

**PETITION OF WINDHAM SOLAR LLC**

**BILTON SOLAR FACILITIES**

**FOR A DECLARATORY RULING FOR THE CONSTRUCTION  
AND OPERATION OF THREE 2.0 MEGAWATT AND TWO 1.0 MW  
SOLAR PHOTOVOLTAICRENEWABLE ENERGY GENERATING  
FACILITIES LOCATED AT 134 BILTON ROAD,  
SOMERS, CONNECTICUT**

**AUGUST 24, 2017**

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## 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) – 2.0 megawatt (“MW”) and two (2) – 1.0 MW solar electric generating facilities (the “Facilities”), located on residentially-zoned land at 134 Bilton Road in Somers, Connecticut (the “Site”).

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. The Facilities also further the State of Connecticut’s goals announced in the 2013 Comprehensive Energy Strategy (the “CES”). “Connecticut has suffered

from some of the country’s worst air pollution, in part due to its geographic location downwind of out-of-state coal- and oil-burning power plants. A cleaner energy future requires support for electricity generation from low- or no-emission sources.”<sup>1</sup> The Facilities will be an important part of that cleaner energy future. The CES also emphasizes the necessity for the “development of more distributed generation”, which the Facilities are.<sup>2</sup>

**II. PETITIONER**

Windham Solar LLC was organized in 2014 by New-York based Allco Renewable Energy Limited for the purposes of developing, constructing, and operating the Facilities in the State of Connecticut. Project development activities are supported by Ecos Energy LLC (“Ecos”). Ecos, based in Minneapolis, MN, has developed and managed the construction/operation of 36 MW of solar PV generation spread over 17 project sites nationwide. Both the Petitioner and Ecos have the knowledge and experience to develop and implement the Facilities in a way that maximizes benefits to the citizens of Connecticut, with no significant adverse impacts.

Correspondence and/or communications regarding this petition should be addressed to:

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<sup>1</sup> See, 2013 Comprehensive Energy Strategy for Connecticut, p. 70, available at [http://www.ct.gov/deep/lib/deep/energy/cep/2013\\_ces\\_final.pdf](http://www.ct.gov/deep/lib/deep/energy/cep/2013_ces_final.pdf)

<sup>2</sup> Id. at p. 71.

### **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 not only to lessen the country’s dependence on foreign oil but also to reduce the environmental impacts associated with fossil fuel sources. The RPS requires that by 2020, twenty percent of electricity generation must be derived from Class I renewable energy sources such as solar PV.

The Facilities will play an important role in the State’s renewable energy goals. The Facilities will provide a significant source of clean, renewable energy produced locally. The Facilities will produce 100 percent clean, renewable electricity with zero emissions will result in significant environmental benefits. Further, the Facilities will act as a peak reducer by producing energy during the electric distribution companies’ peak load hours. The facilities will therefore help moderate peak load requirements and reduce the demand on transmission lines.

#### **A. Site Selection**

The Site was selected based upon a number of 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 directly adjacent to an Eversource 3-phase electric distribution line.

## **B. Site Description**

The Site is located at 134 Bilton Road, Somers, CT. The Site is a 43.3 acre parcel that is zoned 'A-1 Residential' and is located directly adjacent to land owned by the State of Connecticut Department of Corrections. The Site contains three structures including a house, an old barn and a concrete block building. No other structures exist on the Property. Those structures will remain on the Site and are separated from the Facilities. Of the Site's 43.3 acres, approximately 3.0 acres surround the residence and outbuilding structures. Approximately 18.5 acres of the Site have been previously cleared and planted for orchards, although these acres currently are not maintained as a productive orchard. The remaining 24.8 acres of the Site consist of uncleared timber. Approximately 0.77 acres of the Site on the southwest corner have been delineated as low-quality wetlands. Topography on the Site undulates while carrying a slight overall slope towards the west. Adjacent parcels of land to the north, south and west are currently uncleared and vacant. Residential homes are constructed to the east of the site with lots averaging around 1 acre. There is a 9 acre buffer of land located between the project site and the 7 homeowners to the east. The land abutting the Site to the south and west is owned by the State of Connecticut, which houses the Willard-Cybulski Correctional Institution, the Enfield Correctional Institution, the Robinson Correctional Institution, the Osborn Correctional Institution and Northern Correctional Institute (Connecticut's sole supermax prison). An ALTA Survey showing the Site's general location, characteristics, and boundaries can be found 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.

### **C. Description of the Facilities**

The Facilities are renewable energy generation facilities that will use PV solar modules to convert solar radiation to electricity. They will be located on the customer side of the Eversource meter. Each 2.0 MW (AC) Facility will consist of approximately 7,038 solar modules and each 1.0 MW (AC) Facility will consist of approximately 3,519 solar modules (based on a module rating of 345 watts). The AC to DC ratio of the facilities will be approximately 1.21. 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 15 degrees. Solar modules will be mounted to the racking system in portrait orientation, with two rows of modules per rack. The racking system will support the modules to maintain a ground clearance of at least 18 inches. The racking system will be supported above the ground by a series of steel h-beams that are direct-driven into the ground, requiring no concrete foundations. The length of h-beam embedment will be determined following a geotechnical and structural analysis; 6 to 8 feet embedment is typical. The solar modules will be wired in series strings of 18 modules per string. Strings will be connected to 1,000 kilowatt (kW) centralized solar inverters. The inverters alter the DC output of the solar modules to 390V three-phase alternating current (“AC”) output.

Output from the inverters will feed into a step-up transformer services to increase the collected 390V three-phase AC output to 23kV (or other, as required) for interconnection to Eversource’s distribution system. Output from the transformer will be connected via underground cabling to a pad-mounted fused master AC disconnect switch for each facility. This output will be looped throughout the site, connecting each facility in series. Output from the site will be run through a pole-mounted automated recloser, which will provide automated

overcurrent protection for the facilities and to Eversource's distribution/transmission system. Output from the recloser will run through a set of Eversource metering equipment before being connected to the nearby Eversource distribution circuit.

Each facility will contain a centralized equipment skid that will contain the inverters, transformer, revenue metering, disconnect switches, a suite of monitoring and communications equipment, as well as controls for the Facilities' video security system. In addition to the solar energy generating equipment described above, the Facilities will include a 16-foot wide gravel driveway for operations, maintenance, and emergency access. Also, the entirety of the Site footprint will be surrounded by a 7.5 foot tall chain-link security fence. Access to the Site will be via a padlocked gate in the perimeter fence at the location of the Facilities' access driveway off of Bilton Road. A series of motion-sensitive video security cameras will be installed around and within the perimeter fence. 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 row of existing trees and natural vegetation will be maintained around the northern, southern and western perimeter of the Site to shield it from view from neighboring properties. Along the east property line the sites natural topography screens the facility from the neighboring properties as illustrated in the project cross sections detailed in Exhibit C. The Facilities' footprint area will encompass 35.0 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 can be seen in detail in Exhibit A.

