main Street
Ansonia, Connecticut 06401

Date Filed _____
Receipt No. _____
Fee _____ *Incl. CZC*

Instructions: Fill out this application in ball point pen. A scaled plot plan in duplicate, based on a certified surveyor's plot plan must be submitted with this application showing the proposed or existing lot and building dimensions and the location of all buildings in relation to the street lines, side lot lines and rear lot lines.

ADDRESS OF PROPERTY 31 Benz ST Ansonia ZONE A

MAP 87 BLOCK 1 PARCEL 0 LOT NO. _____ ADDRESS MAP NO. _____ LOT SIZE 1.175 Acres

Width of street right of way less than 50 ft.? YES____ NO____ Corner lot? YES____ NO____

Is any portion of the lot below regulatory flood elevation? YES____ NO____

City water____ Private well*____ Sewer**____ Septic***____ Eng.O.S.Permit No. _____

OWNER Abate Family Living Trust

ADDRESS OF OWNER 10 Fitzpatrick Rd. (Street), Ansonia (City), Ct. (State) 06401

PRESENT USE OF PROPERTY Single family

PROPOSED CONSTRUCTION: New ____ Addition ____ Alteration ____ Repair ____

SIZE/USE OF PROPOSED CONSTRUCTION 8-24 Consideration of Purchase

NO. OF STORIES ____ HEIGHT____ REQUIRED PARKING SPACES ____ LOT COVERAGE ____

DATE OF: ZBA APPROVAL____ SPECIAL EXEMPTION____ WETLANS APPROVAL____

SITE PLAN APPROVAL ____ SPECIAL PERMIT APPROVAL____ SUBD. REQU.YES____ NO____

Certification: (Warning) I hereby certify that I am making this application on behalf of and with full authority of the owner of the property and that I am aware of the Zoning Regulations pertinent in this case and that the statements made herein are true and correct. APPROVAL SHALL BE VALID FOR PLANS AS SUBMITTED.

THE OCCUPANCY AND USE OF LAND AND BUILDINGS OR STRUCTURES PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY IS PROHIBITED.

Approved by:

_____
Zoning Enforcement Officer

Date Issued _____

Applicant's Name Joyce A. Harris (Please print)

Applicant's Signature Joyce A. Harris

Address: Street 10 Fitzpatrick Rd.

City Ansonia State Ct 06401

Tel. No. (203) 735-9744

City of Ansonia, CT

Property Listing Report | Map Block Lot 08700010000 | Account 20

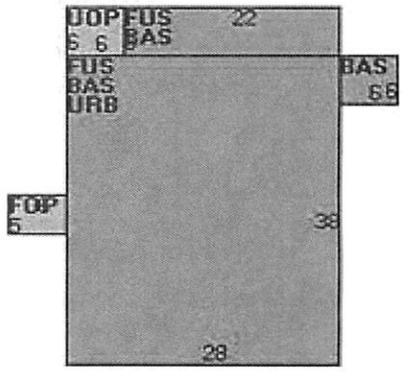
Property Information

Property Location	31 BENZ ST
Owner	ABATE FAMILY LIVING TRUST
Co-Owner	ABATE JOSEPH J & HELEN K AS TRUSTEES
Mailing Address	31 BENZ ST ANSONIA CT 06401
Land Use	101 Single Fam
Land Class	R
Zoning Code	A
Census Tract	
Sub Lot	

Neighborhood	1-00
Acreage	11.75
Utilities	Public Water,Public Sewer
Lot Setting/Desc	Suburban Above
Survey Map	
Additional Info	

Photo

Sketch



Primary Construction Details

Year Built	1930
Stories	2
Building Style	Conventional
Building Use	Residential
Building Condition	Average
Floors	Hardwood
Total Rooms	10

Bedrooms	4 Bedrooms
Full Bathrooms	2
Half Bathrooms	0
Bath Style	Average
Kitchen Style	Average
Roof Style	Hip
Roof Cover	Asphalt Shingl

Exterior Walls	Aluminum Sidin
Interior Walls	Plaster
Heating Type	Hot Water
Heating Fuel	Gas
AC Type	None
Gross Bldg Area	3558
Total Living Area	2428

Report Created On 10/17/2018

City of Ansonia, CT

Property Listing Report | Map Block Lot 08700010000 | Account 20

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	117800	82500
Extras	0	0
Outbuildings	700	500
Land	198700	139100
Total	317200	222100

Outbuilding and Extra Items

Type	Description
Barn 2 St	286.00 S.F.

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	1232	1232
Porch, Open	30	0
Upper Story, Finished	1196	1196
Porch, Open, Unfinished	36	0
Raised Basement	1064	0
Total Area	3558	2428

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
ABATE FAMILY LIVING TRUST	427/ 423	8/23/2005	0
ABATE JOSEPH & HELEN	71/ 579	8/19/1947	0

Report Created On 10/17/2018

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

APPENDIX C
ENVIRONMENTAL DATABASE REPORT

31 Benz St
31 Benz St
Ansonia, CT 06401

Inquiry Number: 5475221.2s
November 05, 2018

The EDR Radius Map™ Report

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

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

31 BENZ ST
ANSONIA, CT 06401

COORDINATES

Latitude (North):	41.3433870 - 41° 20' 36.19''
Longitude (West):	73.0608940 - 73° 3' 39.21''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	662240.9
UTM Y (Meters):	4578479.0
Elevation:	433 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5642091 ANSONIA, CT
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140717
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
31 BENZ ST
ANSONIA, CT 06401

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	LINDA TURNER	19 WEBSTER DR.	LUST, SPILLS, CPCS	Lower	2322, 0.440, SSW
2	NIKE 04		FUDS	Lower	4580, 0.867, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS ---------- Inventory of Hazardous Disposal Sites
SDADB ---------- Site Discovery and Assessment Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- List of Landfills/Transfer Stations

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Underground Storage Tank Data
AST ---------- Marine Terminals and Tank Information
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Engineering Controls Listing
AUL ---------- ELUR Sites

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Remediation Sites

State and tribal Brownfields sites

BROWNFIELDS ---------- Brownfields Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY ---------- Recycling Facilities
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register

CDL ---- Clandestine Drug Lab Listing
US CDL ---- National Clandestine Laboratory Register

Local Land Records

CT PROPERTY ---- Property Transfer Filings
LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
SPILLS ---- Oil & Chemical Spill Database
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ---- RCRA - Non Generators / No Longer Regulated
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
FINDS ---- Facility Index System/Facility Registry System
UXO ---- Unexploded Ordnance Sites
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
ECHO ---- Enforcement & Compliance History Information
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
AIRS ---- Permitted Air Sources Listing

ASBESTOS Asbestos Notification Listing
DRYCLEANERS Drycleaner Facilities
ENF Enforcement Case Listing
Financial Assurance Financial Assurance Information Listing
LEAD Lead Inspection Database
LWDS Connecticut Leachate and Wastewater Discharge Sites
MANIFEST Hazardous Waste Manifest Data
NPDES Wastewater Permit Listing
SEH List of Significant Environmental Hazards Report to DEEP
UIC Underground Injection Control Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS Recovered Government Archive State Hazardous Waste Facilities List
RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's Leaking Underground Storage Tank List.

A review of the LUST list, as provided by EDR, and dated 07/31/2018 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LINDA TURNER	***19 WEBSTER DR.***	***SSW 1/4 - 1/2 (0.440 mi.)***	***1***	***8***

Lust Status: 1
LUST Id: 37271

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 01/31/2015 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NIKE 04 Federal Facility ID:: CT9799F1736 INST ID:: 59424		SE 1/2 - 1 (0.867 mi.)	2	11

CPCS: A list of Contaminated or Potentially Contaminated Sites within Connecticut. This list represents the "Hazardous Waste Facilities," as defined in Section 22a-134f of the Connecticut General Statutes (CGS). The list contains the following types of sites: Sites listed on the Inventory of Hazardous Waste Disposal Sites; Sites subject to the Property Transfer Act; Sites at which underground storage tanks are known to have leaked; Sites at which hazardous waste subject to the RCRA; Sites that are included in EPA's (CERCLIS); Sites that are the subject of an order issued by the Commissioner of DEP that requires investigation and remediation of a potential or known source of pollution; and Sites that have entered into one of the Department's Voluntary Remediation Programs.

A review of the CPCS list, as provided by EDR, and dated 08/07/2018 has revealed that there is 1 CPCS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LINDA TURNER Lust Status: Pending	***19 WEBSTER DR.***	***SSW 1/4 - 1/2 (0.440 mi.)***	***1***	***8***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name	Database(s)
	SWF/LF
WOODBRIDGE SOLID WASTE DISPOSAL AR	SDADB, SWF/LF
153 MAIN STREET & 497 EAST MAIN ST	VCP
DAIRY MART INC	SDADB
PROPOSED ANSONIA HIGH SCHOOL	SDADB

OVERVIEW MAP - 5475221.2S

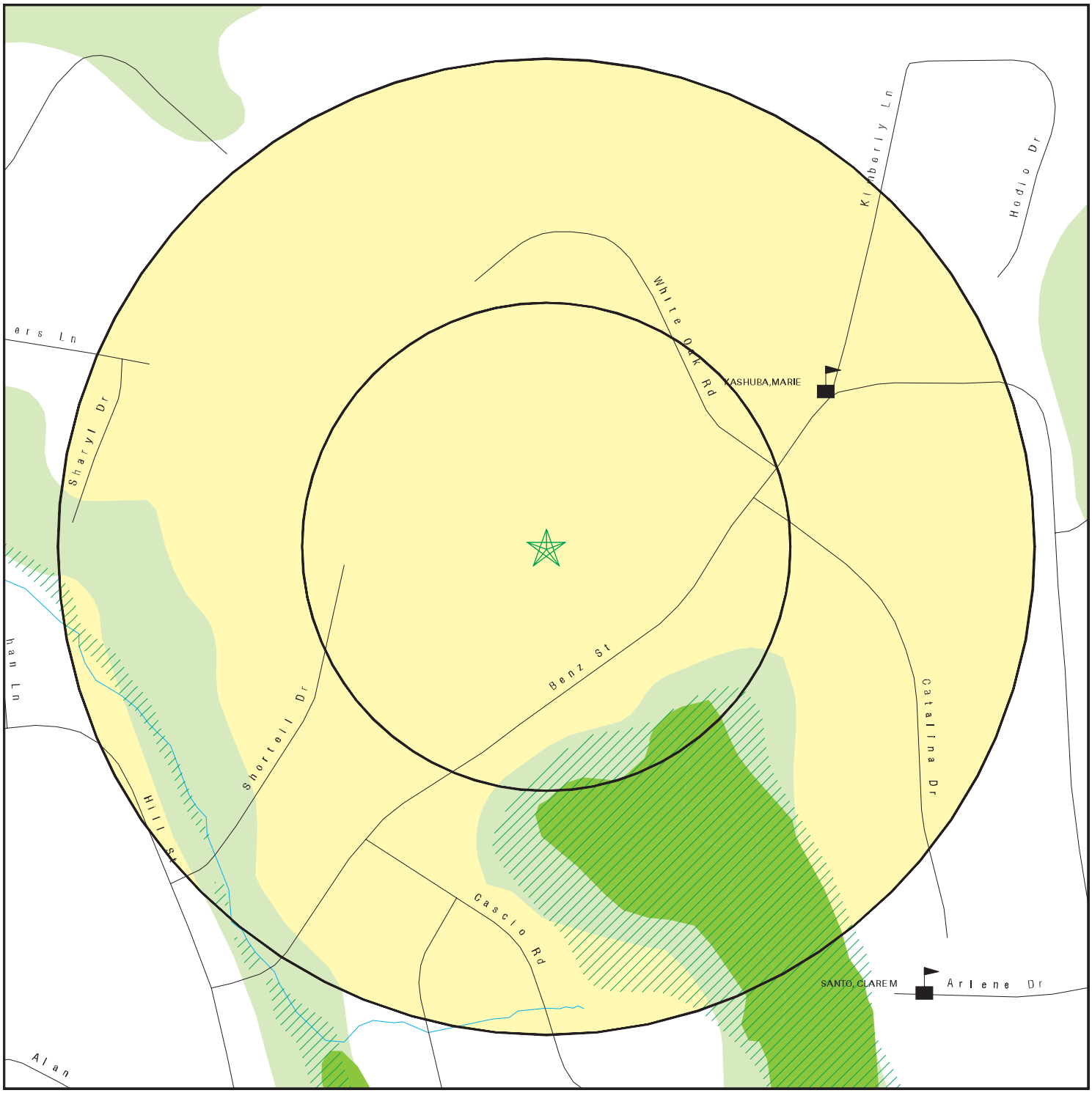
0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 31 Benz St	CLIENT: Northstar Env. Management
ADDRESS: 31 Benz St Ansonia CT 06401	CONTACT: Jean
LAT/LONG: 41.343387 / 73.060894	INQUIRY #: 5475221.2s DATE: November 05, 2018 2:13 pm

DETAIL MAP - 5475221.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 31 Benz St	CLIENT: Northstar Env. Management
ADDRESS: 31 Benz St Ansonia CT 06401	CONTACT: Jean
LAT/LONG: 41.343387 / 73.060894	INQUIRY #: 5475221.2s DATE: November 05, 2018 2:15 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
SDADB	0.500		0	0	0	NR	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
CT PROPERTY	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	1	NR	1
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
CPCS	0.500		0	0	1	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
LEAD	TP		NR	NR	NR	NR	NR	0
LWDS	0.250		0	0	NR	NR	NR	0
MANIFEST	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
SEH	0.500		0	0	0	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	0	0	2	1	0	3

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
SSW
1/4-1/2
0.440 mi.
2322 ft.

LINDA TURNER
19 WEBSTER DR.
ANSONIA, CT 06401

LUST **S104311986**
SPILLS **N/A**
CPCS

Relative:
Lower

Actual:
430 ft.

LUST:

LUST Id:	9304
UST Facility Id:	Not reported
LUST Case Id:	37271
Lust Status:	Pending
Processing Status:	Not reported
EPA Reportable:	0
Motor Fuel:	No
Diesel:	No
Gasoline:	No
Other:	Yes
Other Release:	petroleum
No Release:	No
Leak:	No
Tank:	No
Piping:	No
Overfill:	No
Removal:	No
Incident Date:	12/03/1999
Entry Date:	03/22/2002
Site Case Id:	9908196
UST Site Id:	Not reported
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	Not reported
LUST Owner Id:	Not reported
UST Event Id:	Not reported
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	Not reported
2nd Contact EMail:	Not reported
2nd Contact Address:	Not reported
2nd Contact City,St,Zip:	UNKNOWN
2nd Contact Address 2:	Not reported
2nd Contact City 2:	Not reported
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	2
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	0

LINDA TURNER (Continued) **S104311986**

Date Referred:	Not reported
Emergency:	No
Private Heating Fuel:	Yes
Commercial Heating Fuel:	No
Commercial HF < 2100 Gal.:	No
Commercial HF > 2100 Gal.:	No
Commercial HF - Size Unk:	No
No LUST Site:	No
Cost Recvry Prgm Candidate:	No
OCSRD Complete:	Yes
Follow Up Flag:	No
Alternate Water Supply:	No
Relocation:	No
Responsible Party:	No
Responsible EMail:	Not reported
Resp Party Name:	Not reported
Resp Party Address:	Not reported
Resp Party City,St,Zip:	Not reported
Resp Party Town Number:	UNKNOWN
Resp Party Phone:	Not reported
Resp Party Fax:	Not reported
Resp Party Name 2:	Not reported
Resp Party Address 2:	Not reported
Resp Party Phone 2:	Not reported
Investigator Id:	Not reported
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	Not reported
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	No
Install Micro Wells:	No
Ground Water Sample:	No
Soil Sample:	No
Soil Gas:	No
Site Inspect:	No
Soil Excavate:	No
Geo Probe:	No
Survey:	No
Potable Well Sample:	No

LINDA TURNER (Continued) **S104311986**

Sample MWS:	No
Ground Water Gauging:	No
Soil Venting:	No
Active:	No
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	No
Release Invest Rpt:	No
DEP App Letter 1:	No
Correct Action Plan:	No
DEP App Letter 2:	No
Rem Sys Install:	No
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	No
Qrtly Gwater Mon Rpts:	No
Closure Req Rpt:	No
DEP Closure Letter:	No
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	Not reported
Date Stamp:	Not reported
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	removed 275 UST , soil removal , samples taken.
Work Performed:	Not reported

SPILLS:

Year of Database:	1999
Case Number:	9908196
Who Took Spill:	915
Assigned To:	0
Report Date:	12/03/1999
Report Time:	15:44:47
Date Release:	12/03/1999
Time Responded:	Not reported
Reported By:	jeff merk
Phone:	860 3421559
Representing:	b & m excavating
Terminated:	YES
Recovd (Total):	0
Total (Water):	0
Facility Status:	Closed

LINDA TURNER (Continued) **S104311986**

Continuous Spill: False
Released Substance: #2 FUEL OIL
Qty: 0 (Gallons)
Emergency Measure: removed 275 ust , soil removal , samples taken.
Water Body: na
Discharger: linda turner
Telephone: 937 4277727
Responsible Party: YES
RP Address 1: s.a.a.
RP City,St,Zip: ANSONIA, CT 06401
Historic: False
Waterbody: False
Time Stamp: 1999-12-06 11:57:08
Sr Inspector: Capuano, Mike
At Inspctor: **NO RESPONSE
User Stamp: Not reported
Comments: Not reported
Action: Pumped Out
Other Action: Not reported
Action: Removed Tank
Other Action: Not reported
Action: Soil Removed
Other Action: Not reported
Agency ID: Local Fire Marshal
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Inground Tank Failure
Other Cause: Not reported
Media ID: Other
Other Media: sugsurface soil contamination
Class ID: Private
Other Class: Not reported
Release Type: petroleum
Other Release: Not reported
Waterbody: Other
Other Wtrbody: na

CPCS:
Site Type: LUST
Lust Status code: 1
Lust Status: Pending
PTP Form: Not reported
Program: Not reported
Comments: Removed 275 Ust , Soil Removal , Samples Taken.
Site Type Definition: Leaking Underground Storage Tanks Pending

---

2 NIKE 04 **FUDS** **1010309660**
SE **N/A**
1/2-1 ANSONIA, CT
0.867 mi.
4580 ft.

Relative:
Lower

Actual:
335 ft.