#### **D. Interconnection**

Each Facility is proposed to be interconnected to the Eversource electric distribution grid at an existing 23 kV overhead electric line located along Bilton Road. The interconnection would be in accordance with Eversource technical standards and State of Connecticut, ISO-New England (“ISO-NE”), and the Federal Energy Regulatory Commission (“FERC”) requirements. The interconnection will consist of Eversource-specified metering and protection (breakers/switches/relays) to be installed for each Facility. The interconnection will be made pursuant to Eversource’s Guidelines for Generator Interconnection. As part of the interconnection process, the Petitioner has successfully completed an interconnection application request, and an application review and will be working toward completing a System Impact Study (“SIS”) with Eversource in the coming months. The SIS is expected to include:

1. Circuit Modeling
2. Power Flow Analysis
3. Voltage Impact Study
4. Thermal Impact Study
5. Short Circuit Study
6. Distribution Requirement Interruption Ratings
7. Protection Coordination
8. Transfer Trip Requirements
9. Protection Schemes
10. Costs of Required Network Upgrades

Upon completion of the SIS, the Petitioner will review the requirements for interconnection and enter into an Interconnection Agreement (“IA”) with Eversource for each Facility.

#### **E. Service Life and Capacity Factor**

Each Facility’s equipment has an expected useful life of approximately 45 years, and the Petitioner would plan to operate each Facility until the equipment has exhausted its useful life.

According to the 2012 Integrated Resources Plan for Connecticut, PV solar has an expected capacity factor of approximately 13 percent.

#### **IV. FACILITY 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 exactly the benefit contemplated in the statute and more, as it will generate much of its power at peak times. By providing electricity when there is high demand, each Facility will help stabilize the electrical grid.

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.” Solar facilities are considered Class I renewable energy sources under General Statutes § 16-1(a)(26). Over the life of each Facility, each Facility will contribute to a significant reduction in NO<sub>x</sub>, SO<sub>x</sub>, PM, CO and VOC emissions as compared to combustion-based generation. 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 business. This decreases the amount of power that will need to be brought into the area from further away, lightening the load on utility transmission infrastructure and increasing local grid reliability.

Each Facility will also help the State move closer to meeting its renewable portfolio standards. Further, providing increased renewable capacity helps further distance Connecticut from foreign energy supply and helps support energy independence, a local and national goal. Concerning Project labor, the Company fully intends to employ local labor in completing each

facility wherever practical. As part of larger state, national, and global strategies, reductions in greenhouse gas emissions from each facility will have long-term secondary biological, social, and economic benefits. Similarly, the advancement of renewable resources at a distributed level contribute to our Nation's desire for energy independence and reduces our dependency upon foreign countries where geo-political issues may introduce issues with the reliability of their fuel supply. Windham intends hire local labor, as practical, and be a source of increased revenue for local businesses during construction.

## **V. LOCAL INPUT & NOTICE**

The site plan package submitted with this application, Exhibit A, was also submitted to the Town of Sommers Engineer, Jeffrey Bord, for comment on August 23, 2017. The plans will be circulated internally amongst town departments for comments. The Initial conversation with the town was positive with no major glaring issues. Comments, if received, from the Town of Sommers review will be forwarded to the CT siting board.

In addition to contacting the Town directly, the Petitioner provided 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 resources available onsite. The Facilities' have been designed so as to be compatible with the existing environment while avoiding, reducing, and mitigating potential environmental impacts.

### **A. Natural Environment and Ecological Balance.**

The Site selected for the Facilities' footprint is not an area with any sensitive, rare, or protected natural resources. The area needed to construct the Facilities will be cleared of any

tree/timber vegetation. These removals are detailed on Sheets 5 and 6 of Exhibit A. Minimal grading will be required for each Facility, as the solar racking equipment is designed to follow the existing contour of the Site's topography. The minimal grading will be performed to create the access driveway and transformer equipment pads. The grading area is approximately 22 acres in total. A Phase I Environmental Site Assessment ("ESA") was performed at the Site. The Site was formerly used as a fruit farm and the Phase I recommends collecting soil samples and analyzing the samples for organochlorine pesticides and arsenic. In addition, there are two underground storage tanks located on the premises, however, these tanks are in an area that will not be impacted by the solar facilities. The Phase I recommends collecting soil samples and analyzing the samples for volatile organic compounds (VOC), total petroleum hydrocarbons (TPH) and metals. At the time of submitting this Petition, Windham has commenced Phase II environmental testing consistent with the recommendations of the Phase I ESA and will provide the Siting Council with information on the results of the testing when it is available. For details on the Phase I, see Exhibit E (Phase I Environmental Site Assessment). No hazardous substances or materials will be used or stored onsite during construction or operation.

**B. Public Health and Safety**

Overall, each Facility will meet or exceed all health and safety requirements applicable for electric power generation. 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 normal weekday working hours. It is anticipated that approximately 16 to 20 construction vehicles would make daily trips onto the Site during the approximately 4 month construction period. During operation, construction noise may be audible offsite. Therefore, all work will be conducted during normal weekday working hours, and it is not anticipated that any levels of construction noise will exceed state or local noise limit standards. During operation, the Facilities will not present a health or safety hazard to anyone located offsite. The Facilities will generate no offsite noise, harmful glare, vibrations, or damaging emissions of any kind. PV solar is a long-proven safe and benign generation technology. Authorized personnel visiting the Facilities during operation will be fully licensed and properly 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 (e., PM10, PM2.5, VOCs, GHG, or Ozone). Thus, no air permit will be required. Moreover, over 45 years, the Facilities will result in the offset/elimination of approximately 408,278 tons<sup>3</sup> of CO<sub>2</sub> equivalent, which is equal to 86,317 passenger vehicles off the road<sup>4</sup> or 129,612 tons of avoided landfill waste<sup>5</sup>. The Facilities will have a net benefit effect on air quality. It's estimated that 15.5 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 0.76 days. In other words, the solar generating facilities would off-set the same amount of CO<sub>2</sub> sequestered by the 15.5 acres of trees being removed in the first day of operation.

#### **D. Scenic Values and Visual Renderings**

Once installed, the Facilities will be minimally visible to neighboring property owners and not visible to drivers and passengers traveling on Bilton Road. The solar equipment being installed has a low profile; less than 9 feet in height, with the exception of a few taller fence poles for video cameras and meteorological equipment. At a majority of locations around the Site boundary, existing thick vegetation will completely block views of the Facilities from offsite. The vegetation features at the Site boundaries are not planned for removal. The residences that are adjacent to the Site are located to the east and south of the Facilities. The Site

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<sup>3</sup> CO<sub>2</sub> 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>

<sup>4</sup> Passenger Vehicle off-set calculations were made using the EPA GHG Equivalencies Calculator: <https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references>

<sup>5</sup> Avoided landfill calculations were made using the EPA GHG Equivalencies Calculator: <https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references>

slopes towards the south and west, directly away from the majority of these homes, meaning that the Site topography itself will block most views of the Facilities from these residences. In addition, there is a 9 acre buffer of land with vegetation and trees that will screen the entire project from view.. The Facilities will not be visible to vehicles passing by the Site along Bilton Road since the Facilities will be set back approximately 350 feet from Bilton Road and an existing row of vegetation will be maintained to shield views of the Facilities from motorists. There are no protected or designated scenic areas, roadways, or trails within visual range of the Site. Given these details, the Facilities would 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 review of the Facilities and Site by the Connecticut State Historic Preservation Office (“SHPO”). On January 20<sup>th</sup>, 2017 the petitioner received a response attached as Exhibit G. The petitioner is soliciting proposals to perform a cultural resource assessment and reconnaissance survey in the fall of 2017. The report will be submitted to the siting board for review.

#### **F. Wildlife & Habitat**

The Facilities have been designed to avoid any impacts to sensitive plant or wildlife species or the associated habitats. Two analysis were performed to identify the potential for any sensitive species or habitat:

- 1) Wetlands Report (Exhibit F)

- 2) Request for Natural Diversity Database (“NDDB”) State Listed Species Review by Connecticut Department of Energy & Environmental Protection (“DEEP”) (Exhibit H)

Due to the previous and relatively cleared nature of the Site, an in-depth field survey for species and habitat was not performed. However, the site was investigated for wetlands features; those results can be found in the Wetlands Report (Exhibit F). Some Wetlands features were identified (and subsequently delineated) onsite, and these will be discussed in more detail in section VI.G, below. As it relates to species and habitat, the Facilities footprint was designed to avoid the delineated wetlands features entirely, including a 50-foot buffer around those features. This is shown in detail in Exhibit A. The Petitioner submitted a request to DEEP for NDDB review of the Property and the Facilities’ footprint. DEEP responded with a review results letter on February 22, 2016 (Exhibit H). The NDDB review indicated extant populations of Bobolink and the Northern Harrier on or within the vicinity of the Site. DEEP recommends conducting work outside of the nesting season for both of these species or if work cannot be conducted outside the nesting season, then a walk through should be conducted each day to look for birds, and if found a buffer zone of a minimum of 600’ shall be delineated around nesting sites to minimize disturbance. The Bobolink’s nesting season is during the months of May through August and the Northern Harrier’s breeding season is during the months of February through July. To the extent possible, Windham will avoid construction during the months of February through July, however, in order to avoid winter construction, which can be extremely costly and difficult depending on snow cover and temperatures, Windham would like to start construction of the Facilities by early August. Prior to construction, Windham will hire a qualified consultant to perform walk-throughs of the Site to determine whether or not either of the species in question

is present on the Site. If either species is discovered during the walk-through, Windham will comply with the buffer requirements and avoid work in these areas during the month of August until the nesting season is over.

**G. Water Resources and Storm Water Management.**

The Facilities are not anticipated to have an adverse impact to the water resources of the state. The Facilities fixed panel solar arrays can be considered pervious groundcover. The racking provides adequate height above the ground to promote vegetative growth underneath the solar array and allow for infiltration to continue to occur. Natural drainage patterns will remain, runoff will be directed to sediment traps throughout the site during construction. Some of the sediment traps will remain permanently to provide permeant Stormwater management, for post construction runoff rate control. Hydraulic modeling calculations illustrate no net increase in downstream flow rates from the Facilities and can be reviewed in the Facilities Stormwater Management and Hydrology Report (Exhibit I).

Construction of the Facilities will result in a grading disturbance of approximately 22 acres of land, with 23,380 cubic yards of cut and 20,655 cubic yards of fill (2,725 cubic yards of excess). All graded areas will be seeded to a low growth low maintenance meadow/native grass condition. The Petitioner will register under the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities at least thirty (30) days prior to commencing any construction activities. 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 prior to construction activities and in accordance with applicable rules at the time of filing. The petitioner has implemented temporary

sediment traps throughout the project footprint associated with the Connecticut General Permit. The petitioner will also phase the project to ensure that earth disturbances will be 5 acres of soil or less at any given time during 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.** Did the Petitioner publish a legal notice of its intent to file this petition?

**A01.** Yes. A copy of the following text ran in the Notices section of the August 24<sup>th</sup> edition of the Hartford Courant:

“Windham Solar LLC is providing notice to the general public regarding its intent to file a Petition of Declaratory Ruling (Petition) to the Connecticut Siting Council for the proposed development of three (3) – 2.0 megawatt and two (2) – 1.0 megawatt solar photovoltaic renewable energy generating facilities to be located at 134 Bilton Road in the Town of Somers. This notice is being given pursuant to Section 16-50(1) of the Connecticut General Statutes. The Petition will be submitted on or after August 24, 2017. Copies of the Petition will be available at the Connecticut Siting Council: Ten Franklin Square, New Britain, CT 06501 or at the Town Hall of the Town of Somers.”

**Q02.** How did the Petitioner become aware of the Site?

**A02.** The Site was actively being listed for sale at the time that the Petitioner was searching for an acceptable location for the Facilities.

**Q03.** Did the Petitioner investigate any other properties as potential locations for the Facilities? If so, identify these properties.

**A03.** The Petitioner investigated a large number of properties that were listed for sale. The Site was selected based upon favorable characteristics.

**Q04.** Has the Petitioner conducted a shading analysis of the Site? If so, provide the results.

**A04.** No, a shading analysis was not required because the construction plans for the Facilities do not propose and shading objects to be left within the boundaries of the solar array.

**Q05.** What is the efficiency of the photovoltaic module technology that would be employed by the Petitioner at the proposed Site? Does this efficiency decrease over time?

**A05.** The efficiency will be in the range of 15 to 18 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.

**Q06.** Would the angles of the Facilities' solar modules be adjusted during the year to maintain optimal alignment with the sun's changing path?

**A06.** No. The solar modules will be installed on a fixed-tilt racking system.

**Q07.** Approximately what percentage of the proposed facilities' maximum possible output would occur during those times of the year when Connecticut normally experiences its peak demand for electricity?

**A07.** Energize Connecticut ([www.energizect.com](http://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.

**Q08.** Does the Petitioner have contracts to sell the electricity it expects to generate with the proposed Facilities?

**A08.** The Petitioner has contracts with Eversource under the state's Zero Emission Renewable Energy Credits and Low Emission Renewable Energy Credits programs to sell the renewable energy credits from the three 2 MW Facilities and two 1 MW Facility. The Petitioner does not yet have a contract to sell the energy or capacity.

**Q09.** Has the Petitioner determined if any trees need to be removed to construct the Facilities? If so, how many trees will be removed?

**A09.** Approximately 15.5 acres of trees will be removed to accommodate the Facilities. An individualized tree survey was not performed on the site.

**Q10.** Are the Facilities located near any Important Bird Areas designated by the Connecticut Audubon Society?

**A10.** No.

**Q11.** What would be the construction timeline of the Facilities from groundbreaking to full operation?

**A11.** Approximately 5 months.

**Q12.** Describe how the facilities would be decommissioned at the end of its useful life.

**A12.** A decommissioning memo is included as Exhibit J.

**Q13.** Describe the land use within a 0.5 mile radius of the Site.

**A13.** Uncleared vacant land, residential and correctional institutions

**Q14.** Where is the nearest off-site residence from the center of the solar array?

**A14.** Dimensions from abutting residences to the nearest solar panels are provided on sheet 3 of Exhibit A.

**Q15.** Provide the total direct current (DC) power output in MW for the combined facilities based on the total number of modules and wattage of such modules.