FUDS:
EPA Region: 01
Congressional District: 03
FUDS Number: D01CT0024

NIKE 04 (Continued) **1010309660**

State:	CT
Facility Name:	NIKE 04
Fiscal Year:	2013
City:	ANSONIA
Federal Facility ID:	CT9799F1736
Telephone:	978-318-8238
INST ID:	59424
County:	NEW HAVEN
RAB:	Not reported
CORPS_DIST:	New England District (NAE)
NPL Status:	Not Listed
CTC:	117.5
Current Owner:	Other
Future Prog:	Not reported
Description:	Launcher site currently used as a horse farm, former officers quarters occupied by owner, former barracks used as stables and three other former DoD buildings used for storage. The silos are located next to a park. A concrete block magnesium storage building and a corrugated metal structure exist adjacent to silos. Control area currently used by the U.S. Department of Agriculture, the buildings have been renovated. Five radar towers and utility poles exist at control area.
Current Program:	Not reported
History:	Launcher site approximately 16 acres. Control area approximately 13 acres. Lands acquired in fee by deed on 8/15/1956. Control area used as Army Reserve Center until 1979. Site reported excess to GSA September 1980. Launcher area transferred in fee by quitclaim deed dated 12/16/1982 to Marjorie Lisa Ferguson. Housing area still under DoD control.
Latitude Degree:	41
Latitude Minute:	21
Latitude Second:	3
Latitude Direction:	N
Longitude Degree:	-73
Longitude Minute:	3
Longitude Second:	55
Longitude Direction:	E

Count: 5 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ANSONIA	S108310339		NORTH DIVISION STREET		SWF/LF
ANSONIA	S110280781	153 MAIN STREET & 497 EAST MAIN ST	153 MAIN STREET & 497 EAST MAI		VCP
ANSONIA	S104187208	DAIRY MART INC	NORTH MAIN STREET	06401	SDADB
ANSONIA	S104253223	PROPOSED ANSONIA HIGH SCHOOL	SENTIEL HILL SITE	06401	SDADB
WOODBRIDGE	S104255584	WOODBRIDGE SOLID WASTE DISPOSAL AR	ACORN HILL ROAD		SDADB, SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/14/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/18/2018
Date Data Arrived at EDR: 06/27/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 79

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Inventory of Hazardous Disposal Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/23/2010
Date Data Arrived at EDR: 04/23/2010
Date Made Active in Reports: 05/25/2010
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: No Update Planned

SDADB: Site Discovery and Assessment Database

All sites reported to Permitting, Enforcement, and Remediation Division where it is suspected that hazardous waste may have been disposed or sites that are eligible for listing on the State Inventory of Hazardous Waste Disposal Sites.

Date of Government Version: 04/23/2010
Date Data Arrived at EDR: 04/23/2010
Date Made Active in Reports: 05/25/2010
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: No Update Planned

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: List of Landfills/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/29/2018
Date Data Arrived at EDR: 07/25/2018
Date Made Active in Reports: 07/31/2018
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3366
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 35

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3376
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/10/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Varies

UST: Underground Storage Tank Data
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/19/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 32
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3376
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Semi-Annually

AST: Marine Terminals and Tank Information
A listing of bulk petroleum facilities that receive petroleum by a vessel.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 32
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3233
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Listing

An Engineered Control is a permanent physical structure designed to safely isolate pollutants which would otherwise not comply with the self-implementing remedial options allowed in the Connecticut Remediation Standard Regulations (RSRs). The ECGD includes a description of what is eligible to be considered as an Engineered Control under section 22a-133k-2(f)(2) of the RSRs, a description of the information necessary for the preparation of complete and approvable applications, a step-by-step outline of the review and approval process, and supplemental resources provided in the appendices.

Date of Government Version: 03/05/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/19/2013
Number of Days to Update: 43

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3000
Last EDR Contact: 09/07/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

AUL: ELUR Sites

Environmental Land Use Restriction sites.

Date of Government Version: 05/04/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 06/20/2018
Number of Days to Update: 33

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3912
Last EDR Contact: 11/01/2018
Next Scheduled EDR Contact: 02/18/2019
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

VCP: Voluntary Remediation Sites

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 08/10/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 11/01/2018
Next Scheduled EDR Contact: 02/20/2047
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS 2: Brownfields Inventory

A brownfield site is generally defined as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminanta?|"

Date of Government Version: 08/03/2017
Date Data Arrived at EDR: 09/20/2017
Date Made Active in Reports: 09/26/2017
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

BROWNFIELDS: Brownfields Inventory

CBRA has identified over 200 brownfield sites eligible for redevelopment. In most cases these are prime properties for commercial or industrial use. CBRA's grants, assistance and financing lower the financial risks and eliminate the legal, regulatory and environmental risks of redevelopment.

Date of Government Version: 03/25/2016
Date Data Arrived at EDR: 03/29/2016
Date Made Active in Reports: 05/18/2016
Number of Days to Update: 50

Source: Connecticut Brownfields Redevelopment Authority
Telephone: 860-258-7833
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities

A listing of recycling facilities.

Date of Government Version: 09/14/2018
Date Data Arrived at EDR: 09/20/2018
Date Made Active in Reports: 10/04/2018
Number of Days to Update: 14

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3223
Last EDR Contact: 09/10/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/25/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/22/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/02/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Listing
A listing of clandestine drug lab locations included in the Spills database.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 35

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3361
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Quarterly

Local Land Records

CT PROPERTY: Property Transfer Filings
A listing of sites that meet the definition of a hazardous waste establishment. They can be generators, dry cleaners, furniture strippers, etc. These sites have been sold to another owner.

Date of Government Version: 08/10/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 11/01/2018
Next Scheduled EDR Contact: 02/18/2019
Data Release Frequency: Semi-Annually

LIENS: Environmental Liens Listing
A listing of environmental liens placed by the Cost Recovery Program.

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/13/2017
Number of Days to Update: 26
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3120
Last EDR Contact: 08/07/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

SPILLS: Oil & Chemical Spill Database
Oil and Chemical Spill Data.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 35
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3024
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/15/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/12/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/12/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/27/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/03/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/10/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/24/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/23/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/11/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/11/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/07/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/04/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/02/2018
Date Data Arrived at EDR: 07/05/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 92
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/03/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/30/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/17/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/01/2018
Next Scheduled EDR Contact: 02/18/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/20/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36
Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/29/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 37
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/29/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49
Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/31/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/31/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/10/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/07/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 30

Source: EPA
Telephone: (617) 918-1111
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 06/19/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 87

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/05/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/31/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/22/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Quarterly

AIRS: Permitted Air Sources Listing

A listing of permitted air sources in Connecticut.

Date of Government Version: 07/25/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 44

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3026
Last EDR Contact: 10/22/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

A listing of asbestos notification site locations.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/02/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 39

Source: Department of Public Health
Telephone: 860-509-7371
Last EDR Contact: 10/25/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Varies

CPCS: Contaminated or Potentially Contaminated Sites

A list of Contaminated or Potentially Contaminated Sites within Connecticut. This list represents the "Hazardous Waste Facilities," as defined in Section 22a-134f of the Connecticut General Statutes (CGS). The list contains the following types of sites: Sites listed on the Inventory of Hazardous Waste Disposal Sites; Sites subject to the Property Transfer Act; Sites at which underground storage tanks are known to have leaked; Sites at which hazardous waste subject to the RCRA; Sites that are included in EPA's (CERCLIS); Sites that are the subject of an order issued by the Commissioner of DEP that requires investigation and remediation of a potential or known source of pollution; and Sites that have entered into one of the Department's Voluntary Remediation Programs.

Date of Government Version: 08/07/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3766
Last EDR Contact: 11/01/2018
Next Scheduled EDR Contact: 02/18/2019
Data Release Frequency: Quarterly

DRYCLEANERS: Drycleaner Facilities

A listing of drycleaner facility locations.

Date of Government Version: 07/18/2008
Date Data Arrived at EDR: 08/08/2008
Date Made Active in Reports: 08/27/2008
Number of Days to Update: 19

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3026
Last EDR Contact: 09/06/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

ENFORCEMENT: Enforcement Case Listing

The types of enforcement actions included are administrative consent orders, final unilateral orders and final dispositions of civil cases through the Attorney General's Office.

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 10/19/2018
Date Made Active in Reports: 10/25/2018
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3265
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing containing RCRA financial assurance information submitted on behalf of the CT DEP's Program Analysis Group of the Waste Engineering and Enforcement Division.

Date of Government Version: 06/14/2018
Date Data Arrived at EDR: 06/22/2018
Date Made Active in Reports: 07/31/2018
Number of Days to Update: 39

Source: Department of Energy & Environmental Protection
Telephone: 860-418-5930
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 06/14/2018
Date Data Arrived at EDR: 06/22/2018
Date Made Active in Reports: 07/31/2018
Number of Days to Update: 39

Source: Department of Energy & Environmental Protection
Telephone: 860-418-5930
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

LEAD: Lead Inspection Database

The Lead Poisoning Prevention and Control Program lead inspection database.

Date of Government Version: 03/26/2014
Date Data Arrived at EDR: 03/27/2014
Date Made Active in Reports: 05/08/2014
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 860-509-7299
Last EDR Contact: 08/29/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

LWDS: Connecticut Leachate and Wastewater Discharge Sites

The Leachate and Waste Water Discharge Inventory Data Layer (LWDS) includes point locations digitized from Leachate and Wastewater Discharge Source maps compiled by the Connecticut DEP. These maps locate surface and groundwater discharges that (1) have received a waste water discharge permit from the state or (2) are historic and now defunct waste sites or (3) are locations of accidental spills, leaks, or discharges of a variety of liquid or solid wastes.

Date of Government Version: 07/17/2009
Date Data Arrived at EDR: 10/21/2009
Date Made Active in Reports: 10/30/2009
Number of Days to Update: 9

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 10/15/2014
Next Scheduled EDR Contact: 01/26/2015
Data Release Frequency: Varies

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/09/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: No Update Planned

NPDES: Wastewater Permit Listing
A listing of permits issued by the DEP.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 10/19/2018
Date Made Active in Reports: 10/25/2018
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3832
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

SEH: List of Significant Environmental Hazards Report to DEEP
The Significant Environmental Hazard Statute is intended to identify and abate short-term risks associated with specific environmental conditions identified in the statute. After abatement of short-term risks (meaning abatement of the significant environmental hazard condition), there may still be potential long-term risks associated with the release. However, a significant environmental hazard can be considered abated under the statute even though potential long-term risks may not have been addressed.

Date of Government Version: 08/31/2018
Date Data Arrived at EDR: 10/19/2018
Date Made Active in Reports: 10/25/2018
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3766
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Varies

UIC: Underground Injection Control Listing
A list of of subsurface disposal permits and their locations.

Date of Government Version: 07/16/2018
Date Data Arrived at EDR: 07/24/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 52

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3058
Last EDR Contact: 10/22/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/01/2018
Date Data Arrived at EDR: 08/01/2018
Date Made Active in Reports: 08/31/2018
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/31/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 08/23/2018
Date Data Arrived at EDR: 08/23/2018
Date Made Active in Reports: 09/18/2018
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/06/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Child Care Facilities
Source: Department of Public Health
Telephone: 860-509-8045

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Tidal Wetlands
Source: Department of Energy & Environmental Protection
Telephone: 860-424-4054

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

January 29, 2019

Mr. Christopher Little
Ecos Energy
222 South 9th Street, Suite 1600
Minneapolis, MN 55402

RE: 31 Benz Street, Ansonia CT
Test Pit Explorations
Project No. 181003A

Dear Mr. Little:

NorthStar Environmental Management LLC (NorthStar) is pleased to present the findings of test pit explorations conducted on the above-referenced property. During our Phase I ESA conducted on the property in November 8, 2018, NorthStar observed an area on the property that had been filled using material of unknown origin.

Based on our initial walkover observations, the fill material consisted of solid waste materials including masonry blocks, concrete, sections of brick wall, stumps, and natural soil and rock material. The origin and quality of this material was unknown. NorthStar recommended that test pit explorations be conducted in the area of the fill material to better assess the makeup of the fill material and to collect and analyzed soil samples for analysis of volatile and semi-volatile organic compounds, total petroleum hydrocarbons, metals, and polychlorinated biphenyls.

On January 11, 2019, NorthStar directed the excavation of eight test pits in the area of the fill material. The test pits were excavated to depths of approximately 4 to 8 feet until ledge was encountered. Test pit locations are illustrated in Figure 1. Test pit logs are presented in Appendix B. Based on our test pit observations, the fill material consisted of natural rock and soil, leaf compost, chunks of asphalt and concrete, ground asphalt, pieces of brick and ceramic tile, pieces of natural wood and stumps, a few pieces of building lumber, and small amounts of plastic materials. No oily material, coal ash, slag, obvious asbestos-containing debris, or other materials that are known to cause significant contamination were observed in the fill material.

One soil sample was collected from each test pit and analyzed for one or more of the following analytes: Extractable Total Petroleum Hydrocarbons (ETPH) using the CT ETPH Method; Polynuclear Aromatic Hydrocarbons (PAHs) using EPA Method 8270C; Leachable PAHs using the SPLP method, Total Metals using EPA Methods 6010B & 7471A; Leachable

Metals using the SPLP method; Polychlorinated Biphenyls using EPA Method 8082A; and Volatile Organic Compounds using EPA Method 8260C.

Results of the soil analyses are summarized in Table 1. Laboratory reports are included in Appendix C. No VOCs or PCBs were detected in the fill material. Total RCRA 8 metals were detected in all eight soil samples analyzed for metals as would be expected since Total Metals occur naturally in soil. The detected concentrations of total metals were below Remediation Standard Regulation (RSR) numerical criteria except for Arsenic in Sample TP-7 (6') which occurred at a concentration of 13.7 mg/kg. Both the Residential Direct Exposure Criterion (R DEC) and the Industrial/Commercial DEC (I/C DEC) for Arsenic is 10 mg/kg. Lead and mercury were also slightly elevated in this sample but did not exceed the R DEC.

Given the elevated levels of arsenic, lead and mercury in this sample NorthStar requisitioned the lab to reanalyze the sample for leachability using the Synthetic Precipitation Leaching Procedure (SPLP) to determine if the metals might be impacting groundwater. Only Arsenic and Barium were detected by the SPLP analysis and the detected concentrations were below the GA Pollutant Mobility Criteria. No lead or mercury was detected by the SPLP analysis. This indicates that the trace metals in the fill material is not leaching from the fill material and impacting groundwater. The origin of the elevated Arsenic and Lead is not known but it might be attributable to the pieces of lumber observed in the test pit which might have contained a wood preservative.

As mentioned above, several of the test pits contain asphaltic debris. Asphalt is a petroleum-based material that when analyzed using a mass analysis will contain high levels of ETPH and PAHs. As expected, four of the eight soil samples contained elevated levels of PAHs and three of those four samples exceeded the Residential and Industrial/Commercial Direct Exposure Criteria. In order to determine whether or not the asphalt might be impacting groundwater, NorthStar requisitioned the laboratory to re-analyze sample TP7 (8') using the SPLP analytic method. Only one PAH constituent was detected by the SPLP analysis (Phenanthrene) and its concentration (0.2 µg/L) was well below the GA PMC of 4,000 µg/L indicating that the asphalt material is relatively stable and would not be expected to impact groundwater.

ETPH exceeded the Residential DEC and the GA PMC in only two of the eight samples analyzed for ETPH. ETPH in those two samples did not exceed the Commercial/Industrial DEC. One of the eight samples contained a trace level of ETPH (140 mg/kg) and five samples were non-detected for ETPH (< 60 - 500 mg/kg). As an average concentration, ETPH would likely be below the Residential DEC and the GA PMC of 500 mg/kg. Additional analyses would be needed to make this determination with greater statistical reliability.

Given the composition of the fill material present on the property and the fact that it doesn't contain VOCs and it doesn't leach contaminants to the groundwater, it is NorthStar's opinion that the material on the subject property meets the current definition of Clean Fill: natural soil and rock, brick, ceramics, concrete, and asphalt paving fragments which are virtually inert and pose neither a pollution threat to ground water nor a fire hazard.

NorthStar spoke with Mr. Ray Frigon of the CT DEEP Remediation Division on January 28, 2019 regarding the fill material and he concurred that it would be considered "Clean Fill" and would not require remediation. Mr. Frigon indicated that there are proposed changes to Connecticut regulations regarding fill material that would exclude construction materials (brick, concrete, etc.) and asphalt from the definition of Clean Fill but those changes will not likely be promulgated any time soon and would not apply to the subject property as the material when placed on the subject property was considered "Clean Fill".

In addition, the Connecticut Remediation Standard Regulations (RSRs) do not apply to the subject property as the property does not meet the definition of a CT Transfer Act Site, Voluntary Remediation Program site, or Underground Storage Tank Site. Therefore, the RSRs are only used as guidelines for assessing the property. Of course if the property were converted to a commercial/industrial property that generated hazardous waste or otherwise met the definition of a CT Transfer Act site (auto body repair shop, furniture striper, dry cleaner), the fill material might require further consideration. Even then though, there are exclusions for fill material contaminated with PAHs providing it does not contain VOCs, high levels of metals and is not impacting groundwater.

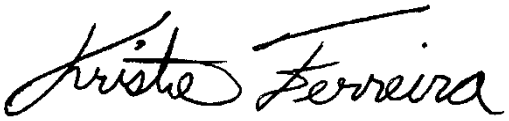
Please note that this report is subject to the limitations contained in Appendix A. This study was conducted on behalf of and for the exclusive use of Ecos Energy solely for use in a preliminary environmental evaluation of the above-referenced site. This report and findings shall not be used or relied on by any other parties, in whole or in part, without prior written authorization from NorthStar. However, we acknowledge and agree that the report may be conveyed to and relied on by the lender, title insurer and legal counsel associated with the proximate transaction of the site.

The work was undertaken to assess environmental conditions specifically on the subject property in accordance with generally accepted engineering and hydrogeological practices. No other warranty, expressed or implied, is made. Absolute assurance that any and all possible contamination at the site will be identified cannot be provided.