**A15.** 9.71 MW DC based upon the use of a 345W module.

**Q16.** In general, in the case of fixed solar panels, does orienting your solar panels to the south provide a sort of balance (in terms of sun exposure) between the sun rising in the east and setting in the west and ultimately result in optimizing (or attempting to maximize) your total annual energy production (in kilowatt-hours) and your capacity factor?

**A16** This statement is correct for the proposed facilities. There are situations in some parts of the country where a more westerly orientation is preferred in order to maximize energy production during peak demand periods, but this is usually only considered in situations where the power purchaser pays a time-of-use rate that is higher during peak demand periods than what is paid during shoulder or off-peak periods.

**Q17.** In this Petition, Windham notes that, according to the 2012 Integrated Resources Plan (IRP), the capacity factor for PV solar (and thus the proposed projects) is approximately 13 percent. Is that based on the DC or AC side of the proposed solar facilities?

**A17.** The 13% capacity factor stated in the 2012 Integrated Resource Plan for Connecticut is based on the DC nameplate of a solar facility.

**Q18.** How many 1,000-kilowatt inverters would be installed?

**A18.** (8) 1,000-kilowatt inverters are planned to be installed, however, Windham may elect to utilize a 60 kilowatt inverter design. In the case of a string inverter design, approximately 133 – 60 kW inverters would be installed throughout the site.

**Q19.** Please provide the specification sheets for the inverters and solar modules/panels.

**A18.** Please see the attached Exhibit K for the specification sheets for the inverters and solar modules that are currently selected for the project. The module that is used for the project may change depending on availability and pricing at the time the equipment is procured for the project. The inverter is also subject to change depending on whether the Petitioner elects to utilize a centralized or string inverter architecture for the Facilities. The equipment that is ultimately used for the Facilities will not have a material effect to the Facilities' site plan or footprints.

**Q20.** What are the estimated heights of the transformers and inverters?

**A20.** The transformer is approximately 7' high. The 1,000 kW centralized inverter is approximately 7' high. If a string architecture is selected, the 60 kW string inverters would be mounted at a height of approximately 5' – 6' high and be located throughout the array field. A cut sheet of a typical inverter/transformer pad has been included (2-1000-kilowatt inverters and 1 2000KvA transformer) in the Exhibit K

**Q21.** Does Eversource currently have three-phase overhead electrical distribution on Bilton Road?

**A21.** Yes

**Q22.** Would the tree clearing be performed in stages (e.g. five acres at a time), or would the clearing all be performed together as one stage of construction? (Note: Connecticut Department of Energy and Environmental Protection "DEEP" General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities states that, "Whenever possible, the site shall be phased to avoid the disturbance of over five acres at a time...").

**A22.** Tree clearing will be phased per the DEEP requirements, and the federal NPDES requirements.

**Q23.** Estimate the amounts of cut and fill in cubic yards.

**A23.** 1200 cu yd Cut / 1200 cu yd Fill, any excess topsoil will be blended on site and seeded.

**Q24.** Approximately how tall would the poles be for the video cameras and meteorological equipment noted in the Petition?

**A24.** Video and meteorological poles at the central skid will be 12' to 15' high.

Approximately 6-10 perimeter fence posts per project limits will be installed at 12' high and will have motion detecting video mounted to atop the higher fence posts. These locations will be based on the final footprint, and camera sight lines. The cameras are battery powered, and run on an internal wireless network for each project.

**Q25.** How would the H-beams (that support the racking system) be driven into the ground?

**A25.** The intent is that a majority of the H-beams will be driven pile. However, an alternative grouted foundation is also designed if subsurface boulders or ledge is encountered. Rock outcroppings and walls interior to the site will also be avoided in the final design. All structural pile designs will be signed by a CT licensed Professional Engineer.

**Q26.** What are the estimated constructed hours (e.g. Monday through Friday 8 AM to 5 PM)?

**A26.** Local zoning code working hours will be adhered to which are as follows:

“No activity connected with any excavation, removal or filling operation may be undertaken on any Sunday or any legal holiday; or earlier than 7:30 a.m. nor continue

after 5:30 p.m. Monday through Friday; or earlier than 8:00 a.m. nor continue after 12:00 noon on Saturday. No processing of earth products shall take place on Saturdays.

Processing of earth products in cases of emergencies may be granted by special permission of the Zoning Commission.” §214-17 D. Zoning: Earth Removal and Filling

**Q27.** Approximately what size mesh does Windham anticipate utilizing for the chain link fence? While 2-inch mesh is a common size, would Windham consider utilizing a mesh size less than two inches as an anti-climbing measure? Would the fence have barbed wire?

**A27.** 7' chain link would be preferred. The sites security system will identify intruders or a breach in the perimeter on the site. Windham would consider a smaller mesh, if costs are similar. The majority of our sites do not have barb wire given our planned security measures, and barb wire is not intended for these projects, however, if the Council feels that barbed wire would add another measure of security, Windham is willing to install a 1' barbed wire rampart on top of the chain link fence for each project.

**Q28.** Are the proposed projects located within an aquifer protection area?

**A28.** No. The Town of Somers does not have an aquifer protection area.

**Q29.** Are any of the proposed projects located within a 100-year or 500-year flood zone? If yes, indicate which portion(s) of the project area are located within flood zones, and provide a Federal Emergency Management Agency flood zone map that includes the subject property.

**A29.** No FEMA zone lines are on the site.

**Q30.** Would the solar panels “heat” rainwater and potentially thermally pollute wetlands?

**A30.** No. There is no evidence that this occurs given the short duration that rainwater is on the panels, furthermore, the panels would be clouded during the time of rainfall, so surface temperatures of the panels would be less than on a sunny day.

**Q31.** Do the proposed projects meet the applicable DEEP noise standards at the boundaries of the subject properties? (Sources of noise might include but not be limited to inverters, transformers, etc.)

**A31.** Yes

**Q32.** How would WS handle potential snow accumulation on the panels and its effects of blocking the sunlight?

**A32.** Snow soiling has been accounted for in our energy production forecasts We do not anticipate clearing the snow from the modules during the winter months.

**Q33.** Has WS done any analysis to determine structural limits of snow accumulation on the solar panels and steel support structures, assuming heavy, wet snow? What accumulation of snow could the structures handle? Would WS clear snow from the panels when it approached the limit?

**A33.** Each of the project's racking system will be designed for the regions wind and snow loading, and will be stamped by a licensed structural engineer. No clearing of snow is contemplated.

## **VIII. CONCLUSION**

The Facilities will provide numerous and significant benefits to the Town of Somers, the State of Connecticut and its citizens, while producing significant environmental benefits with minimal 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. The Facilities meet these criteria. Each Facility is a customer-side distributed resources facility “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. In addition, as demonstrated above, the Facilities will not have a substantial adverse environmental effect in the State of Connecticut.

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

Respectfully Submitted,  
Windham Solar LLC

By:  \_\_\_\_\_

Christopher Little  
Windham Solar LLC  
c/o Ecos Energy LLC  
Phone (651) 268-2053  
chris.little@ecosrenewable.com

# **Exhibit A**

## **Facilities Site Plan**

# BILTON ROAD SOLAR CONNECTICUT SITING BOARD DOCUMENTS

FOR  
Site/Electrical Layout, Grading/Drainage/Erosion Control/Landscaping  
IN  
SOMERS, CONNECTICUT

## Westwood

Phone (480) 747-6558 6909 East Greenway Parkway, Suite 250  
Fax (480) 376-8025 Scottsdale, AZ 85254  
westwoodps.com

Westwood Professional Services, Inc.



Designed: BTB

Checked: ADC

Drawn: JLB

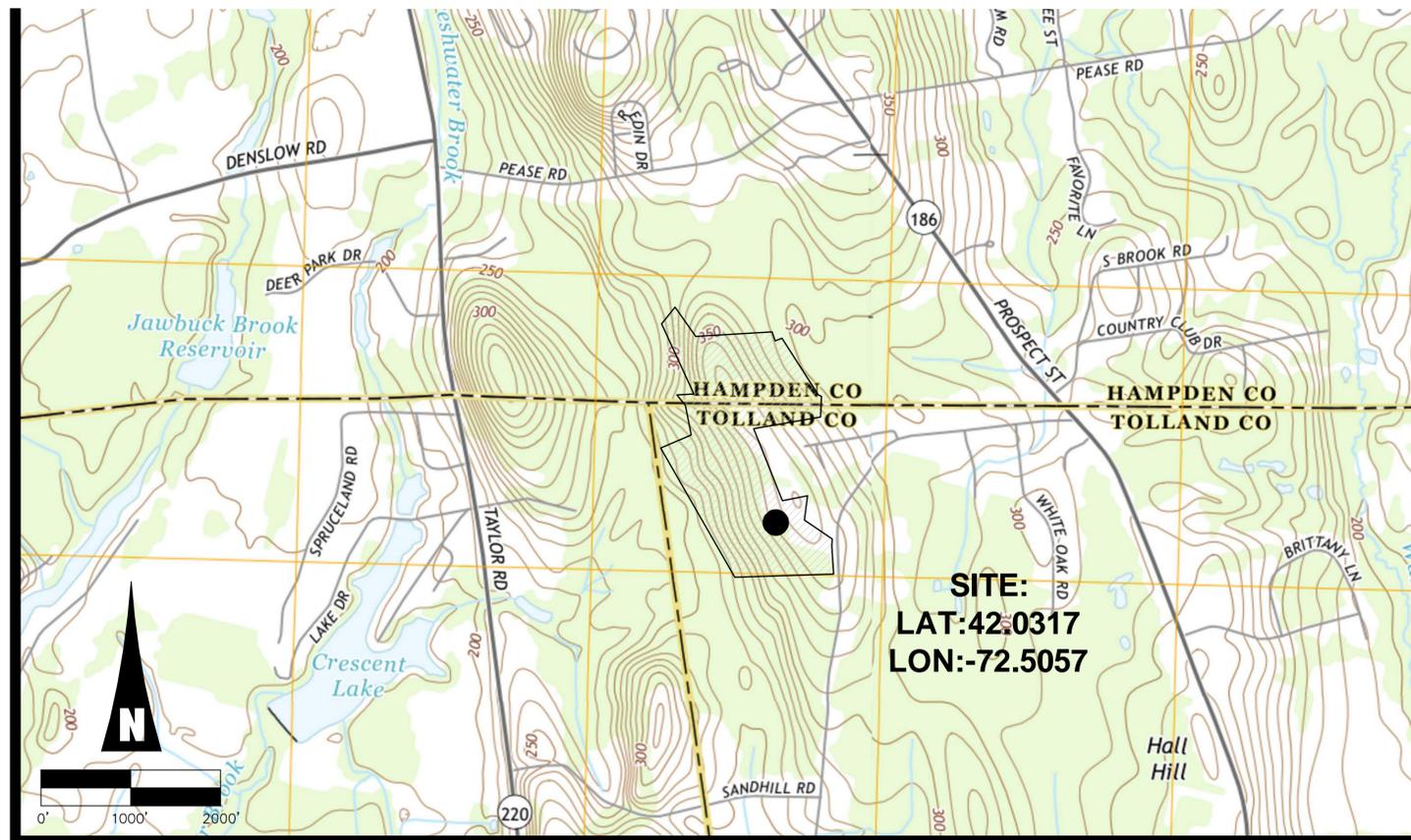
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-	8/23/2017	CT SITING BOARD SUBMISSION

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### LOCATION MAP



### SHEET INDEX

●	08/23/17	1	COVER SHEET
●	11/17/2015	2	ALTA SURVEY (BY HELLSTROM LS, LLC)
●	08/23/17	3	OVERALL SITE PLAN
●	08/23/17	4	NORTH REMOVAL & EROSION CONTROL PLAN - 1"=50'
●	08/23/17	5	CENTRAL REMOVAL & EROSION CONTROL PLAN - 1"=50'
●	08/23/17	6	SOUTH REMOVAL & EROSION CONTROL PLAN - 1"=50'
●	08/23/17	7	NORTH SITE & GRADING PLAN - 1"=50'
●	08/23/17	8	SOUTH SITE & GRADING PLAN - 1"=50'
●	08/23/17	9	OVERALL LANDSCAPE PLAN
●	08/23/17	10	CIVIL NOTES
●	08/23/17	11	CIVIL DETAILS
●	08/23/17	12	KEY OBSERVATION POINT PLAN
●	08/23/17	13	NORTH PROJECT CROSS SECTION
●	08/23/17	14	SOUTH PROJECT CROSS SECTION

#### DRAWING INDEX LEGEND

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

○ - X/XX/201X X SHEET TITLE

### BILTON ROAD SOLAR

134 BILTON RD  
SOMERS, CT 06071  
TOLLAND COUNTY

### COVER SHEET

SITING BOARD REVIEW

DATE: 08/23/17

SHEET: 1 of 14

#### 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:  
WESTWOOD PROFESSIONAL  
SERVICES  
7699 ANAGRAM DRIVE  
EDEN PRAIRIE, MN 55344