The study is based, in part, on information provided by the client, their agents, or third parties, including state or local officials. NorthStar assumes no responsibility for the accuracy and completeness of this information.

We trust that the report presented herein will satisfy your current requirements. We appreciate the opportunity to be of continued service to your office. Should you have any questions or comments, please do not hesitate to contact the undersigned.

Very truly yours,
NorthStar Environmental Management, LLC



Kristie Ferreira, LEP
Principal

800 Village Walk, No. 325, Guilford, CT 06437
Phone (203) 458-3426 • Fax (203) 458-1597 • e-mail: northstar_environmental@hotmail.com

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

Figure 1
Test Pit Locations

800 Village Walk, No. 325, Guilford, CT 06437
Phone (203) 458-3426 • Fax (203) 458-1597 • e-mail: northstar_environmental@hotmail.com

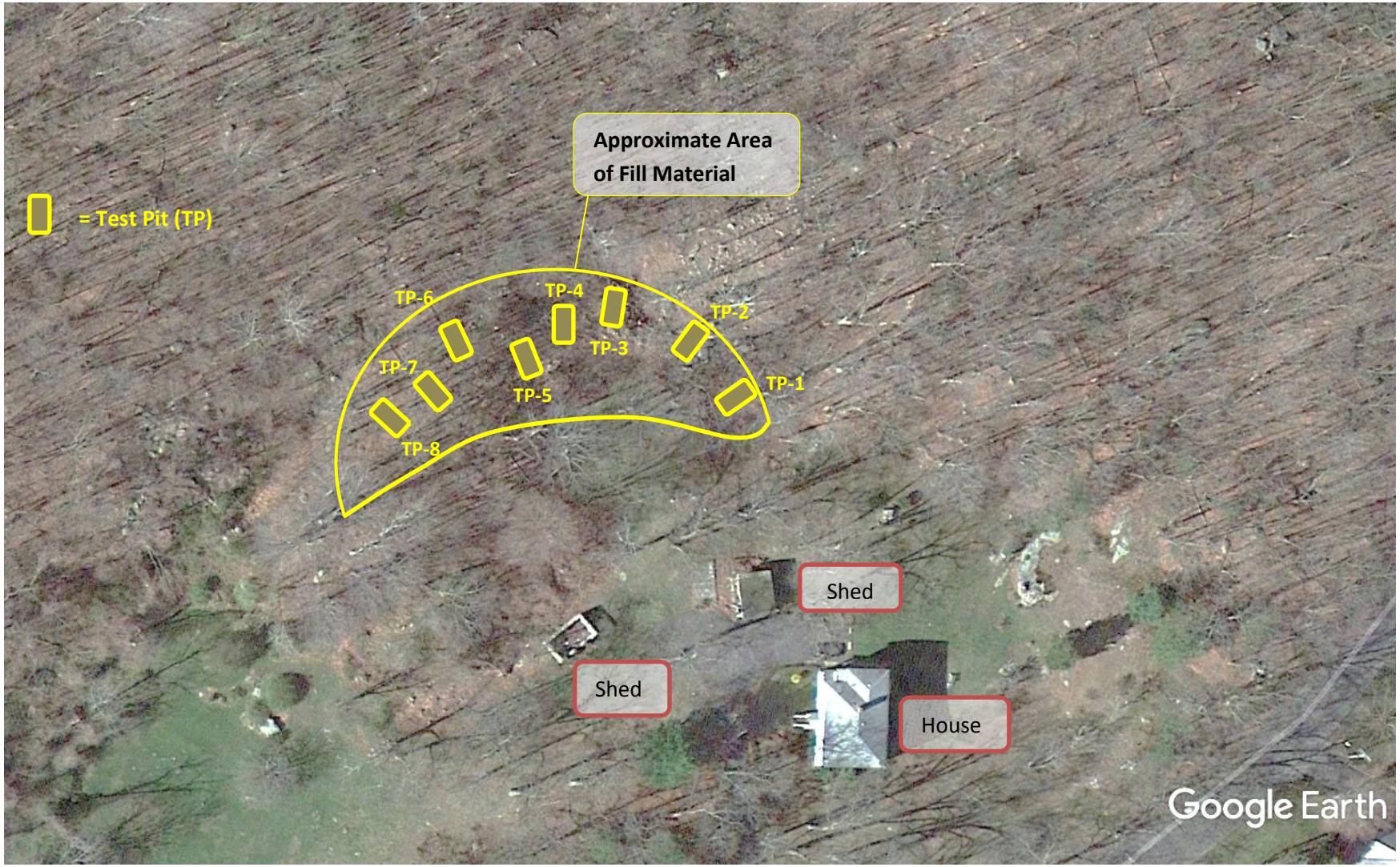


Figure 1
Test Pit Locations
34 Benz Street, Ansonia, CT

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

Table 1
Summary of Soil Sample Results

800 Village Walk, No. 325, Guilford, CT 06437
Phone (203) 458-3426 • Fax (203) 458-1597 • e-mail: northstar_environmental@hotmail.com

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06040
(860) 645-1102

Project Id : 181003A

Table 1- Summary of Soil Sample Resuts

	Lab Sample Id						CC28418		CC28419		CC28420		CC28421		CC28422		CC28423		CC28424		CC28425	
	Collection Date						1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019	
	Client Id						TP-1 (4)		TP-2 (6)		TP-3 (6)		TP-4 (5)		TP-5 (8)		TP-6 (6)		TP-7 (6)		TP-8 (4)	
	Matrix						Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
	CAS	Units	DEC RES	DEC RES APS	GA PMC	GA PMC APS	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics																						
Percent Solid	PHNX - PCTSOLID	%					83		75		74		79		87		62		58		32	
Metals, Total																						
Arsenic	7440-38-2	mg/Kg	10				9	0.85	9.96	0.94	7.75	0.87	5.9	0.84	4.36	0.80	6.8	1.0	13.7	1.2	2.9	2.0
Barium	7440-39-3	mg/Kg	4,700				49.1	0.42	62.6	0.47	35.1	0.43			43.3	0.40			61.6	0.62		
Cadmium	7440-43-9	mg/Kg	34				< 0.42	0.42	< 0.47	0.47	0.57	0.43			< 0.40	0.40			< 0.62	0.62		
Chromium	7440-47-3	mg/Kg					20.5	0.42	19.5	0.47	8.72	0.43			16.3	0.40			13.4	0.62		
Lead	7439-92-1	mg/Kg	400				46.7	0.42	47.3	0.47	44.9	0.43	68.5	0.42	45.5	0.40	82.3	0.52	101	0.62	33	1.0
Mercury	7439-97-6	mg/Kg	20				< 0.08	0.08	< 0.08	0.08	< 0.04	0.04			< 0.07	0.07			0.2	0.05		
Selenium	7782-49-2	mg/Kg	340				< 1.7	1.7	< 1.9	1.9	< 1.7	1.7			< 1.6	1.6			< 2.5	2.5		
Silver	7440-22-4	mg/Kg	340				< 0.42	0.42	< 0.47	0.47	< 0.43	0.43			< 0.40	0.40			< 0.62	0.62		
Metals, SPLP																						
SPLP Arsenic	7440-38-2	mg/L			0.05														0.028	0.004		
SPLP Barium	7440-39-3	mg/L			1														0.031	0.010		
SPLP Cadmium	7440-43-9	mg/L			0.005														< 0.005	0.005		
SPLP Chromium	7440-47-3	mg/L			0.05														< 0.010	0.010		
SPLP Lead	7439-92-1	mg/L			0.015														< 0.010	0.010		
SPLP Mercury	7439-97-6	mg/L			0.002														< 0.0005	0.0005		
SPLP Selenium	7782-49-2	mg/L			0.05														< 0.020	0.020		
SPLP Silver	7440-22-4	mg/L			0.036														< 0.010	0.010		
TPH By CTETPH 8015D																						
Ext. Petroleum H.C. (C9-C36)	PHNX - TPH	mg/Kg	500		500		< 60	60	< 65	65	1,100	670	< 62	62	1,100	560	< 400	400	140	84	< 500	500
Identification	PHNX - TPH-IDENT	mg/Kg					<		<		**		<		**		<		**		<	
PCBs By SW8082A																						
PCB-1016	12674-11-2	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1221	11104-28-2	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1232	11141-16-5	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1242	53469-21-9	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1248	12672-29-6	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1254	11097-69-1	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1260	11096-82-5	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1262	37324-23-5	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
PCB-1268	11100-14-4	ug/Kg	1,000				< 400	400			< 440	440			< 370	370	< 530	530			< 1000	1,000
Volatiles By SW8260C																						
1,1,1,2-Tetrachloroethane	630-20-6	ug/Kg	24,000		20				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,1,1-Trichloroethane	71-55-6	ug/Kg	500,000		4,000				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg	3,100		10				< 2.8	2.8	< 4.3	4.3			< 3.9	3.9	< 6.8	6.8				
1,1,2-Trichloroethane	79-00-5	ug/Kg	11,000		100				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,1-Dichloroethane	75-34-3	ug/Kg	500,000		1,400				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,1-Dichloroethene	75-35-4	ug/Kg	1,000		140				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,1-Dichloropropene	563-58-6	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06040
(860) 645-1102
Project Id : 181003A

	Lab Sample Id						CC28418		CC28419		CC28420		CC28421		CC28422		CC28423		CC28424		CC28425	
	Collection Date						1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019	
	Client Id						TP-1 (4)		TP-2 (6)		TP-3 (6)		TP-4 (5)		TP-5 (8)		TP-6 (6)		TP-7 (6)		TP-8 (4)	
	Matrix						Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
	CAS	Units	DEC RES	DEC RES APS	GA PMC	GA PMC APS	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2-Dichloroethane	107-06-2	ug/Kg	6,700		20				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,2-Dichloropropane	78-87-5	ug/Kg	9,000		100				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,3,5-Trimethylbenzene	108-67-8	ug/Kg		500,000		2,800			< 830	830	< 970	970			< 970	970	< 11	11				
1,3-Dichlorobenzene	541-73-1	ug/Kg	500,000		12,000				< 830	830	< 970	970			< 970	970	< 11	11				
1,3-Dichloropropane	142-28-9	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
1,4-Dichlorobenzene	106-46-7	ug/Kg	26,000		1,500				< 830	830	< 970	970			< 970	970	< 11	11				
2,2-Dichloropropane	594-20-7	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
2-Chlorotoluene	95-49-8	ug/Kg		500,000		2,800			< 830	830	< 970	970			< 970	970	< 11	11				
2-Hexanone	591-78-6	ug/Kg		340,000		700			< 23	23	< 36	36			< 32	32	< 56	56				
2-Isopropyltoluene	527-84-4	ug/Kg							< 830	830	< 970	970			< 970	970	< 11	11				
4-Chlorotoluene	106-43-4	ug/Kg		500,000		2,800			< 830	830	< 970	970			< 970	970	< 11	11				
4-Methyl-2-pentanone	108-10-1	ug/Kg	500,000		7,000				< 23	23	< 36	36			< 32	32	< 56	56				
Acetone	67-64-1	ug/Kg	500,000		14,000				< 230	230	< 360	360			< 320	320	< 560	560				
Acrylonitrile	107-13-1	ug/Kg	1,100		10				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 10	10				
Benzene	71-43-2	ug/Kg	21,000		20				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Bromobenzene	108-86-1	ug/Kg							< 830	830	< 970	970			< 970	970	< 11	11				
Bromochloromethane	74-97-5	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Bromodichloromethane	75-27-4	ug/Kg		18,000		20			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Bromoform	75-25-2	ug/Kg	78,000		80				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Bromomethane	74-83-9	ug/Kg		34,000		70			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Carbon Disulfide	75-15-0	ug/Kg		500,000		800			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Carbon tetrachloride	56-23-5	ug/Kg	4,700		100				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Chlorobenzene	108-90-7	ug/Kg	500,000		2,000				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Chloroethane	75-00-3	ug/Kg		130,000		150			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Chloroform	67-66-3	ug/Kg	100,000		120				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Chloromethane	74-87-3	ug/Kg		180,000		360			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
cis-1,2-Dichloroethene	156-59-2	ug/Kg	500,000		1,400				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
cis-1,3-Dichloropropene	10061-01-5	ug/Kg				10			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 10	10				
Dibromochloromethane	124-48-1	ug/Kg	7,300		10				< 2.8	2.8	< 4.3	4.3			< 3.9	3.9	< 6.8	6.8				
Dibromomethane	74-95-3	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Dichlorodifluoromethane	75-71-8	ug/Kg		500,000		7,000			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Ethylbenzene	100-41-4	ug/Kg	500,000		10,100				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Hexachlorobutadiene	87-68-3	ug/Kg		130,000		200			< 200	200	< 200	200			< 200	200	< 11	11				
Isopropylbenzene	98-82-8	ug/Kg		500,000		500			< 500	500	< 500	500			< 500	500	< 11	11				
m&p-Xylene	179601-23-1	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Methyl Ethyl Ketone	78-93-3	ug/Kg	500,000		8,000				< 28	28	< 43	43			< 39	39	< 68	68				
Methyl t-butyl ether (MTBE)	1634-04-4	ug/Kg	500,000		2,000				< 9.3	9.3	< 14	14			< 13	13	< 23	23				
Methylene chloride	75-09-2	ug/Kg	82,000		100				< 9.3	9.3	< 14	14			< 13	13	< 23	23				
Naphthalene	91-20-3	ug/Kg	1,000,000		5,600				< 830	830	< 970	970			< 970	970	< 11	11				
n-Butylbenzene	104-51-8	ug/Kg		500,000		7,000			< 830	830	< 970	970			< 970	970	< 11	11				
n-Propylbenzene	103-65-1	ug/Kg		500,000		1,000			< 830	830	< 970	970			< 970	970	< 11	11				
o-Xylene	95-47-6	ug/Kg							< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
p-Isopropyltoluene	99-87-6	ug/Kg		500,000		500			< 500	500	< 500	500			< 500	500	< 11	11				
sec-Butylbenzene	135-98-8	ug/Kg		500,000		7,000			< 830	830	< 970	970			< 970	970	< 11	11				
Styrene	100-42-5	ug/Kg	500,000		2,000				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
tert-Butylbenzene	98-06-6	ug/Kg		500,000		7,000			< 830	830	< 970	970			< 970	970	< 11	11				
Tetrachloroethene	127-18-4	ug/Kg	12,000		100				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Tetrahydrofuran (THF)	109-99-9	ug/Kg		61,000		80			< 9.3	9.3	< 14	14			< 13	13	< 23	23				
Toluene	108-88-3	ug/Kg	500,000		20,000				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Total Xylenes	1330-20-7	ug/Kg	500,000		19,500				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
trans-1,2-Dichloroethene	156-60-5	ug/Kg	500,000		2,000				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
trans-1,3-Dichloropropene	10061-02-6	ug/Kg				10			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 10	10				
trans-1,4-dichloro-2-butene	110-57-6	ug/Kg							< 1700	1,700	< 1900	1,900			< 1900	1,900	< 23	23				
Trichloroethene	79-01-6	ug/Kg	56,000		100				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Trichlorofluoromethane	75-69-4	ug/Kg		500,000		20,000			< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				
Trichlorotrifluoroethane	76-13-1	ug/Kg		500,000		20,000			< 9.3	9.3	< 14	14			< 13	13	< 23	23				
Vinyl chloride	75-01-4	ug/Kg	320		40				< 4.7	4.7	< 7.2	7.2			< 6.5	6.5	< 11	11				

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06040
(860) 645-1102

Project Id : 181003A

	Lab Sample Id						CC28418		CC28419		CC28420		CC28421		CC28422		CC28423		CC28424		CC28425	
	Collection Date						1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019		1/11/2019	
	Client Id						TP-1 (4)		TP-2 (6)		TP-3 (6)		TP-4 (5)		TP-5 (8)		TP-6 (6)		TP-7 (6)		TP-8 (4)	
	Matrix						Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
	CAS	Units	DEC RES	DEC RES APS	GA PMC	GA PMC APS	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Benzo(a)pyrene	50-32-8	ug/L													< 0.20	0.20						
Benzo(b)fluoranthene	205-99-2	ug/L													< 0.08	0.08						
Benzo(ghi)perylene	191-24-2	ug/L													< 0.48	0.48						
Benzo(k)fluoranthene	207-08-9	ug/L													< 0.30	0.30						
Chrysene	218-01-9	ug/L													< 0.50	0.50						
Dibenz(a,h)anthracene	53-70-3	ug/L													< 0.10	0.10						
Fluoranthene	206-44-0	ug/L													< 0.50	0.50						
Fluorene	86-73-7	ug/L													< 0.50	0.50						
Indeno(1,2,3-cd)pyrene	193-39-5	ug/L													< 0.10	0.10						
Naphthalene	91-20-3	ug/L													< 0.50	0.50						
Phenanthrene	85-01-8	ug/L			4,000										0.2	0.07						
Pyrene	129-00-0	ug/L													< 0.50	0.50						
Polynuclear Aromatic HC By SW8270D																						
2-Methylnaphthalene	91-57-6	ug/Kg		270,000		560			< 310	310	< 310	310			< 260	260	< 370	370	< 400	400	< 560	560
Acenaphthene	83-32-9	ug/Kg		1,000,000		8,400			< 310	310	960	310			360	260	< 370	370	< 400	400	< 1100	1,100
Acenaphthylene	208-96-8	ug/Kg	1,000,000		8,400				< 310	310	< 310	310			290	260	< 370	370	< 400	400	< 1100	1,100
Anthracene	120-12-7	ug/Kg	1,000,000		40,000				< 310	310	1,300	310			1,500	260	< 370	370	430	400	< 1100	1,100
Benz(a)anthracene	56-55-3	ug/Kg	1,000	7800	1,000				< 310	310	4,500	310			4,200	260	610	370	2,600	400	< 1000	1,000
Benzo(a)pyrene	50-32-8	ug/Kg	1,000	1,000	1,000				< 310	310	4,100	310			3,500	260	750	370	2,600	400	< 1000	1,000
Benzo(b)fluoranthene	205-99-2	ug/Kg	1,000	78,000	1,000				< 310	310	4,200	310			3,800	260	700	370	2,600	400	< 1000	1,000
Benzo(ghi)perylene	191-24-2	ug/Kg		8,400		1,000			< 310	310	2,500	310			2,500	260	510	370	1,700	400	< 1000	1,000
Benzo(k)fluoranthene	207-08-9	ug/Kg	8,400		1,000				< 310	310	4,000	310			3,000	260	690	370	2,500	400	< 1000	1,000
Chrysene	218-01-9	ug/Kg		84,000		1,000			< 310	310	5,400	310			4,700	260	750	370	2,800	400	< 1000	1,000
Dibenz(a,h)anthracene	53-70-3	ug/Kg		1,000		1,000			< 310	310	840	310			900	260	< 370	370	550	400	< 1000	1,000
Fluoranthene	206-44-0	ug/Kg	1,000,000		5,600				< 310	310	20,000	3,100			14,000	2,600	1,100	370	4,700	400	< 1100	1,100
Fluorene	86-73-7	ug/Kg	1,000,000		5,600				< 310	310	1,100	310			530	260	< 370	370	< 400	400	< 1100	1,100
Indeno(1,2,3-cd)pyrene	193-39-5	ug/Kg		1,000		1,000			< 310	310	2,400	310			2,300	260	440	370	1,600	400	< 1000	1,000
Naphthalene	91-20-3	ug/Kg	1,000,000		5,600				< 310	310	320	310			< 260	260	< 370	370	< 400	400	< 1100	1,100
Phenanthrene	85-01-8	ug/Kg	1,000,000		4,000				< 310	310	12,000	3,100			7,900	2,600	< 370	370	2,100	400	< 1100	1,100
Pyrene	129-00-0	ug/Kg	1,000,000		4,000				< 310	310	16,000	3,100			11,000	2,600	1,200	370	4,400	400	< 1100	1,100

Result Detected

RL Exceeds Criteria

Result Exceeds Criteria

Appendix A
Limitations

800 Village Walk, No. 325, Guilford, CT 06437
Phone (203) 458-3426 • Fax (203) 458-1597 • e-mail: northstar_environmental@hotmail.com

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

PROJECT LIMITATIONS

All work performed and the report provided by NorthStar Environmental Management, LLC (NorthStar) in connection with the performance of this Environmental Site Assessment are subject to the following limitations:

1. The observations described in the report were made under the conditions stated therein. The conclusions presented in the report are based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the client.

2. In preparing this report, NorthStar has relied upon certain information provided by State and Local Officials, on information contained in the files of State and/or Local Agencies made available to NorthStar at the time of this writing, and upon information provided by and representations made by other parties referenced therein. To the extent that such files are missing, incomplete or not provided to NorthStar, NorthStar is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, NorthStar did not attempt to independently verify the accuracy or completeness of all information reviewed during the course of this project.

3. If the conclusions and recommendations contained in this report are based in part upon data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations; then the nature and extent of variations between these explorations may not become evident until further explorations. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

4. Except as noted within the text of the report, no qualitative laboratory testing was performed as part of the project. Where such analyses have been conducted by an outside laboratory, NorthStar has relied upon the data provided, and has not conducted an independent evaluation of the reliability of the test data.

5. Chemical analyses may have been performed for specific parameters during the course of this project, as described in the text. However, it should be noted that additional chemical constituents, which were not searched for during the current project, may be present in soil and/or groundwater at the site.

6. If the conclusions and recommendations contained in this report are based, in part, upon various types of chemical data; then the conclusions and recommendations are contingent upon the validity of such data. The data has been reviewed and interpretations made in this report. If indicated within the report, some of this data may be preliminary "screening" level data and should be confirmed with quantitative analysis if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, it is recommended that the data be reviewed by NorthStar and the conclusions and recommendations presented herein be modified accordingly.

7. It is recommended that NorthStar be retained to provide further consulting services during the construction and/or implementation of any remedial measures recommended in this report. This is to allow NorthStar to observe compliance with the concepts and recommendations contained herein, and to allow the development of changes to the remedial program in the event that subsurface conditions or other conditions differ from those anticipated.

8. Plot, plans, sketches and other illustrative materials in this report are included to assist the reader in visualizing the site and are not drawn to scale unless otherwise noted.

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

Appendix B
Test Pit Logs

800 Village Walk, No. 325, Guilford, CT 06437
Phone (203) 458-3426 • Fax (203) 458-1597 • e-mail: northstar_environmental@hotmail.com

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-1
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity	10,000 lbs
Reach	12 ft

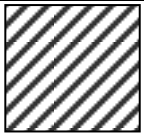
Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Leaves and compost	E		
2	Soil and rocks			
3				
4	Ledge	Refusal		Sample TP-1 (4')
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

4' × 4'



Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-2
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

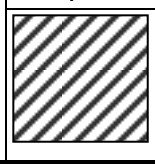
Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity	10,000 lbs Reach 12 ft

Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Composte	E		
2	Soil and rocks			
3				
4				
5				
6	Ledge	Refusal		Sample TP-2 (6')
7				
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan



Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-3
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity 10,000 lbs	Reach 12 ft

Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Composte	E		
2				
3				
4	Asphalt Chunks and Soil			
5	Ground Asphalt and Soil			
6	Ledge	Refusal		Sample TP-2 (6')
7				
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

4'

6'

Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-4
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity 10,000 lbs	Reach 12 ft

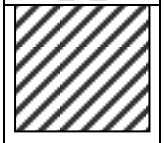
Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Concrete Blocks Soil Compost	E		
2	↓			
3				
4	Soil, Brick, Wood			
5	Clay, Ledge	Refusal		Sample TP-4 (5')
6				
7				
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

_6_ ' × _4_ '



Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-5
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity 10,000 lbs	Reach 12 ft

Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Concrete, Ceramic Tile	E		
2	Concrete, Tile and Soil			
3	Compost			
4	Sand and Asphalt			
5				
6				
7				
8	Ledge	Refusal		Sample TP-5 (8')
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

7_' _4_'

Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-6
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity 10,000 lbs	Reach 12 ft

Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Stumps	E		
2	↓			
3	Compost			
4	Wood, Rocks, Asphalt, Concrete			
5	Assorted Rubble			
6	Ledge	Refusal		Sample TP-2 (6')
7				
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

4'

6'

Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-7
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kutota
Capacity 10,000 lbs Reach	12 ft

Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Wood Concrete Slabs ↓	E		
2		M		
3	Assorted Rubble	E		
4	↓	↓		
5				
6	↓	↓		Sample TP-7 (6')
7	Ledge	Refusal		
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

5'

7'

Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

TEST PIT FIELD LOG

NORTHSTAR Environmental Management

Project Location:

Test Pit No.	TP-8
File No.	
Date	01/11/19

Analyst: Kristie Ferreira, LEP
Jean Bissonnette

Weather: Sunny
30º

EXCAVATION EQUIPMENT

Contractor	Limewood
Operator	Don Ifkavic
Make	Kubota
Capacity 10,000 lbs Reach	12 ft

Ground Elev.

Depth (feet)	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class	Remark No.
1	Wood Assorted rubble	E		
2				
3	6 inches of wood ash			
4	Assorted rubble Ledge	Refusal		Sample TP-8 (4')
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Remarks:

Test Pit Plan

4'

4'

Legend:

Boulder Count Size Range Classification	Letter Designation
6" – 18"	A
18" – 36"	B
36" & Larger	C

Proportions Used

Trace (Tr.) 0 – 10%
Little (Li.) 10 – 20%
Some (So.) 20 – 35%
And 35 – 50%

Abbreviations

F = Fine
M = Medium
C = Coarse
F/M = Fine to Medium
F/C = Fine to Coarse
V = Very
Gr = Gray
Bn = Brown
Yel = Yellow
Blk = Black

Excavation Effort

E = Easy
M = Moderate
D = Difficult

Elapsed Time to Reading (Hrs.) 0

GWL

NORTHSTAR
ENVIRONMENTAL MANAGEMENT, LLC

Appendix C
Laboratory Data Reports

800 Village Walk, No. 325, Guilford, CT 06437
Phone (203) 458-3426 • Fax (203) 458-1597 • e-mail: northstar_environmental@hotmail.com

PHOENIX
Environmental Laboratories, Inc.

Monday, January 21, 2019

Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Project ID: 181003A
SDG ID: GCC28418
Sample ID#s: CC28418 - CC28425

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 21, 2019

SDG I.D.: GCC28418

Project ID: 181003A

Client Id	Lab Id	Matrix
TP-1 (4)	CC28418	SOIL
TP-2 (6)	CC28419	SOIL
TP-3 (6)	CC28420	SOIL
TP-4 (5)	CC28421	SOIL
TP-5 (8)	CC28422	SOIL
TP-6 (6)	CC28423	SOIL
TP-7 (6)	CC28424	SOIL
TP-8 (4)	CC28425	SOIL

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28418

Project ID: 181003A
Client ID: TP-1 (4)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	1	01/15/19	TH	SW6010D
Arsenic	9.00	0.85	mg/Kg	1	01/15/19	TH	SW6010D
Barium	49.1	0.42	mg/Kg	1	01/15/19	TH	SW6010D
Cadmium	< 0.42	0.42	mg/Kg	1	01/15/19	TH	SW6010D
Chromium	20.5	0.42	mg/Kg	1	01/15/19	TH	SW6010D
Mercury	< 0.08	0.08	mg/Kg	1	01/15/19	RS	SW7471B
Lead	46.7	0.42	mg/Kg	1	01/15/19	TH	SW6010D
Selenium	< 1.7	1.7	mg/Kg	1	01/15/19	TH	SW6010D
Percent Solid	83		%		01/14/19	AK	SW846-%Solid
Soil Extraction for PCB	Completed				01/14/19	MM/V	SW3545A
Extraction of CT ETPH	Completed				01/14/19	GG/VCK	SW3545A
Mercury Digestion	Completed				01/15/19	I/EV	SW7471B
Total Metals Digest	Completed				01/14/19	SAG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	60	mg/Kg	1	01/15/19	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	78		%	1	01/15/19	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1221	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1232	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1242	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1248	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1254	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1260	ND	400	ug/Kg	10	01/15/19	SC	SW8082A

Project ID: 181003A
Client ID: TP-1 (4)

Phoenix I.D.: CC28418

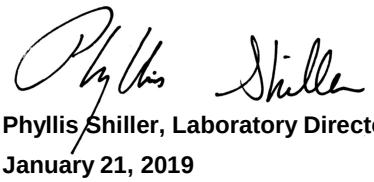
Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1262	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1268	ND	400	ug/Kg	10	01/15/19	SC	SW8082A
QA/QC Surrogates							
% DCBP	61		%	10	01/15/19	SC	30 - 150 %
% DCBP (Confirmation)	61		%	10	01/15/19	SC	30 - 150 %
% TCMX	74		%	10	01/15/19	SC	30 - 150 %
% TCMX (Confirmation)	74		%	10	01/15/19	SC	30 - 150 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28419

Project ID: 181003A
Client ID: TP-2 (6)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.47	0.47	mg/Kg	1	01/15/19	TH	SW6010D
Arsenic	9.96	0.94	mg/Kg	1	01/15/19	TH	SW6010D
Barium	62.6	0.47	mg/Kg	1	01/15/19	TH	SW6010D
Cadmium	< 0.47	0.47	mg/Kg	1	01/15/19	TH	SW6010D
Chromium	19.5	0.47	mg/Kg	1	01/15/19	TH	SW6010D
Mercury	< 0.08	0.08	mg/Kg	1	01/15/19	RS	SW7471B
Lead	47.3	0.47	mg/Kg	1	01/15/19	TH	SW6010D
Selenium	< 1.9	1.9	mg/Kg	1	01/15/19	TH	SW6010D
Percent Solid	75		%		01/14/19	AK	SW846-%Solid
Soil Extraction SVOA PAH	Completed				01/14/19	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				01/14/19	GG/VCK	SW3545A
Mercury Digestion	Completed				01/15/19	I/EV	SW7471B
Total Metals Digest	Completed				01/14/19	SAG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	65	mg/Kg	1	01/15/19	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	79		%	1	01/15/19	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,1,1-Trichloroethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2-Trichloroethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloropropene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C

Project ID: 181003A
Client ID: TP-2 (6)

Phoenix I.D.: CC28419

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,2,3-Trichloropropane	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,2,4-Trichlorobenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,2,4-Trimethylbenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dibromoethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichlorobenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,2-Dichloroethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichloropropane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,3,5-Trimethylbenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,3-Dichlorobenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
1,3-Dichloropropane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
1,4-Dichlorobenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
2,2-Dichloropropane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
2-Chlorotoluene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
2-Hexanone	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
2-Isopropyltoluene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
4-Chlorotoluene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
Acetone	ND	230	ug/Kg	1	01/15/19	RM	SW8260C
Acrylonitrile	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Benzene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Bromobenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
Bromochloromethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Bromodichloromethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Bromoform	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Bromomethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Carbon Disulfide	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Carbon tetrachloride	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Chlorobenzene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Chloroethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Chloroform	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Chloromethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,2-Dichloroethene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,3-Dichloropropene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Dibromochloromethane	ND	2.8	ug/Kg	1	01/15/19	RM	SW8260C
Dibromomethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Dichlorodifluoromethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Ethylbenzene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Hexachlorobutadiene	ND	200	ug/Kg	50	01/15/19	RM	SW8260C
Isopropylbenzene	ND	500	ug/Kg	50	01/15/19	RM	SW8260C
m&p-Xylene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	01/15/19	RM	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.3	ug/Kg	1	01/15/19	RM	SW8260C
Methylene chloride	ND	9.3	ug/Kg	1	01/15/19	RM	SW8260C
Naphthalene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
n-Butylbenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
n-Propylbenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
o-Xylene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C

Project ID: 181003A
Client ID: TP-2 (6)

Phoenix I.D.: CC28419

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
p-Isopropyltoluene	ND	500	ug/Kg	50	01/15/19	RM	SW8260C
sec-Butylbenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
Styrene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
tert-Butylbenzene	ND	830	ug/Kg	50	01/15/19	RM	SW8260C
Tetrachloroethene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Tetrahydrofuran (THF)	ND	9.3	ug/Kg	1	01/15/19	RM	SW8260C
Toluene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Total Xylenes	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,2-Dichloroethene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,3-Dichloropropene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,4-dichloro-2-butene	ND	1700	ug/Kg	50	01/15/19	RM	SW8260C
Trichloroethene	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorofluoromethane	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorotrifluoroethane	ND	9.3	ug/Kg	1	01/15/19	RM	SW8260C
Vinyl chloride	ND	4.7	ug/Kg	1	01/15/19	RM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	01/15/19	RM	70 - 130 %
% Bromofluorobenzene	84		%	1	01/15/19	RM	70 - 130 %
% Dibromofluoromethane	105		%	1	01/15/19	RM	70 - 130 %
% Toluene-d8	93		%	1	01/15/19	RM	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	97		%	50	01/15/19	RM	70 - 130 %
% Bromofluorobenzene (50x)	96		%	50	01/15/19	RM	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthylene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Anthracene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Benz(a)anthracene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(a)pyrene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(b)fluoranthene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(ghi)perylene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(k)fluoranthene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Chrysene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Fluoranthene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Fluorene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Naphthalene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Phenanthrene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Pyrene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	52		%	1	01/15/19	WB	30 - 130 %
% Nitrobenzene-d5	51		%	1	01/15/19	WB	30 - 130 %
% Terphenyl-d14	53		%	1	01/15/19	WB	30 - 130 %
Field Extraction	Completed				01/11/19		SW5035A

Project ID: 181003A
Client ID: TP-2 (6)

Phoenix I.D.: CC28419

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28420

Project ID: 181003A
Client ID: TP-3 (6)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	1	01/15/19	TH	SW6010D
Arsenic	7.75	0.87	mg/Kg	1	01/15/19	TH	SW6010D
Barium	35.1	0.43	mg/Kg	1	01/15/19	TH	SW6010D
Cadmium	0.57	0.43	mg/Kg	1	01/15/19	TH	SW6010D
Chromium	8.72	0.43	mg/Kg	1	01/15/19	TH	SW6010D
Mercury	< 0.04	0.04	mg/Kg	1	01/15/19	RS	SW7471B
Lead	44.9	0.43	mg/Kg	1	01/15/19	TH	SW6010D
Selenium	< 1.7	1.7	mg/Kg	1	01/15/19	TH	SW6010D
Percent Solid	74		%		01/14/19	AK	SW846-%Solid
Soil Extraction for PCB	Completed				01/14/19	MM/V	SW3545A
Soil Extraction SVOA PAH	Completed				01/14/19	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				01/14/19	GG/VCK	SW3545A
Mercury Digestion	Completed				01/15/19	I/EV	SW7471B
Total Metals Digest	Completed				01/14/19	SAG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	1100	670	mg/Kg	10	01/15/19	JRB	CTETPH 8015D
Identification	**		mg/Kg	10	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	132		%	10	01/15/19	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1221	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1232	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1242	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1248	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1254	ND	440	ug/Kg	10	01/15/19	SC	SW8082A

Project ID: 181003A
Client ID: TP-3 (6)

Phoenix I.D.: CC28420

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1262	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1268	ND	440	ug/Kg	10	01/15/19	SC	SW8082A
QA/QC Surrogates							
% DCBP	61		%	10	01/15/19	SC	30 - 150 %
% DCBP (Confirmation)	59		%	10	01/15/19	SC	30 - 150 %
% TCMX	67		%	10	01/15/19	SC	30 - 150 %
% TCMX (Confirmation)	64		%	10	01/15/19	SC	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,1,1-Trichloroethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.3	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2-Trichloroethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloropropene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,2,3-Trichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2,3-Trichloropropane	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2,4-Trichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2,4-Trimethylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2-Dichloroethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichloropropane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,3,5-Trimethylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,3-Dichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,3-Dichloropropane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
1,4-Dichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
2,2-Dichloropropane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
2-Chlorotoluene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
2-Hexanone	ND	36	ug/Kg	1	01/15/19	RM	SW8260C
2-Isopropyltoluene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
4-Chlorotoluene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
4-Methyl-2-pentanone	ND	36	ug/Kg	1	01/15/19	RM	SW8260C
Acetone	ND	360	ug/Kg	1	01/15/19	RM	SW8260C
Acrylonitrile	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Benzene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Bromobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
Bromochloromethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Bromodichloromethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Bromoform	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Bromomethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Carbon Disulfide	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Carbon tetrachloride	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Chlorobenzene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Chloroethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Chloroform	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Chloromethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C