SURVEYOR:  
MARTINEZ COUCH & ASSOCIATES  
1084 CROMWELL AVE  
SUITE A-2  
ROCKY HILL, CT 06067

WETLAND DELINEATION:  
PIETRAS ENVIRONMENTAL GROUP  
15 BRIARWOOD LANE  
WALLINGFORD, CT 06492





Designed: BTB

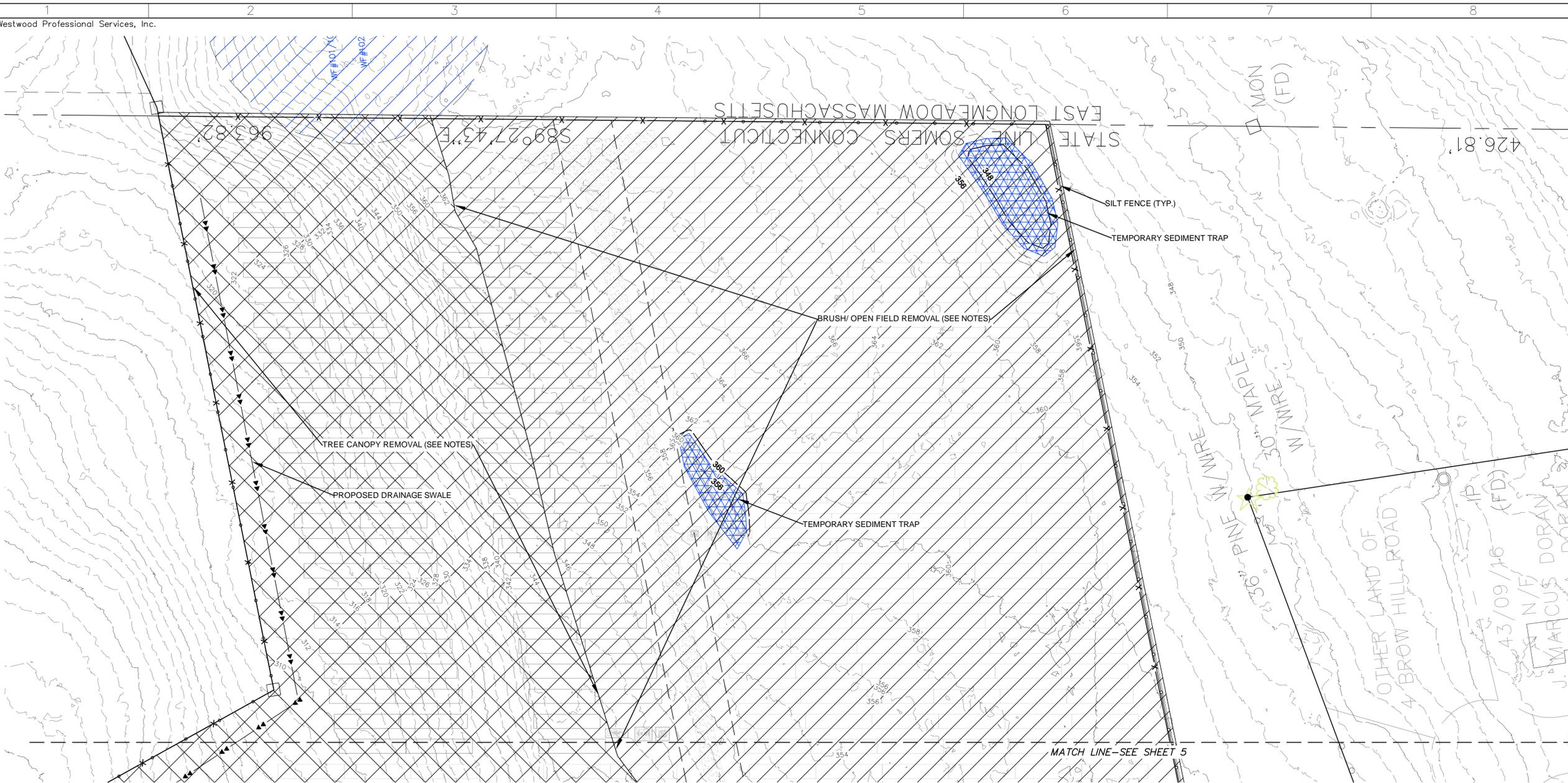
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**LEGEND:**

- EXISTING PROPERTY LINE
- PROPOSED PROJECT FENCE
- PROPOSED GRAVEL ACCESS ROAD
- 18 x 2 SOLAR MODULE BOCK
- 100' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE/AREA
- PROPOSED SILT FENCE
- SITE CLEARING
- SITE CLEARING

**CONSTRUCTION SEQUENCING NOTES:**

1. THE CONTRACTOR SHALL PERFORM ALL TREE REMOVAL ACTIVITIES ON SITE TO ALLOW FOR BMP INSTALLATION, NO GRUBBING IS TO OCCUR DURING TREE REMOVAL, PRIOR TO BMP INSTALLATION.
2. ALL BMP'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.

**PROJECT FOOTPRINT REMOVAL NOTES**

AREAS WITHIN THE PROJECT FENCELINE LIMITS SHALL BE CLEARED BY THE FOLLOWING METHODS:

- BRUSH/ OPEN FIELD (20.5 ACRES):
1. BRUSH AND LOW GROWTH VEGETATION SHALL BE CUT AT 6" IN HEIGHT
  2. TREES AND VEGETATION LESS THAN 4" IN DIAMETER SHALL BE REMOVED
- TREE CANOPY AREAS (15.5 ACRES):
1. TREES AND VEGETATION SHALL BE CLEARED AND GRUBBED

**EROSION CONTROL NOTES:**

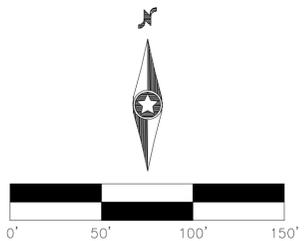
1. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE ANY SOIL DISTURBANCE.
2. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
3. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES.
4. 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.
5. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. STABILIZATION MEASURES SUCH AS HYDROSEEDING 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 STORMWATER 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.
6. DEVELOPER TO OBTAIN AN NPDES PERMIT PRIOR TO CONSTRUCTION.