Project ID: 181003A
Client ID: TP-3 (6)

Phoenix I.D.: CC28420

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,3-Dichloropropene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Dibromochloromethane	ND	4.3	ug/Kg	1	01/15/19	RM	SW8260C
Dibromomethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Dichlorodifluoromethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Ethylbenzene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Hexachlorobutadiene	ND	200	ug/Kg	50	01/15/19	RM	SW8260C
Isopropylbenzene	ND	500	ug/Kg	50	01/15/19	RM	SW8260C
m&p-Xylene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Methyl Ethyl Ketone	ND	43	ug/Kg	1	01/15/19	RM	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	ug/Kg	1	01/15/19	RM	SW8260C
Methylene chloride	ND	14	ug/Kg	1	01/15/19	RM	SW8260C
Naphthalene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
n-Butylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
n-Propylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
o-Xylene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
p-Isopropyltoluene	ND	500	ug/Kg	50	01/15/19	RM	SW8260C
sec-Butylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
Styrene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
tert-Butylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
Tetrachloroethene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Tetrahydrofuran (THF)	ND	14	ug/Kg	1	01/15/19	RM	SW8260C
Toluene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Total Xylenes	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,2-Dichloroethene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,3-Dichloropropene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,4-dichloro-2-butene	ND	1900	ug/Kg	50	01/15/19	RM	SW8260C
Trichloroethene	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorofluoromethane	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorotrifluoroethane	ND	14	ug/Kg	1	01/15/19	RM	SW8260C
Vinyl chloride	ND	7.2	ug/Kg	1	01/15/19	RM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	91		%	1	01/15/19	RM	70 - 130 %
% Bromofluorobenzene	76		%	1	01/15/19	RM	70 - 130 %
% Dibromofluoromethane	107		%	1	01/15/19	RM	70 - 130 %
% Toluene-d8	86		%	1	01/15/19	RM	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	97		%	50	01/15/19	RM	70 - 130 %
% Bromofluorobenzene (50x)	98		%	50	01/15/19	RM	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthene	960	310	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthylene	ND	310	ug/Kg	1	01/15/19	WB	SW8270D
Anthracene	1300	310	ug/Kg	1	01/15/19	WB	SW8270D
Benz(a)anthracene	4500	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(a)pyrene	4100	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(b)fluoranthene	4200	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(ghi)perylene	2500	310	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(k)fluoranthene	4000	310	ug/Kg	1	01/15/19	WB	SW8270D
Chrysene	5400	310	ug/Kg	1	01/15/19	WB	SW8270D

Project ID: 181003A
Client ID: TP-3 (6)

Phoenix I.D.: CC28420

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibenz(a,h)anthracene	840	310	ug/Kg	1	01/15/19	WB	SW8270D
Fluoranthene	20000	3100	ug/Kg	10	01/16/19	WB	SW8270D
Fluorene	1100	310	ug/Kg	1	01/15/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	2400	310	ug/Kg	1	01/15/19	WB	SW8270D
Naphthalene	320	310	ug/Kg	1	01/15/19	WB	SW8270D
Phenanthrene	12000	3100	ug/Kg	10	01/16/19	WB	SW8270D
Pyrene	16000	3100	ug/Kg	10	01/16/19	WB	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	Diluted Out		%	10	01/16/19	WB	30 - 130 %
% Nitrobenzene-d5	Diluted Out		%	10	01/16/19	WB	30 - 130 %
% Terphenyl-d14	Diluted Out		%	10	01/16/19	WB	30 - 130 %
Field Extraction	Completed				01/11/19		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C19 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

Phyllis Shiller, Laboratory Director

January 21, 2019

Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28421

Project ID: 181003A
Client ID: TP-4 (5)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	79		%		01/14/19	AK	SW846-%Solid
Extraction of CT ETPH	Completed				01/14/19	GG/VCK	SW3545A
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	62	mg/Kg	1	01/15/19	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	68		%	1	01/15/19	JRB	50 - 150 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28422

Project ID: 181003A
Client ID: TP-5 (8)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	01/15/19	TH	SW6010D
Arsenic	4.36	0.80	mg/Kg	1	01/15/19	TH	SW6010D
Barium	43.3	0.40	mg/Kg	1	01/15/19	TH	SW6010D
Cadmium	< 0.40	0.40	mg/Kg	1	01/15/19	TH	SW6010D
Chromium	16.3	0.40	mg/Kg	1	01/15/19	TH	SW6010D
Mercury	< 0.07	0.07	mg/Kg	1	01/15/19	RS	SW7471B
Lead	45.5	0.40	mg/Kg	1	01/15/19	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	01/15/19	TH	SW6010D
Percent Solid	87		%		01/14/19	AK	SW846-%Solid
Soil Extraction for PCB	Completed				01/14/19	MM/V	SW3545A
Soil Extraction SVOA PAH	Completed				01/14/19	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				01/14/19	GG/VCK	SW3545A
Mercury Digestion	Completed				01/15/19	I/EV	SW7471B
SPLP Extraction for Organics	Completed				01/14/19	I	SW1312
SPLP Semivolatiles (SIM) Ext.	Completed				01/15/19	P/R	SW3510C/SW3520C
Total Metals Digest	Completed				01/14/19	SAG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	1100	560	mg/Kg	10	01/15/19	JRB	CTETPH 8015D
Identification	**		mg/Kg	10	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	92		%	10	01/15/19	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1221	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1232	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1242	ND	370	ug/Kg	10	01/15/19	SC	SW8082A

Project ID: 181003A
Client ID: TP-5 (8)

Phoenix I.D.: CC28422

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1248	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1254	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1260	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1262	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1268	ND	370	ug/Kg	10	01/15/19	SC	SW8082A
QA/QC Surrogates							
% DCBP	69		%	10	01/15/19	SC	30 - 150 %
% DCBP (Confirmation)	68		%	10	01/15/19	SC	30 - 150 %
% TCMX	75		%	10	01/15/19	SC	30 - 150 %
% TCMX (Confirmation)	74		%	10	01/15/19	SC	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,1,1-Trichloroethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.9	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2-Trichloroethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloropropene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,2,3-Trichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2,3-Trichloropropane	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2,4-Trichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2,4-Trimethylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dibromoethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,2-Dichloroethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichloropropane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,3,5-Trimethylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,3-Dichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
1,3-Dichloropropane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
1,4-Dichlorobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
2,2-Dichloropropane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
2-Chlorotoluene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
2-Hexanone	ND	32	ug/Kg	1	01/15/19	RM	SW8260C
2-Isopropyltoluene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
4-Chlorotoluene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
4-Methyl-2-pentanone	ND	32	ug/Kg	1	01/15/19	RM	SW8260C
Acetone	ND	320	ug/Kg	1	01/15/19	RM	SW8260C
Acrylonitrile	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Benzene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Bromobenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
Bromochloromethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Bromodichloromethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Bromoform	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Bromomethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Carbon Disulfide	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Carbon tetrachloride	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Chlorobenzene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Chloroethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C

Project ID: 181003A
Client ID: TP-5 (8)

Phoenix I.D.: CC28422

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chloroform	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Chloromethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,2-Dichloroethene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,3-Dichloropropene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Dibromochloromethane	ND	3.9	ug/Kg	1	01/15/19	RM	SW8260C
Dibromomethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Dichlorodifluoromethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Ethylbenzene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Hexachlorobutadiene	ND	200	ug/Kg	50	01/15/19	RM	SW8260C
Isopropylbenzene	ND	500	ug/Kg	50	01/15/19	RM	SW8260C
m&p-Xylene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Methyl Ethyl Ketone	ND	39	ug/Kg	1	01/15/19	RM	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	01/15/19	RM	SW8260C
Methylene chloride	ND	13	ug/Kg	1	01/15/19	RM	SW8260C
Naphthalene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
n-Butylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
n-Propylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
o-Xylene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
p-Isopropyltoluene	ND	500	ug/Kg	50	01/15/19	RM	SW8260C
sec-Butylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
Styrene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
tert-Butylbenzene	ND	970	ug/Kg	50	01/15/19	RM	SW8260C
Tetrachloroethene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	01/15/19	RM	SW8260C
Toluene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Total Xylenes	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,2-Dichloroethene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,3-Dichloropropene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,4-dichloro-2-butene	ND	1900	ug/Kg	50	01/15/19	RM	SW8260C
Trichloroethene	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorofluoromethane	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorotrifluoroethane	ND	13	ug/Kg	1	01/15/19	RM	SW8260C
Vinyl chloride	ND	6.5	ug/Kg	1	01/15/19	RM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	93		%	1	01/15/19	RM	70 - 130 %
% Bromofluorobenzene	75		%	1	01/15/19	RM	70 - 130 %
% Dibromofluoromethane	115		%	1	01/15/19	RM	70 - 130 %
% Toluene-d8	82		%	1	01/15/19	RM	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96		%	50	01/15/19	RM	70 - 130 %
% Bromofluorobenzene (50x)	97		%	50	01/15/19	RM	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	260	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthene	360	260	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthylene	290	260	ug/Kg	1	01/15/19	WB	SW8270D
Anthracene	1500	260	ug/Kg	1	01/15/19	WB	SW8270D
Benz(a)anthracene	4200	260	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(a)pyrene	3500	260	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(b)fluoranthene	3800	260	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(ghi)perylene	2500	260	ug/Kg	1	01/15/19	WB	SW8270D

Project ID: 181003A
Client ID: TP-5 (8)

Phoenix I.D.: CC28422

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(k)fluoranthene	3000	260	ug/Kg	1	01/15/19	WB	SW8270D
Chrysene	4700	260	ug/Kg	1	01/15/19	WB	SW8270D
Dibenz(a,h)anthracene	900	260	ug/Kg	1	01/15/19	WB	SW8270D
Fluoranthene	14000	2600	ug/Kg	10	01/16/19	WB	SW8270D
Fluorene	530	260	ug/Kg	1	01/15/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	2300	260	ug/Kg	1	01/15/19	WB	SW8270D
Naphthalene	ND	260	ug/Kg	1	01/15/19	WB	SW8270D
Phenanthrene	7900	2600	ug/Kg	10	01/16/19	WB	SW8270D
Pyrene	11000	2600	ug/Kg	10	01/16/19	WB	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	44		%	10	01/16/19	WB	30 - 130 %
% Nitrobenzene-d5	58		%	10	01/16/19	WB	30 - 130 %
% Terphenyl-d14	58		%	10	01/16/19	WB	30 - 130 %

SPLP Semivolatiles by SIM

2-Methylnaphthalene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Acenaphthene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Acenaphthylene	ND	0.30	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Anthracene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Benz(a)anthracene	ND	0.06	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Benzo(a)pyrene	ND	0.20	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.08	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.48	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.30	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Chrysene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.10	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Fluoranthene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Fluorene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.10	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Naphthalene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Phenanthrene	0.20	0.07	ug/L	1	01/18/19	KCA	SW8270D (SIM)
Pyrene	ND	0.50	ug/L	1	01/18/19	KCA	SW8270D (SIM)
QA/QC Surrogates							
% 2-Fluorobiphenyl	62		%	1	01/18/19	KCA	30 - 130 %
% Nitrobenzene-d5	50		%	1	01/18/19	KCA	30 - 130 %
% Terphenyl-d14	46		%	1	01/18/19	KCA	30 - 130 %
Field Extraction	Completed				01/11/19		SW5035A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

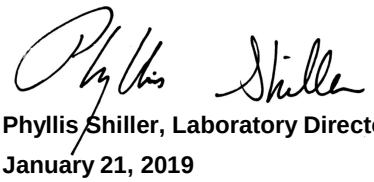
Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C19 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.



Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28423

Project ID: 181003A
Client ID: TP-6 (6)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	62		%		01/14/19	AK	SW846-%Solid
Soil Extraction for PCB	Completed				01/16/19	MM/V	SW3545A
Soil Extraction SVOA PAH	Completed				01/14/19	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				01/14/19	GG/VCK	SW3545A
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	400	mg/Kg	5	01/15/19	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	62		%	5	01/15/19	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1221	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1232	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1242	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1248	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1254	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1260	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1262	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
PCB-1268	ND	530	ug/Kg	10	01/18/19	SC	SW8082A
QA/QC Surrogates							
% DCBP	74		%	10	01/18/19	SC	30 - 150 %
% DCBP (Confirmation)	79		%	10	01/18/19	SC	30 - 150 %
% TCMX	69		%	10	01/18/19	SC	30 - 150 %
% TCMX (Confirmation)	72		%	10	01/18/19	SC	30 - 150 %

Project ID: 181003A
Client ID: TP-6 (6)

Phoenix I.D.: CC28423

Volatiles

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,1,1,2-Tetrachloroethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,1,1-Trichloroethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.8	ug/Kg	1	01/15/19	RM	SW8260C
1,1,2-Trichloroethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloroethene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,1-Dichloropropene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2,3-Trichlorobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2,3-Trichloropropane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2,4-Trichlorobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2,4-Trimethylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichlorobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichloroethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,2-Dichloropropane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,3,5-Trimethylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,3-Dichlorobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,3-Dichloropropane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
1,4-Dichlorobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
2,2-Dichloropropane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
2-Chlorotoluene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
2-Hexanone	ND	56	ug/Kg	1	01/15/19	RM	SW8260C
2-Isopropyltoluene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
4-Chlorotoluene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
4-Methyl-2-pentanone	ND	56	ug/Kg	1	01/15/19	RM	SW8260C
Acetone	ND	560	ug/Kg	1	01/15/19	RM	SW8260C
Acrylonitrile	ND	10	ug/Kg	1	01/15/19	RM	SW8260C
Benzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Bromobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Bromochloromethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Bromodichloromethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Bromoform	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Bromomethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Carbon Disulfide	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Carbon tetrachloride	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Chlorobenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Chloroethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Chloroform	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Chloromethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,2-Dichloroethene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
cis-1,3-Dichloropropene	ND	10	ug/Kg	1	01/15/19	RM	SW8260C
Dibromochloromethane	ND	6.8	ug/Kg	1	01/15/19	RM	SW8260C
Dibromomethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Dichlorodifluoromethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Ethylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Hexachlorobutadiene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Isopropylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C

Project ID: 181003A
Client ID: TP-6 (6)

Phoenix I.D.: CC28423

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Methyl Ethyl Ketone	ND	68	ug/Kg	1	01/15/19	RM	SW8260C
Methyl t-butyl ether (MTBE)	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
Methylene chloride	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
Naphthalene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
n-Butylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
n-Propylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
o-Xylene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
p-Isopropyltoluene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
sec-Butylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Styrene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
tert-Butylbenzene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Tetrachloroethene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Tetrahydrofuran (THF)	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
Toluene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Total Xylenes	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,2-Dichloroethene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,3-Dichloropropene	ND	10	ug/Kg	1	01/15/19	RM	SW8260C
trans-1,4-dichloro-2-butene	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
Trichloroethene	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorofluoromethane	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
Trichlorotrifluoroethane	ND	23	ug/Kg	1	01/15/19	RM	SW8260C
Vinyl chloride	ND	11	ug/Kg	1	01/15/19	RM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	93		%	1	01/15/19	RM	70 - 130 %
% Bromofluorobenzene	83		%	1	01/15/19	RM	70 - 130 %
% Dibromofluoromethane	98		%	1	01/15/19	RM	70 - 130 %
% Toluene-d8	94		%	1	01/15/19	RM	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthylene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Anthracene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Benz(a)anthracene	610	370	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(a)pyrene	750	370	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(b)fluoranthene	700	370	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(ghi)perylene	510	370	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(k)fluoranthene	690	370	ug/Kg	1	01/15/19	WB	SW8270D
Chrysene	750	370	ug/Kg	1	01/15/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Fluoranthene	1100	370	ug/Kg	1	01/15/19	WB	SW8270D
Fluorene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	440	370	ug/Kg	1	01/15/19	WB	SW8270D
Naphthalene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Phenanthrene	ND	370	ug/Kg	1	01/15/19	WB	SW8270D
Pyrene	1200	370	ug/Kg	1	01/15/19	WB	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	51		%	1	01/15/19	WB	30 - 130 %
% Nitrobenzene-d5	55		%	1	01/15/19	WB	30 - 130 %

Ver 1

Project ID: 181003A
Client ID: TP-6 (6)

Phoenix I.D.: CC28423

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	49		%	1	01/15/19	WB	30 - 130 %
Field Extraction	Completed				01/11/19		SW5035A

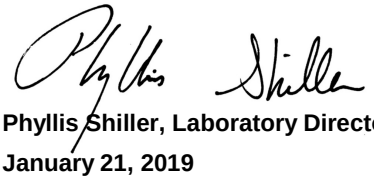
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.



Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28424

Project ID: 181003A
Client ID: TP-7 (6)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.62	0.62	mg/Kg	1	01/15/19	TH	SW6010D
Arsenic	13.7	1.2	mg/Kg	1	01/15/19	TH	SW6010D
Barium	61.6	0.62	mg/Kg	1	01/15/19	TH	SW6010D
Cadmium	< 0.62	0.62	mg/Kg	1	01/15/19	TH	SW6010D
Chromium	13.4	0.62	mg/Kg	1	01/15/19	TH	SW6010D
Mercury	0.20	0.05	mg/Kg	1	01/15/19	RS	SW7471B
Lead	101	0.62	mg/Kg	1	01/15/19	TH	SW6010D
Selenium	< 2.5	2.5	mg/Kg	1	01/15/19	TH	SW6010D
Percent Solid	58		%		01/14/19	AK	SW846-%Solid
Soil Extraction SVOA PAH	Completed				01/14/19	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				01/14/19	MG/VCK	SW3545A
Mercury Digestion	Completed				01/15/19	I/EV	SW7471B
Total Metals Digest	Completed				01/14/19	SAG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	140	84	mg/Kg	1	01/15/19	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	77		%	1	01/15/19	JRB	50 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	400	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthene	ND	400	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthylene	ND	400	ug/Kg	1	01/15/19	WB	SW8270D
Anthracene	430	400	ug/Kg	1	01/15/19	WB	SW8270D
Benz(a)anthracene	2600	400	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(a)pyrene	2600	400	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(b)fluoranthene	2600	400	ug/Kg	1	01/15/19	WB	SW8270D

Ver 1

Project ID: 181003A
Client ID: TP-7 (6)

Phoenix I.D.: CC28424

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(ghi)perylene	1700	400	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(k)fluoranthene	2500	400	ug/Kg	1	01/15/19	WB	SW8270D
Chrysene	2800	400	ug/Kg	1	01/15/19	WB	SW8270D
Dibenz(a,h)anthracene	550	400	ug/Kg	1	01/15/19	WB	SW8270D
Fluoranthene	4700	400	ug/Kg	1	01/15/19	WB	SW8270D
Fluorene	ND	400	ug/Kg	1	01/15/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	1600	400	ug/Kg	1	01/15/19	WB	SW8270D
Naphthalene	ND	400	ug/Kg	1	01/15/19	WB	SW8270D
Phenanthrene	2100	400	ug/Kg	1	01/15/19	WB	SW8270D
Pyrene	4400	400	ug/Kg	1	01/15/19	WB	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	62		%	1	01/15/19	WB	30 - 130 %
% Nitrobenzene-d5	60		%	1	01/15/19	WB	30 - 130 %
% Terphenyl-d14	58		%	1	01/15/19	WB	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C16 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

January 21, 2019

FOR: Attn:
Northstar Environmental
800 Village Walk No. 325
Guilford, CT 06437

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		01/11/19	
Location Code:	NORTHSTR	Received by:	CP	01/14/19	14:52
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCC28418
Phoenix ID: CC28425

Project ID: 181003A
Client ID: TP-8 (4)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	32		%		01/14/19	AK	SW846-%Solid
Soil Extraction for PCB	Completed				01/14/19	MM/V	SW3545A
Soil Extraction SVOA PAH	Completed				01/14/19	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				01/14/19	MG/VCK	SW3545A
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	500	mg/Kg	5	01/15/19	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	01/15/19	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	68		%	5	01/15/19	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1221	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1232	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1242	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1248	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1254	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1260	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1262	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
PCB-1268	ND	1000	ug/Kg	10	01/15/19	SC	SW8082A
QA/QC Surrogates							
% DCBP	65		%	10	01/15/19	SC	30 - 150 %
% DCBP (Confirmation)	65		%	10	01/15/19	SC	30 - 150 %
% TCMX	67		%	10	01/15/19	SC	30 - 150 %
% TCMX (Confirmation)	68		%	10	01/15/19	SC	30 - 150 %

Project ID: 181003A
Client ID: TP-8 (4)

Phoenix I.D.: CC28425

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	560	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Acenaphthylene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Anthracene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Benz(a)anthracene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(a)pyrene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(b)fluoranthene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(ghi)perylene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Benzo(k)fluoranthene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Chrysene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Fluoranthene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Fluorene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	1000	ug/Kg	1	01/15/19	WB	SW8270D
Naphthalene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Phenanthrene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
Pyrene	ND	1100	ug/Kg	1	01/15/19	WB	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	59		%	1	01/15/19	WB	30 - 130 %
% Nitrobenzene-d5	62		%	1	01/15/19	WB	30 - 130 %
% Terphenyl-d14	65		%	1	01/15/19	WB	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

Phyllis Shiller, Laboratory Director
January 21, 2019
Reviewed and Released by: Helen Geoghegan, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

January 21, 2019

QA/QC Data

SDG I.D.: GCC28418

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 463323 (mg/kg), QC Sample No: CC28252 (CC28418, CC28419, CC28420, CC28422, CC28424)													
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	95.7	87.4	9.1	82.1			70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 463284 (mg/kg), QC Sample No: CC28418 (CC28418, CC28419, CC28420, CC28422, CC28424)													
ICP Metals - Soil													
Arsenic	BRL	0.67	9.00	8.94	0.70	108			97.1			75 - 125	30
Barium	BRL	0.33	49.1	58.5	17.5	102			110			75 - 125	30
Cadmium	BRL	0.33	<0.42	<0.38	NC	104			98.2			75 - 125	30
Chromium	BRL	0.33	20.5	18.8	8.70	109			99.7			75 - 125	30
Lead	BRL	0.33	46.7	50.9	8.60	106			100			75 - 125	30
Selenium	BRL	1.3	<1.7	<1.5	NC	99.8			91.0			75 - 125	30
Silver	BRL	0.33	<0.42	<0.38	NC	102			98.8			75 - 125	30

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QA/QC Report

January 21, 2019

QA/QC Data

SDG I.D.: GCC28418

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 463245 (mg/Kg), QC Sample No: CC28423 (CC28418, CC28419, CC28420, CC28421, CC28422, CC28423, CC28424, CC28425)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	104	95	9.0	87	69	23.1	60 - 120	30
% n-Pentacosane	65	%	76	69	9.7	73	68	7.1	50 - 150	30
Comment:										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 463243 (ug/Kg), QC Sample No: CC28418 2X (CC28418, CC28420, CC28422, CC28425)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	83	80	3.7	61	70	13.7	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	90	86	4.5	67	79	16.4	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	85	%	99	85	15.2	70	79	12.1	30 - 150	30
% TCMX (Surrogate Rec)	81	%	90	86	4.5	64	76	17.1	30 - 150	30
QA/QC Batch 463567 (ug/Kg), QC Sample No: CC29713 2X (CC28423)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	84	82	2.4	60	63	4.9	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	89	88	1.1	69	71	2.9	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	106	%	99	97	2.0	75	76	1.3	30 - 150	30
% TCMX (Surrogate Rec)	98	%	91	92	1.1	66	69	4.4	30 - 150	30
QA/QC Batch 463278 (ug/kg), QC Sample No: CC28524 (CC28419, CC28420, CC28422, CC28423, CC28424, CC28425)										
Semivolatiles - Soil										
2-Methylnaphthalene	ND	230	60	63	4.9	67	60	11.0	30 - 130	30
Acenaphthene	ND	230	68	70	2.9	67	60	11.0	30 - 130	30
Acenaphthylene	ND	130	64	67	4.6	65	60	8.0	30 - 130	30
Anthracene	ND	230	73	76	4.0	70	64	9.0	30 - 130	30
Benz(a)anthracene	ND	230	74	76	2.7	63	56	11.8	30 - 130	30
Benzo(a)pyrene	ND	130	72	75	4.1	59	54	8.8	30 - 130	30

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Benzo(b)fluoranthene	ND	160	78	79	1.3	64	58	9.8	30 - 130	30	
Benzo(ghi)perylene	ND	230	68	72	5.7	48	42	13.3	30 - 130	30	
Benzo(k)fluoranthene	ND	230	73	78	6.6	62	60	3.3	30 - 130	30	
Chrysene	ND	230	76	78	2.6	67	60	11.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	76	79	3.9	58	51	12.8	30 - 130	30	
Fluoranthene	ND	230	75	77	2.6	67	58	14.4	30 - 130	30	
Fluorene	ND	230	68	71	4.3	67	60	11.0	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	77	80	3.8	58	50	14.8	30 - 130	30	
Naphthalene	ND	230	57	59	3.4	65	59	9.7	30 - 130	30	
Phenanthrene	ND	130	72	74	2.7	69	61	12.3	30 - 130	30	
Pyrene	ND	230	75	77	2.6	70	60	15.4	30 - 130	30	
% 2-Fluorobiphenyl	50	%	62	65	4.7	63	58	8.3	30 - 130	30	
% Nitrobenzene-d5	46	%	60	63	4.9	68	61	10.9	30 - 130	30	
% Terphenyl-d14	68	%	67	69	2.9	60	54	10.5	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 463415 (ug/L), QC Sample No: CC28557 (CC28422)

Semivolatiles by SIM, PAH - SPLP

2-Methylnaphthalene	ND	0.50	45	41	9.3				30 - 130	20	
Acenaphthene	ND	0.50	61	44	32.4				30 - 130	20	r
Acenaphthylene	ND	0.30	57	57	0.0				30 - 130	20	
Anthracene	ND	0.50	65	50	26.1				30 - 130	20	r
Benz(a)anthracene	ND	0.02	63	56	11.8				30 - 130	20	
Benzo(a)pyrene	ND	0.02	61	45	30.2				30 - 130	20	r
Benzo(b)fluoranthene	ND	0.02	66	81	20.4				30 - 130	20	
Benzo(ghi)perylene	ND	0.48	64	73	13.1				30 - 130	20	
Benzo(k)fluoranthene	ND	0.02	65	82	23.1				30 - 130	20	r
Chrysene	ND	0.02	65	62	4.7				30 - 130	20	
Dibenz(a,h)anthracene	ND	0.10	70	89	23.9				30 - 130	20	r
Fluoranthene	ND	0.50	67	57	16.1				30 - 130	20	
Fluorene	ND	0.50	63	57	10.0				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	0.02	68	76	11.1				30 - 130	20	
Naphthalene	ND	0.50	44	38	14.6				30 - 130	20	
Phenanthrene	ND	0.07	63	58	8.3				30 - 130	20	
Pyrene	ND	0.50	68	38	56.6				30 - 130	20	r
% 2-Fluorobiphenyl	55	%	57	50	13.1				30 - 130	20	
% Nitrobenzene-d5	53	%	50	41	19.8				30 - 130	20	
% Terphenyl-d14	62	%	62	57	8.4				30 - 130	20	

Comment:

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 463363 (ug/kg), QC Sample No: CC28419 (CC28419 (1X, 50X) , CC28420, CC28422)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	113	118	4.3	109	112	2.7	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	112	124	10.2	114	124	8.4	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	115	120	4.3	110	117	6.2	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	115	117	1.7	108	113	4.5	70 - 130	30	
1,1-Dichloroethane	ND	5.0	117	122	4.2	115	121	5.1	70 - 130	30	
1,1-Dichloroethene	ND	5.0	133	140	5.1	131	139	5.9	70 - 130	30	l,m
1,1-Dichloropropene	ND	5.0	119	127	6.5	120	125	4.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	122	126	3.2	108	120	10.5	70 - 130	30	

QA/QC Data

SDG I.D.: GCC28418

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2,3-Trichloropropane	ND	5.0	118	128	8.1	106	112	5.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	118	121	2.5	102	116	12.8	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	111	117	5.3	110	115	4.4	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	116	123	5.9	107	114	6.3	70 - 130	30	
1,2-Dibromoethane	ND	5.0	117	121	3.4	110	115	4.4	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	115	119	3.4	110	116	5.3	70 - 130	30	
1,2-Dichloroethane	ND	5.0	117	121	3.4	117	122	4.2	70 - 130	30	
1,2-Dichloropropane	ND	5.0	112	116	3.5	112	112	0.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	111	117	5.3	110	114	3.6	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	114	119	4.3	109	116	6.2	70 - 130	30	
1,3-Dichloropropane	ND	5.0	113	116	2.6	109	111	1.8	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	113	118	4.3	108	115	6.3	70 - 130	30	
2,2-Dichloropropane	ND	5.0	120	127	5.7	116	121	4.2	70 - 130	30	
2-Chlorotoluene	ND	5.0	113	120	6.0	111	117	5.3	70 - 130	30	
2-Hexanone	ND	25	87	91	4.5	75	80	6.5	70 - 130	30	
2-Isopropyltoluene	ND	5.0	104	110	5.6	103	108	4.7	70 - 130	30	
4-Chlorotoluene	ND	5.0	111	115	3.5	108	114	5.4	70 - 130	30	
4-Methyl-2-pentanone	ND	25	93	98	5.2	87	90	3.4	70 - 130	30	
Acetone	ND	10	95	95	0.0	75	77	2.6	70 - 130	30	
Acrylonitrile	ND	5.0	96	103	7.0	91	100	9.4	70 - 130	30	
Benzene	ND	1.0	116	121	4.2	115	119	3.4	70 - 130	30	
Bromobenzene	ND	5.0	115	122	5.9	113	119	5.2	70 - 130	30	
Bromochloromethane	ND	5.0	109	112	2.7	107	111	3.7	70 - 130	30	
Bromodichloromethane	ND	5.0	116	119	2.6	115	119	3.4	70 - 130	30	
Bromoform	ND	5.0	113	117	3.5	103	106	2.9	70 - 130	30	
Bromomethane	ND	5.0	116	122	5.0	86	94	8.9	70 - 130	30	
Carbon Disulfide	ND	5.0	123	128	4.0	118	125	5.8	70 - 130	30	
Carbon tetrachloride	ND	5.0	114	121	6.0	113	118	4.3	70 - 130	30	
Chlorobenzene	ND	5.0	112	118	5.2	112	116	3.5	70 - 130	30	
Chloroethane	ND	5.0	119	126	5.7	111	140	23.1	70 - 130	30	m
Chloroform	ND	5.0	114	120	5.1	113	119	5.2	70 - 130	30	
Chloromethane	ND	5.0	103	108	4.7	102	105	2.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	117	122	4.2	115	121	5.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	117	120	2.5	112	114	1.8	70 - 130	30	
Dibromochloromethane	ND	3.0	117	122	4.2	109	113	3.6	70 - 130	30	
Dibromomethane	ND	5.0	115	119	3.4	112	116	3.5	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	123	133	7.8	127	134	5.4	70 - 130	30	l,m
Ethylbenzene	ND	1.0	111	118	6.1	111	113	1.8	70 - 130	30	
Hexachlorobutadiene	ND	5.0	121	127	4.8	117	124	5.8	70 - 130	30	
Isopropylbenzene	ND	1.0	113	120	6.0	114	118	3.4	70 - 130	30	
m&p-Xylene	ND	2.0	110	115	4.4	110	112	1.8	70 - 130	30	
Methyl ethyl ketone	ND	5.0	82	85	3.6	73	80	9.2	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	87	87	0.0	95	100	5.1	70 - 130	30	
Methylene chloride	ND	5.0	123	125	1.6	118	126	6.6	70 - 130	30	
Naphthalene	ND	5.0	125	130	3.9	113	127	11.7	70 - 130	30	
n-Butylbenzene	ND	1.0	115	122	5.9	112	122	8.5	70 - 130	30	
n-Propylbenzene	ND	1.0	113	119	5.2	111	117	5.3	70 - 130	30	
o-Xylene	ND	2.0	112	119	6.1	111	114	2.7	70 - 130	30	
p-Isopropyltoluene	ND	1.0	113	119	5.2	113	118	4.3	70 - 130	30	
sec-Butylbenzene	ND	1.0	119	127	6.5	120	125	4.1	70 - 130	30	
Styrene	ND	5.0	111	115	3.5	108	112	3.6	70 - 130	30	
tert-Butylbenzene	ND	1.0	113	120	6.0	114	118	3.4	70 - 130	30	
Tetrachloroethene	ND	5.0	114	120	5.1	116	121	4.2	70 - 130	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Tetrahydrofuran (THF)	ND	5.0	95	100	5.1	87	95	8.8	70 - 130	30	
Toluene	ND	1.0	113	119	5.2	113	116	2.6	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	130	129	0.8	126	137	8.4	70 - 130	30	m
trans-1,3-Dichloropropene	ND	5.0	111	114	2.7	105	108	2.8	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	101	104	2.9	90	95	5.4	70 - 130	30	
Trichloroethene	ND	5.0	118	125	5.8	118	122	3.3	70 - 130	30	
Trichlorofluoromethane	ND	5.0	114	122	6.8	106	132	21.8	70 - 130	30	m
Trichlorotrifluoroethane	ND	5.0	119	125	4.9	119	127	6.5	70 - 130	30	
Vinyl chloride	ND	5.0	112	119	6.1	116	123	5.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	97	%	100	101	1.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	96	%	101	100	1.0	99	99	0.0	70 - 130	30	
% Dibromofluoromethane	104	%	100	99	1.0	93	98	5.2	70 - 130	30	
% Toluene-d8	97	%	101	101	0.0	102	102	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 463507 (ug/kg), QC Sample No: CC28423 (CC28420 (50X) , CC28422 (50X) , CC28423)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	105	103	1.9	99	107	7.8	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	112	112	0.0	108	118	8.8	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	115	110	4.4	104	108	3.8	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	109	108	0.9	100	107	6.8	70 - 130	30	
1,1-Dichloroethane	ND	5.0	112	110	1.8	108	115	6.3	70 - 130	30	
1,1-Dichloroethene	ND	5.0	131	135	3.0	128	135	5.3	70 - 130	30	l,m
1,1-Dichloropropene	ND	5.0	112	114	1.8	107	120	11.5	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	117	120	2.5	105	116	10.0	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	120	116	3.4	112	105	6.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	112	116	3.5	100	112	11.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	106	108	1.9	103	112	8.4	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	111	106	4.6	99	101	2.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0	110	108	1.8	102	108	5.7	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	111	110	0.9	104	113	8.3	70 - 130	30	
1,2-Dichloroethane	ND	5.0	117	114	2.6	111	118	6.1	70 - 130	30	
1,2-Dichloropropane	ND	5.0	105	105	0.0	103	108	4.7	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	105	106	0.9	103	112	8.4	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	108	110	1.8	103	114	10.1	70 - 130	30	
1,3-Dichloropropane	ND	5.0	107	104	2.8	101	106	4.8	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	108	111	2.7	102	113	10.2	70 - 130	30	
2,2-Dichloropropane	ND	5.0	112	116	3.5	106	114	7.3	70 - 130	30	
2-Chlorotoluene	ND	5.0	107	108	0.9	104	114	9.2	70 - 130	30	
2-Hexanone	ND	25	84	80	4.9	68	74	8.5	70 - 130	30	m
2-Isopropyltoluene	ND	5.0	99	99	0.0	96	104	8.0	70 - 130	30	
4-Chlorotoluene	ND	5.0	104	106	1.9	100	110	9.5	70 - 130	30	
4-Methyl-2-pentanone	ND	25	94	88	6.6	80	81	1.2	70 - 130	30	
Acetone	ND	10	92	91	1.1	71	68	4.3	70 - 130	30	m
Acrylonitrile	ND	5.0	93	90	3.3	84	88	4.7	70 - 130	30	
Benzene	ND	1.0	109	109	0.0	105	114	8.2	70 - 130	30	
Bromobenzene	ND	5.0	110	110	0.0	106	115	8.1	70 - 130	30	
Bromochloromethane	ND	5.0	106	103	2.9	100	104	3.9	70 - 130	30	
Bromodichloromethane	ND	5.0	111	112	0.9	108	115	6.3	70 - 130	30	
Bromoform	ND	5.0	104	102	1.9	92	97	5.3	70 - 130	30	
Bromomethane	ND	5.0	116	125	7.5	88	100	12.8	70 - 130	30	
Carbon Disulfide	ND	5.0	116	122	5.0	111	118	6.1	70 - 130	30	