**BILTON ROAD SOLAR**  
 134 BILTON RD  
 SOMERS, CT 06071  
 TOLLAND COUNTY

**NORTH REMOVAL & EROSION CONTROL PLAN**

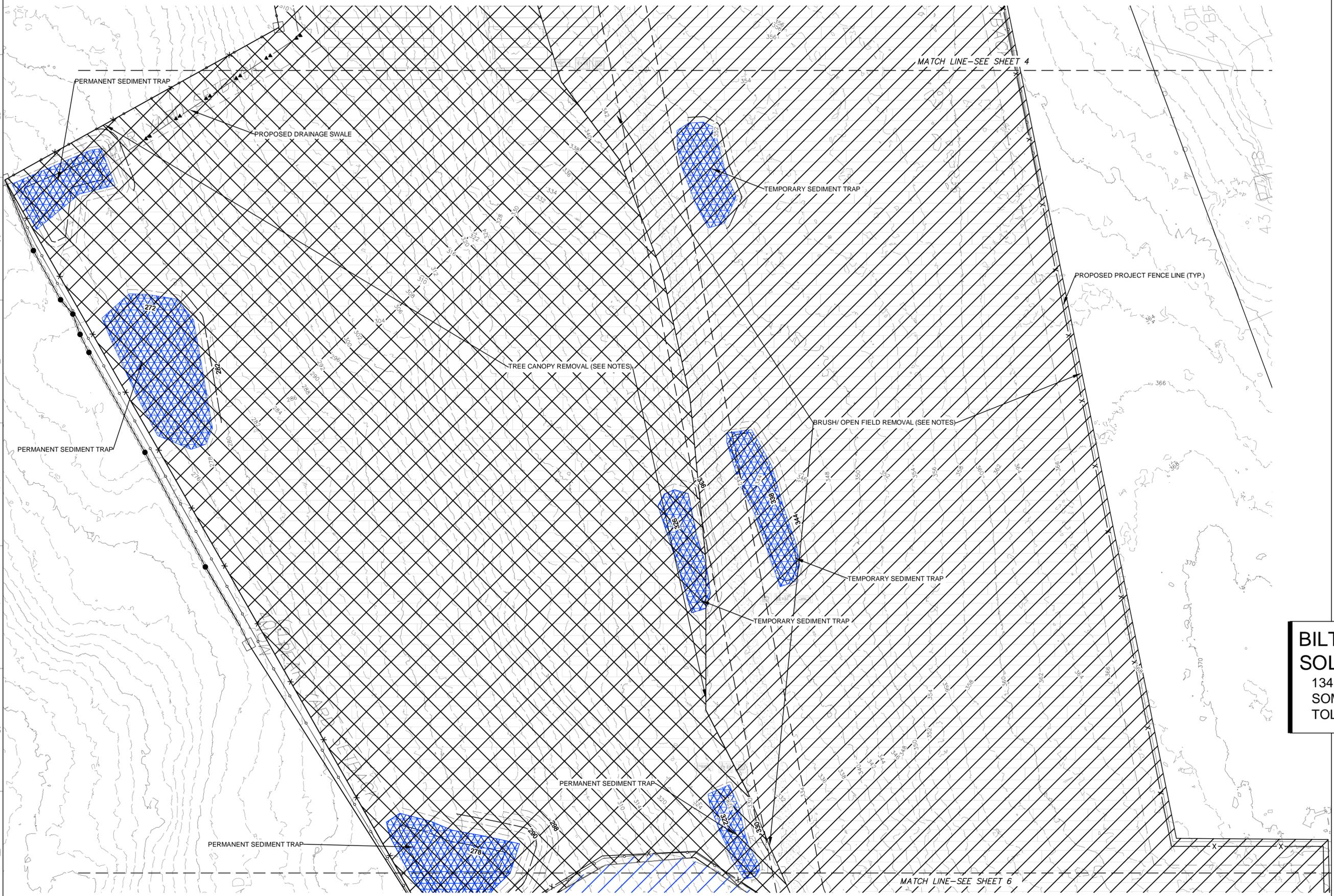
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DATE: 08/23/17  
 SHEET: 4 of 14



**NOTES & LEGEND:**

SEE SHEET 4



**Westwood**

Phone (480) 747-6558 6909 East Greenway Parkway, Suite 250  
Fax (480) 376-8025 Scottsdale, AZ 85254  
westwoodps.com

Westwood Professional Services, Inc.



Designed: BTB

Checked: ADC

Drawn: JLB

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**BILTON ROAD  
SOLAR**  
134 BILTON RD  
SOMERS, CT 06071  
TOLLAND COUNTY

**CENTRAL  
REMOVAL &  
EROSION  
CONTROL PLAN**

SITING BOARD REVIEW

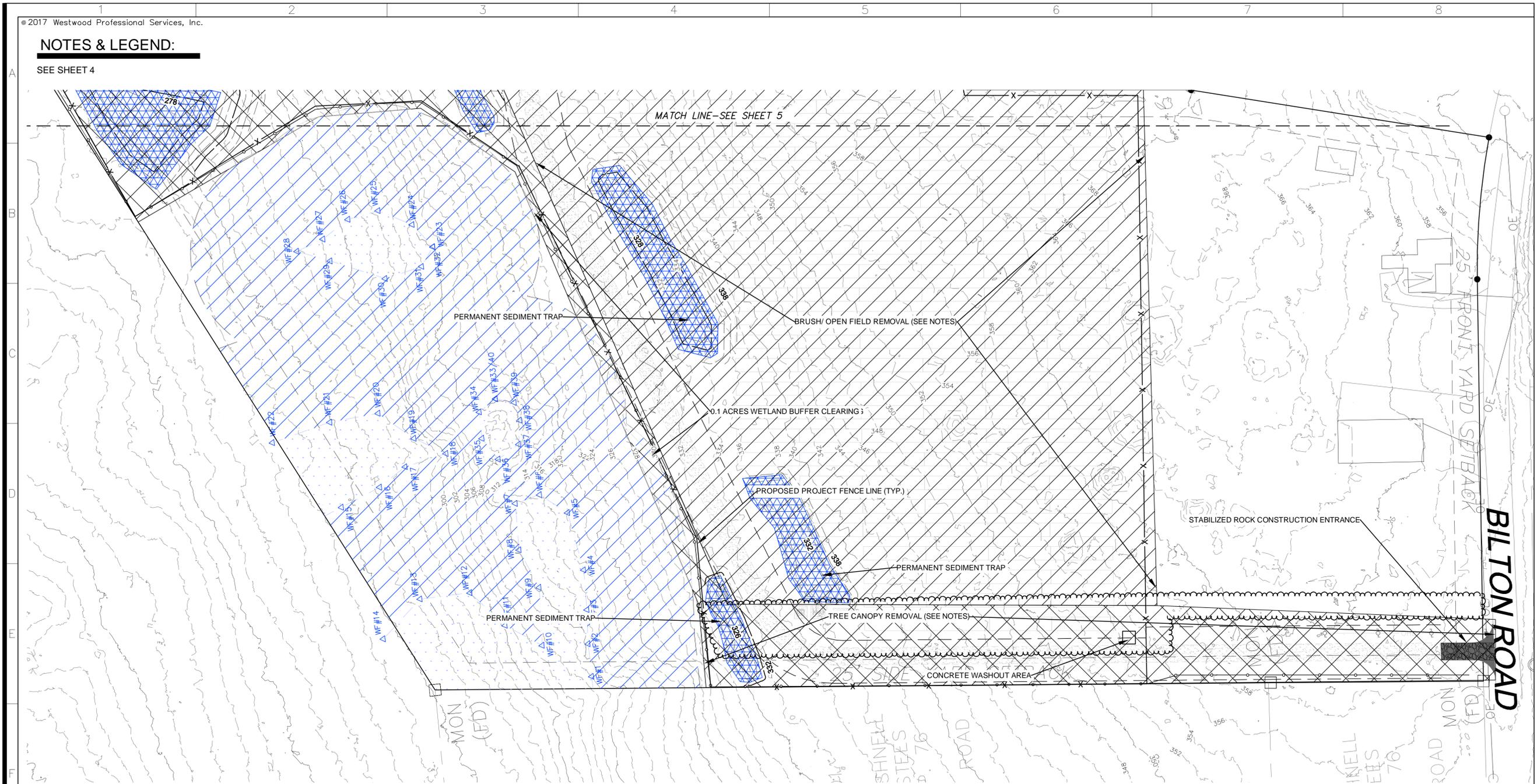
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**NOTES & LEGEND:**