QA/QC Data

SDG I.D.: GCC28418

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Carbon tetrachloride	ND	5.0	108	109	0.9	103	112	8.4	70 - 130	30	
Chlorobenzene	ND	5.0	105	106	0.9	102	110	7.5	70 - 130	30	
Chloroethane	ND	5.0	118	121	2.5	139	150	7.6	70 - 130	30	m
Chloroform	ND	5.0	113	110	2.7	107	115	7.2	70 - 130	30	
Chloromethane	ND	5.0	94	95	1.1	92	100	8.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	112	109	2.7	108	115	6.3	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	110	110	0.0	102	108	5.7	70 - 130	30	
Dibromochloromethane	ND	3.0	109	105	3.7	99	107	7.8	70 - 130	30	
Dibromomethane	ND	5.0	113	110	2.7	104	111	6.5	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	117	120	2.5	114	123	7.6	70 - 130	30	
Ethylbenzene	ND	1.0	102	104	1.9	100	109	8.6	70 - 130	30	
Hexachlorobutadiene	ND	5.0	114	115	0.9	109	119	8.8	70 - 130	30	
Isopropylbenzene	ND	1.0	105	107	1.9	104	113	8.3	70 - 130	30	
m&p-Xylene	ND	2.0	101	103	2.0	99	109	9.6	70 - 130	30	
Methyl ethyl ketone	ND	5.0	80	76	5.1	71	74	4.1	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	97	85	13.2	81	86	6.0	70 - 130	30	
Methylene chloride	ND	5.0	125	121	3.3	119	126	5.7	70 - 130	30	
Naphthalene	ND	5.0	125	122	2.4	110	117	6.2	70 - 130	30	
n-Butylbenzene	ND	1.0	111	116	4.4	108	120	10.5	70 - 130	30	
n-Propylbenzene	ND	1.0	104	108	3.8	104	113	8.3	70 - 130	30	
o-Xylene	ND	2.0	104	104	0.0	100	110	9.5	70 - 130	30	
p-Isopropyltoluene	ND	1.0	108	109	0.9	105	115	9.1	70 - 130	30	
sec-Butylbenzene	ND	1.0	113	114	0.9	112	122	8.5	70 - 130	30	
Styrene	ND	5.0	103	103	0.0	99	108	8.7	70 - 130	30	
tert-Butylbenzene	ND	1.0	106	106	0.0	105	114	8.2	70 - 130	30	
Tetrachloroethene	ND	5.0	107	111	3.7	105	115	9.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	92	86	6.7	83	85	2.4	70 - 130	30	
Toluene	ND	1.0	106	107	0.9	103	111	7.5	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	126	132	4.7	126	134	6.2	70 - 130	30	l,m
trans-1,3-Dichloropropene	ND	5.0	106	104	1.9	96	102	6.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	94	91	3.2	78	87	10.9	70 - 130	30	
Trichloroethene	ND	5.0	110	112	1.8	106	116	9.0	70 - 130	30	
Trichlorofluoromethane	ND	5.0	115	118	2.6	116	129	10.6	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	117	122	4.2	119	123	3.3	70 - 130	30	
Vinyl chloride	ND	5.0	111	112	0.9	108	119	9.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	97	%	102	101	1.0	100	99	1.0	70 - 130	30	
% Bromofluorobenzene	98	%	99	100	1.0	99	98	1.0	70 - 130	30	
% Dibromofluoromethane	99	%	97	97	0.0	94	96	2.1	70 - 130	30	
% Toluene-d8	97	%	102	104	1.9	102	101	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
January 21, 2019

Monday, January 21, 2019

Criteria: CT: GAM, RC

State: CT

Sample Criteria Exceedances Report

GCC28418 - NORTHSTR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CC28420	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	2400	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	4500	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	4100	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	4200	310	1000	1000	ug/Kg
CC28420	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GA,GAA (mg/kg) / APS Organics	2400	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benzo(ghi)perylene	CT / RSR GA,GAA (mg/kg) / APS Organics	2500	310	1000	1000	ug/Kg
CC28420	$8100SMR	Chrysene	CT / RSR GA,GAA (mg/kg) / APS Organics	5400	310	1000	1000	ug/Kg
CC28420	$8100SMR	Phenanthrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	12000	3100	4000	4000	ug/Kg
CC28420	$8100SMR	Fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	20000	3100	5600	5600	ug/Kg
CC28420	$8100SMR	Benzo(b)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	4200	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benz(a)anthracene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	4500	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benzo(a)pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	4100	310	1000	1000	ug/Kg
CC28420	$8100SMR	Benzo(k)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	4000	310	1000	1000	ug/Kg
CC28420	$8100SMR	Pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	16000	3100	4000	4000	ug/Kg
CC28420	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	1100	670	500	500	mg/Kg
CC28420	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GA,GAA (mg/kg) / Pesticides/TPH	1100	670	500	500	mg/Kg
CC28422	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	2300	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3500	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	4200	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3800	260	1000	1000	ug/Kg
CC28422	$8100SMR	Chrysene	CT / RSR GA,GAA (mg/kg) / APS Organics	4700	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benzo(ghi)perylene	CT / RSR GA,GAA (mg/kg) / APS Organics	2500	260	1000	1000	ug/Kg
CC28422	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GA,GAA (mg/kg) / APS Organics	2300	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benz(a)anthracene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	4200	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benzo(a)pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	3500	260	1000	1000	ug/Kg
CC28422	$8100SMR	Fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	14000	2600	5600	5600	ug/Kg
CC28422	$8100SMR	Phenanthrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	7900	2600	4000	4000	ug/Kg
CC28422	$8100SMR	Pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	11000	2600	4000	4000	ug/Kg
CC28422	$8100SMR	Benzo(b)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	3800	260	1000	1000	ug/Kg
CC28422	$8100SMR	Benzo(k)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	3000	260	1000	1000	ug/Kg
CC28422	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	1100	560	500	500	mg/Kg
CC28422	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GA,GAA (mg/kg) / Pesticides/TPH	1100	560	500	500	mg/Kg
CC28424	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	1600	400	1000	1000	ug/Kg
CC28424	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2600	400	1000	1000	ug/Kg
CC28424	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2600	400	1000	1000	ug/Kg
CC28424	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2600	400	1000	1000	ug/Kg
CC28424	$8100SMR	Benzo(ghi)perylene	CT / RSR GA,GAA (mg/kg) / APS Organics	1700	400	1000	1000	ug/Kg
CC28424	$8100SMR	Chrysene	CT / RSR GA,GAA (mg/kg) / APS Organics	2800	400	1000	1000	ug/Kg
CC28424	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GA,GAA (mg/kg) / APS Organics	1600	400	1000	1000	ug/Kg
CC28424	$8100SMR	Benz(a)anthracene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	2600	400	1000	1000	ug/Kg

Monday, January 21, 2019

Criteria: CT: GAM, RC

State: CT

Sample Criteria Exceedances Report

GCC28418 - NORTHSTR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CC28424	$8100SMR	Benzo(b)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	2600	400	1000	1000	ug/Kg
CC28424	$8100SMR	Benzo(k)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	2500	400	1000	1000	ug/Kg
CC28424	$8100SMR	Pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	4400	400	4000	4000	ug/Kg
CC28424	$8100SMR	Benzo(a)pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	2600	400	1000	1000	ug/Kg
CC28424	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	13.7	1.2	10	10	mg/Kg

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

January 21, 2019 SDG I.D.: GCC28418

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

VOA Narration

CHEM14 01/14/19-2: CC28419, CC28420, CC28422

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 30% (20%), Methyl Ethyl Ketone 35% (20%), Methylene chloride 21% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.062 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

CHEM14 01/15/19-1: CC28420, CC28422, CC28423

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 30% (20%), Methyl Ethyl Ketone 35% (20%), Methylene chloride 21% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.062 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]
Temp 2.1°C Pg of

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery/Contact Options:
[ ] Fax:
[ ] Phone:
[ ] Email:

Customer: NorthStar
Address: 1100 Boston Post Rd Suite B Guilford, CT

Project: 181003A
Report to: NorthStar
Invoice to: NorthStar
QUOTE #

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: 1/11/19

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe **OIL**=Oil
B=Bulk **L**=Liquid **X** = _____(Other)

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	ETPH	PCBs 8082	8 RCRA Metals Total	PAH 8270C	SPLP PAH (8270C)	VOCs 8260C	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [X] methanol [ ] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
28418	TP-1 (4)	S	1/11/19		✓	✓	✓				2	10										
28419	TP-2 (6)				✓	✓	✓	✓		✓	3	1										
28420	TP-3 (6)				✓	✓	✓	✓		✓	3	1										
28421	TP-4 (5)				✓						·	1										
28422	TP-5 (8)				✓	✓	✓	✓	✓	✓	3	1										
28423	TP-6 (6)				✓	✓		✓		✓	3	1										
28424	TP-7 (6)				✓	✓	✓	✓				1										
28425	TP-8 (4)				✓	✓		✓				1										

Relinquished by:	Accepted by:	Date:	Time:
Krista Ferrara	Kristin Squier	1-14-19	12:30
Kristin Squier	[illegible]	1.14.19	1452

Comments, Special Requirements or Regulations:

Turnaround Time:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[X] GA Mobility
[ ] GB Mobility
[X] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1 GW-1 [ ] S-1 GW-2 [ ] S-1 GW-3
[ ] S-2 GW-1 [ ] S-2 GW-2 [ ] S-2 GW-3
[ ] S-3 GW-1 [ ] S-3 GW-2 [ ] S-3 GW-3
[ ] MWRA eSMART [ ] Other

State where samples were collected: CT

Data Format
[X] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

Exhibit F

Wetlands Report

DAVISON ENVIRONMENTAL

Biodiversity Studies • Wetland Delineation & Assessment • Habitat Management • GIS Mapping • Permitting • Forestry

January 17, 2019

Godfrey, Hoffman, Hodge, LLC
Attention: Adam Hoffman
26 Broadway
North Haven, CT 06473

RE: Wetland Delineation, 31 Benz Street, Ansonia

Mr. Hoffman,

At your request, I conducted an inspection on the above-referenced property on January 16, 2019. The purpose of the inspection was to delineate Connecticut jurisdictional wetlands and watercourses. The inspection was conducted by a soil scientist according to the requirements of the Connecticut Inland Wetlands and Watercourses Act (P.A. 155). Wetlands are defined as areas of poorly drained, very poorly drained, floodplain, and alluvial soils, as delineated by a soil scientist.

Wetlands were delineated by examining the upper 20" of the soil profile with a spade and auger. Those areas meeting the requirements noted above were marked with pink flagging tape and wire stake flags and numbered with the following sequence: WF 1 – 39. A wetland delineation sketch map is attached for reference.

The delineated area is a seasonally flooded, forested wetland located along the west property boundary and extending off-site to the west. Wetland hydrology appears to be driven primarily by groundwater discharge/seeps originating from extremely stony uplands adjacent to the wetland. Representative photos of the delineated wetland are attached for reference.

Digitally available updated soil survey information was obtained from the Natural Resources Conservation Service (attached for reference). The following is a description of wetland and upland soil types.

Wetland Soil Types

Wetland soils are comprised of Ridgebury, Leicester, and Whitman soils (Map Unit 3 – not shown). The Ridgebury series consists of very deep, somewhat poorly and poorly drained soils formed in glacial till derived mainly from granite, gneiss and schist. They are nearly level to gently sloping soils in low areas in uplands. This series includes phases that are poorly drained and the wetter part of somewhat poorly drained. A perched, fluctuating water table above the dense till saturates the solum to or near the surface for 7 to 9 months of the year.

The Leicester series consists of very deep, poorly drained loamy soils formed in friable till. They are nearly level or gently sloping soils in drainageways and low-lying positions on hills. Depth to bedrock is commonly more than 6 feet. Rock fragments range from 5 to 35 percent by volume to a depth of 40 inches and up to 50 percent below 40 inches. Leicester soils have a water table at or near the surface much of the year.

The Whitman series consists of very deep, very poorly drained soils formed in glacial till derived mainly from granite, gneiss, and schist. They are nearly level or gently sloping soils in depressions and drainageways on uplands. Depth to dense till is 12 to 30 inches. Some pedons have organic horizons overlying the A horizon. They are fibric hemic or sapric material, and are up to 5 inches thick. Whitman soils are found on nearly level and gently sloping soils in depressions and in drainage ways of glacial uplands. Slopes are typically 0 to 2 percent but range up to 8 percent where wetness is due to seepage water. This soil is very poorly drained. A perched water table, or excess seepage water, is at or near the surface for about 9 months of the year.

Upland Soil Types

The non-wetland soils were not examined in detail, except as was necessary to identify the wetland boundary. They generally consist of Charlton and Chatfield soils. The Charlton series is a very deep, well drained loamy soil formed in friable till. They are nearly level to very steep soils on till plains and hills. Depth to bedrock and the seasonal high water table is commonly more than 6 feet.

The Chatfield series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 0 to 70 percent. Crystalline bedrock is at depths of 20 to 40 inches. The soils formed in a moderately thick mantle of glacial till overlying granite, gneiss, or schist bedrock. Rock outcrops are rare to common and are limited to the more resistant bedrock.

If you have any questions regarding these findings, please feel free to contact me.

Respectfully submitted,

Matthew Davison, PWS, PSS, CPESC, CT Forester

Enclosures: Wetland Photographs
Wetland Delineation Sketch Map
NRCS Soil Mapping

Photo 1: View of delineated wetland facing north

Photo 2: View of delineated wetland facing southeast where groundwater seeps drain to the wetland


White Oak Rd
Shortell Dr
WF 1
WF 39 CLOSE
THERE ARE A FEW AREAS OF GROUNDWATER DISCHARGE UPGRADIENT OF WETLAND, MODERATELY-WELL DRAINED SOILS NOT WET
WETLAND DELINEATION
SKETCH MAP
MATTHEW DAVISON, PSS
1/16/2019

Soil Map—State of Connecticut
(31 Benz Street, Ansonia)

Map Scale: 1:3,180 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 19, Sep 13, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Jul 22, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Leicester fine sandy loam	2.3	5.1%
18	Catden and Freetown soils, 0 to 2 percent slopes	1.0	2.3%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	15.8	35.4%
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	14.6	32.8%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	0.1	0.1%
260B	Charlton-Urban land complex, 3 to 8 percent slopes	4.1	9.3%
273C	Urban land-Charlton-Chatfield complex, rocky, 3 to 15 percent slopes	5.2	11.6%
275E	Urban land-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	1.5	3.4%
Totals for Area of Interest		**44.7**	**100.0%**

Exhibit G

DEEP NDDB Species Review

Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

January 24, 2019

Blake Nicholson
Windam Solar LLC
222 S 9th St, Suite 1600
Minneapolis, MN 55402
blake.nicholson@ecosrenewable.com

NDDB DETERMINATION NUMBER.: 201900731
Project: BENZ SOLAR ENERGY FACILITY, 31 BENZ STREET IN ANSONIA, CT

I have reviewed Natural Diversity Database (NDDB) maps and files regarding this project. I do not anticipate negative impacts to State-listed species (RCSA Sec. 26-306) resulting from your proposed activity at the site. **This determination is good for 2 years**.

Natural Diversity Database information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Database should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Database as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at shannon.kearney@ct.gov . Thank you for consulting the Natural Diversity Database.

Sincerely,

/s/ Shannon B. Kearney
Wildlife Biologist

Natural Diversity Data Base Areas

ANSONIA, CT

December 2018

State and Federal Listed Species & Significant Natural Communities

Town Boundary

NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources . Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

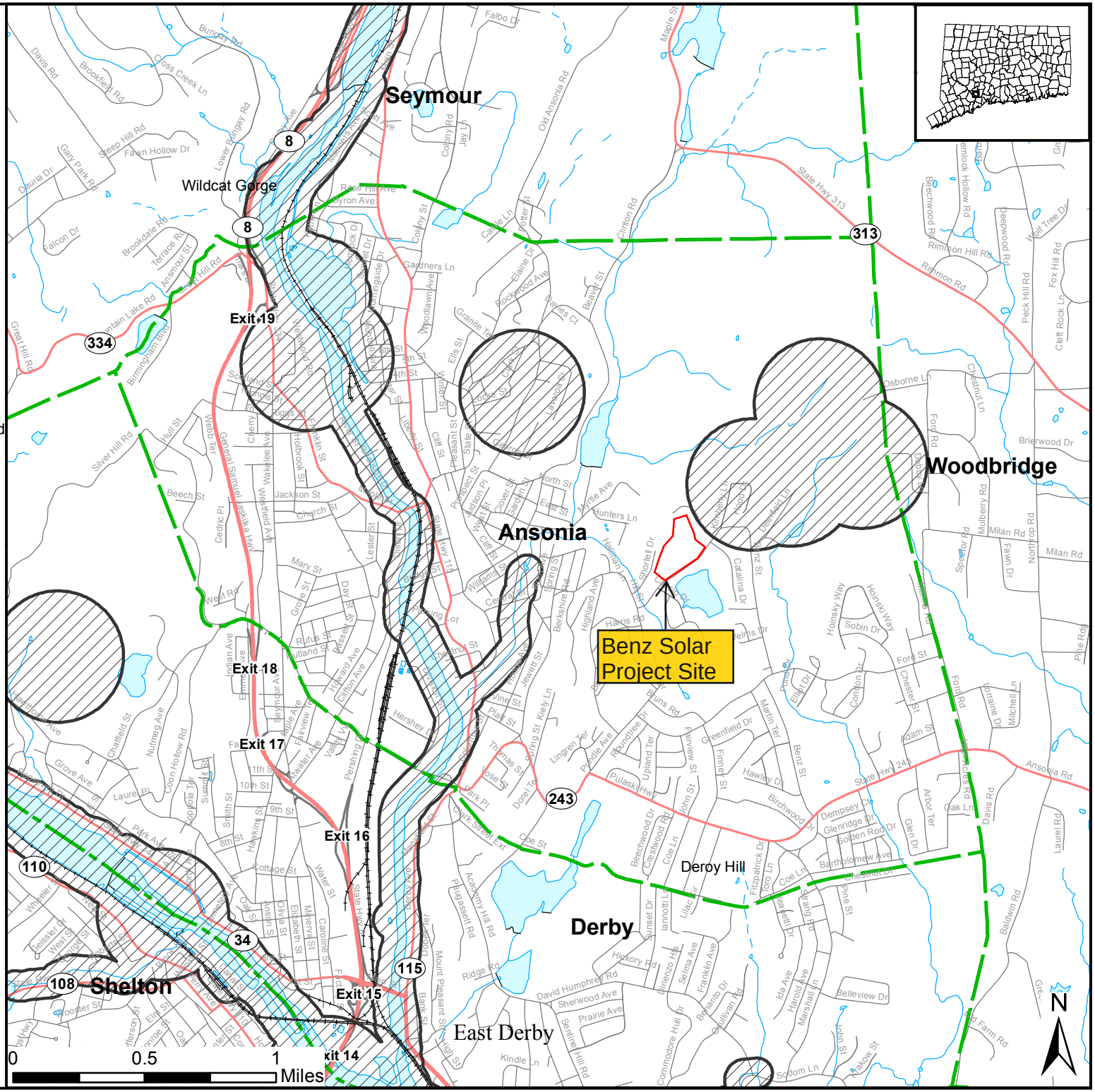
This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

www.ct.gov/deep/nddbrequest

Use the CTECO Interactive Map Viewers at www.cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)
79 Elm St., Hartford CT 06106
Phone (860) 424-3011

Connecticut Department of Energy & Environmental Protection
Bureau of Natural Resources
Wildlife Division



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

ANSONIA QUADRANGLE
CONNECTICUT
7.5-MINUTE SERIES

-73.1250°
41.3750°
41.2500°
-73.0000°
$^{45}82^{000m}$N
$^{45}69^{000m}$N
$^{6}57^{000m}$E
$^{6}67^{000m}$E

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid:Universal Transverse Mercator, Zone 18T

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, July 2016 - September 2016
Roads.....U.S. Census Bureau, 2016
Names.....GNIS, 1979 - 2017
Hydrography.....National Hydrography Dataset, 2004 - 2016
Contours.....National Elevation Dataset, 2012
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 2010

MN
GN
13°31'
240 MILS
1°17'
23 MILS
UTM GRID AND 2017 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
XL
Grid Zone Designation
18T

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

CONNECTICUT
QUADRANGLE LOCATION

1 Southbury
2 Naugatuck
3 Mount Carmel
4 Long Hill
5 New Haven
6 Bridgeport
7 Milford
8 Woodmont
ADJOINING QUADRANGLES

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

ANSONIA, CT
2018

NSN 7643011636009
NGA REF NO. USGSX24K1098

Exhibit H

SHPO Correspondence

Connecticut
still revolutionary

Department of Economic and Community Development

State Historic Preservation Office

February 7, 2019

Mr. Blake Nicholson
Analyst
Ecos Energy
222 South Ninth Street, Suite 1600
Minneapolis, MN 55402

Subject: Benz Solar
31 Benz
Ansonia, CT
ENV-19-0230

Dear Mr. Nicholson:

The State Historic Preservation Office (SHPO) has reviewed your request for information concerning the potential effects to historic properties associated with the referenced project. SHPO understands that the proposed solar facility will consist of post mounded fixed-tilt solar panels, along with ancillary equipment, encompassing an approximately 13.5 acre parcel, located at 31 Benz Street, Ansonia, Connecticut. The proposed activities are subject to review by this office pursuant to the Connecticut Environmental Policy Act (CEPA).

No properties listed or determined eligible for listing in the National Register of Historic Places are located within 0.5 miles of the project area. One previously identified archaeological site is within 0.5 miles of the project area; however, it will not be impacted by the proposed undertaking.

Soil types in the area of the proposed facility indicate rocky soils removed from fresh water sources. As such, the area possesses a low potential to contain intact archaeological resources.

Based on the information provided to our office, SHPO concurs that no historic properties will be affected by the construction of the facility.

This office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act. For additional information, please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Catherine Labadia
Deputy State Historic Preservation Officer

Exhibit I

Decommissioning Memo

Benz Solar Project - Decommissioning Memo

This memo describes a Decommissioning Plan that establishes the approach to conduct decommissioning activities for the permanent closure of the Facilities at the end of the Facilities' useful life or the permanent cessation of the Facilities' operation, whichever comes first. The Plan describes the approach for removal and/or abandonment of facilities and equipment associated with the Facilities and describes anticipated land-restoration activities.

DECOMMISSIONING ACTIVITIES

Decommissioning will involve removal and disposal or recycling of all above-surface Project components. All recyclable materials will be transported to the appropriate nearby recycling facilities. Any non-recyclable materials will be properly disposed of at a nearby landfill. 95% or greater of the Facilities' components will be recyclable.

Decommissioning Preparation

The first step in the decommissioning process will be to assess existing site conditions and prepare the site for demolition. Site decommissioning and equipment removal can take up to six months to complete for a project of this size. Therefore, access roads, fencing, and electrical power will temporarily remain in place for use by the decommissioning and site restoration workers until no longer needed. Demolition debris will be placed in temporary on-site storage areas pending final transportation and disposal/recycling according to the procedures listed below.

PV Equipment Removal and Recycling

During decommissioning, all Facilities components will be either removed from the site and recycled or abandoned in place 12 inches below grade (for underground conduit and conductors). Equipment removal will include all pad-mounted cabinets, above ground wiring, solar modules, solar module racking, string inverters, and panel boards. Steel h-beams that supported the module racking and inverters/panelboards will be mechanically pulled out of the ground; any resulting holes will be backfilled with locally imported soil to match existing site soil conditions. The concrete transformer and interconnection equipment pads will be broken up and removed.

The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the on-site equipment being used. The majority of glass, steel and aluminum will be processed for transportation and delivery to an off-site recycling center. The solar modules will be transported to and recycled at the nearest facility that will accept them. Minimal non-recyclable materials are anticipated; these will be properly disposed of at the nearest qualified disposal facility.

Internal Power Collection System

The DC and AC power collection system will be dismantled and removed. All underground cables and conduit will remain in place at a depth of 12 inches below ground surface. All conduit and cabling that is removed will be recycled.

Access Roads

The onsite 20-foot wide access driveway will remain in place to accomplish decommissioning at the end of the facility's life. At the time of decommissioning, if the landowner determines that this road will be beneficial for the future use of the site, the access road may remain after decommissioning. The future use of the site is currently undetermined. Roads that will not be used will be restored to pre-construction conditions by removal of the aggregate base material, fill of the compacted base section with locally imported soil to match existing onsite soils, and a hydroseeding of a seed mix to match existing onsite groundcover.

Security Fence

The chain link perimeter security fence will remain in place during decommissioning activities for site safety and security purposes. At the time of decommissioning, if the landowner determines that this fence will be beneficial for the future use of the site, the fence may remain after decommissioning. The future use of the site is currently undetermined. If the fencing is not used, it will be removed and transported to the nearest steel recycling facility. Holes left behind by the fence support posts will be backfilled with locally imported soil to match existing onsite soils, and a hydroseeding of a seed mix to match existing onsite groundcover.

Landscaping

The double row of screening vegetation along certain areas of the northern and western perimeter of the Site will remain in place during decommissioning activities for site safety and security purposes. At the time of decommissioning, if the landowner determines that this landscaping will be beneficial for the future use of the site, the landscaping may remain after decommissioning. The future use of the site is undetermined at this time. If the landscaping is not used, it will be removed and transported to the nearest plant material disposal facility for composting or mulching. Shrubs, bushes, and trees would be stump cut to just below ground level.

13.8 kV Interconnection Line

The interconnection cabling that runs East from the project and across Williams Crossing Road to connect the Facilities to the CL&P distribution circuit will remain in place during decommissioning activities to provide electric service onsite during decommissioning. At the time of decommissioning, if the landowner determines that this electric service line will be beneficial for the future use of the site, the line may remain after

decommissioning. If the line is not used, it will be removed per CL&P guidelines and transported offsite to the nearest recycling facility. Underground cabling and conduit on private property will remain in place at a depth of 12 inches below ground level. Underground cabling and conduit within a public right-of-way will be removed completely, and the resulting trenches will be backfilled with locally imported soil to match existing onsite soils, and a hydroseeding of a seed mix to match existing onsite groundcover.

SITE RECLAMATION

After the Facilities are completely decommissioned, and all Facilities equipment has been removed from the Site, additional activities will be performed to return the resultantly vacant property back to pre-construction conditions.

Restoration Process

The decommissioning process will remove Project-related structures and infrastructure as described in the previous sections. Following decommissioning, site reclamation activities will occur. Reclamation will restore landform features, vegetative cover, and hydrologic function after the closure of the facility. The process will involve (where needed) the replacement of topsoil and vegetation, as well as modification of site topography where necessary to bring the Site back to pre-construction conditions. Restoration will bring the Site back to a natural pre-construction condition that is compatible with the adjacent surroundings.

If any excavated areas remain after removal of equipment pads or access road base material, these areas will be backfilled and compacted with locally imported soil to match existing onsite soils, and a hydroseeding of a seed mix to match existing onsite groundcover. Any other areas of lower than average ground surface level will receive the same treatment.

If any soils are determined to be compacted at levels that would affect successful revegetation, decompaction will occur. The method of decompaction will depend on how compacted the soil has become over the life of the Project. Following decompaction, re-contouring of the site will be conducted, if necessary, to return the Site to approximately match the pre-construction surface conditions and the surrounding area conditions. Original site drainage characteristics will be restored if they have not been maintained. It is unlikely that any or a significant amount of earthwork will be required, as the Project construction plan calls for minimal or no disturbance of the Site during Project construction. Grading activities will be limited to previously disturbed areas that require re-contouring. Efforts will be made to disturb as little of the natural drainages and existing natural vegetation that remain post-decommissioning as possible.

Any areas identified as remaining in bare earth will be hydroseeded with a seed mix to match existing onsite groundcover.

Site Restoration activities are anticipated to be very minimal, as the pre-construction conditions of the site are not planned to be significantly altered during Project construction. However, these activities as described, as well as any others that become necessary, will be performed to return the Site to a pre-construction condition.

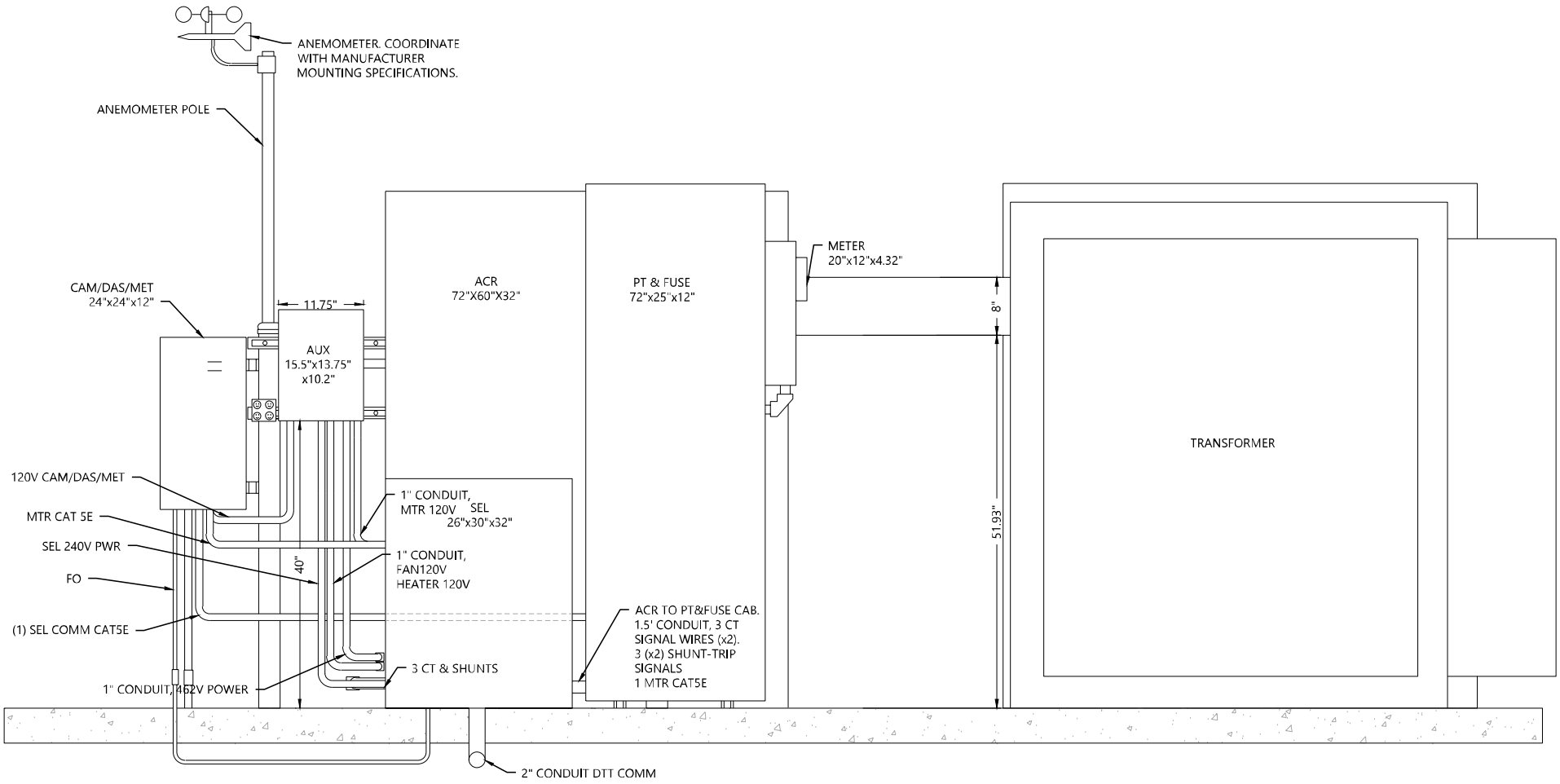
Monitoring Activities

The Site will be monitored after Site Restoration activities are complete to confirm that any earthwork and revegetation were performed correctly and last permanently. The Site will be periodically inspected (at least twice annually) to check for any eroded earthwork or failed revegetation. Any deficiencies will be immediately corrected. This monitoring will continue for a period of five years, or until the Site is redeveloped for another future purpose, whichever comes first.

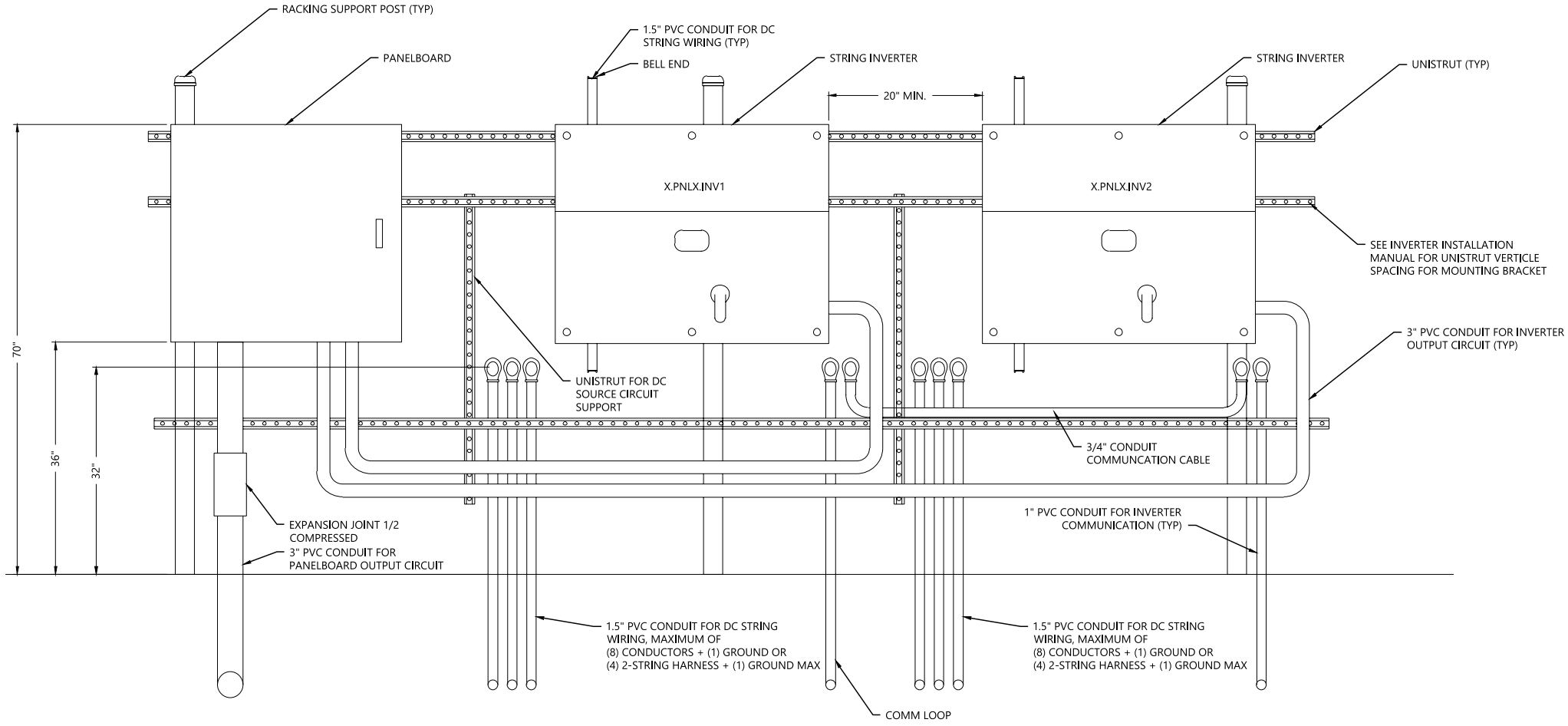
Exhibit J

Electrical Equipment Information

TYPICAL TRANSFORMER PAD ELEVATION



TYPICAL INVERTER LAYOUT



TYPICAL ROW-TO-ROW ELECTRICAL LAYOUT