SEE SHEET 4

MATCH LINE-SEE SHEET 5



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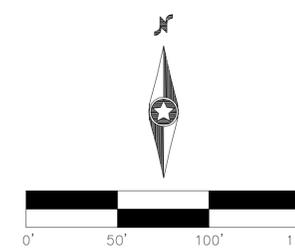


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 TOLLAND COUNTY

**SOUTH REMOVAL & EROSION CONTROL PLAN**

SITING BOARD REVIEW

DATE: 08/23/17

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**LEGEND:**

- EXISTING PROPERTY LINE
- - - PROPOSED FENCE
- ▤▤▤ PROPOSED GRAVEL ACCESS ROAD
- ▬▬▬ PROPOSED SWALE
- ▬▬▬ PROPOSED SILT FENCE
- - - PHASING/ DRAINAGE AREA LINE
- ~ EXISTING CONTOUR
- ~ PROPOSED CONTOUR
- ➔ PROPOSED DRAINAGE DIRECTION
- ▭ 18 x 2 SOLAR MODULE BOCK
- ▭ 50' WETLAND BUFFER AREA
- ▭ WETLAND DELINEATION LINE/AREA
- EXISTING GROUND SLOPE
- PROPOSED GROUND SLOPE

**Earthwork Quantities**

Item	Cut	Fill
Access Road Grading	640 CY	640 CY
Temporary Basin Grading	4,570 CY	0 CY
Temporary Basin Fill	0 CY	4,570 CY
Permanent Basin Grading	10,170 CY	0 CY
Array Grading	8,000 CY	15,445 CY
<b>TOTAL</b>	<b>23,380 CY</b>	<b>20,655 CY</b>
	EXCESS = 2,725 CY	

QUANTITIES SHOWN ARE IN-PLACE ESTIMATES  
 NO SHRINK OR SWELL IS ASSUMED  
 NO GROUND LOSS IS INCLUDED  
 NO TRENCH SPOILS ARE INCLUDED  
 NO TOPSOIL STRIPPING INCLUDED  
 \*CONTRACTOR SHALL REFER TO PROJECT GEOTECHNICAL REPORT FOR ASSUMPTIONS FOR SOIL LOSSES  
 \*\*CONTRACTOR SHALL DISTRIBUTE EXCESS EARTHWORK MATERIAL UNIFORMLY ACROSS THE SITE

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 westwoodps.com  
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Prepared for:

ecos ENERGY  
 222 SOUTH 9TH STREET  
 SUITE 1600  
 MINNEAPOLIS, MN 55402

**BILTON ROAD SOLAR**  
 134 BILTON RD  
 SOMERS, CT 06071  
 TOLLAND COUNTY

**NORTH SITE & GRADING PLAN**

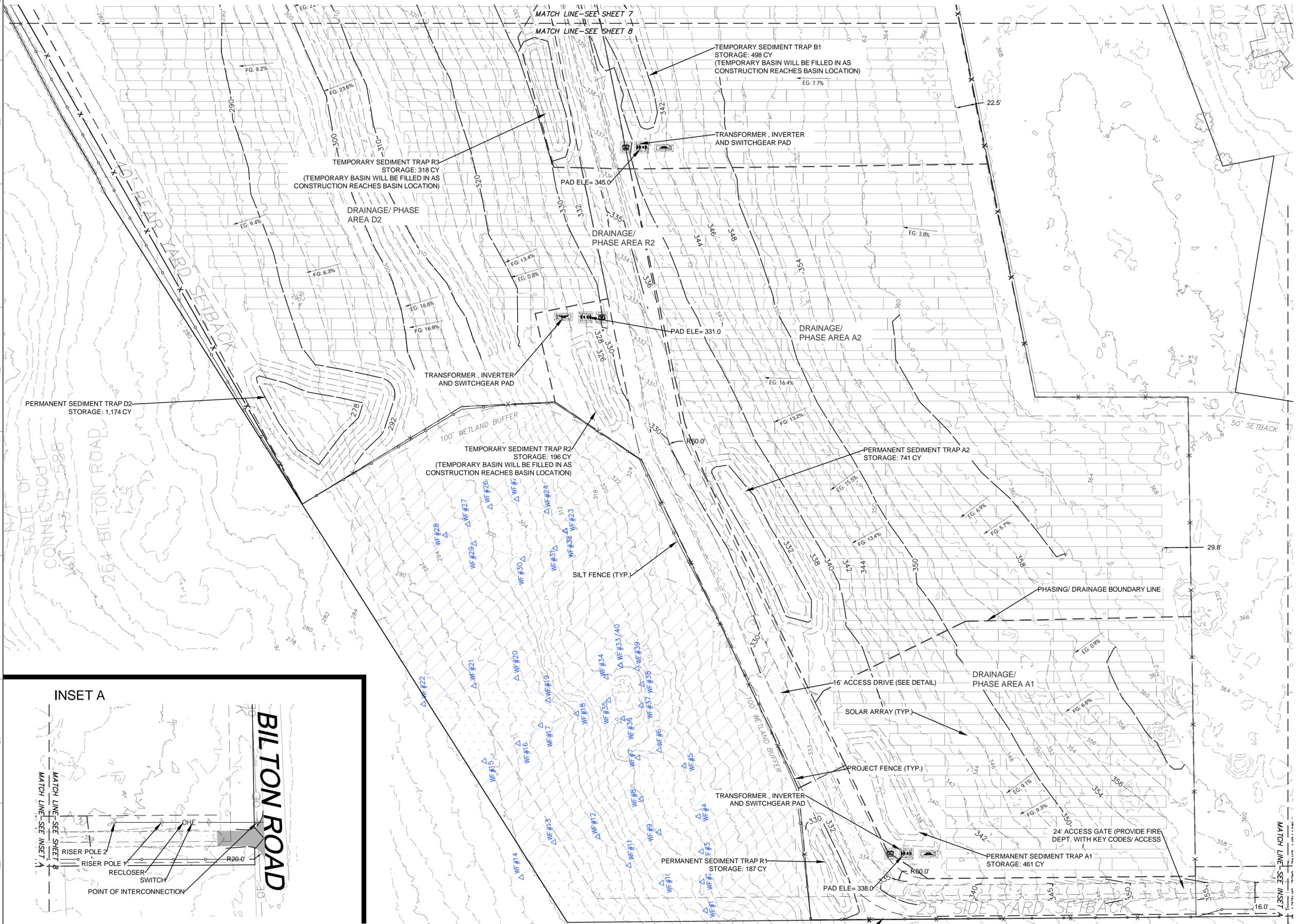
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EAST LONGMEADOW MASSACHUSETTS  
 STATE LINE SOMERS CONNECTICUT

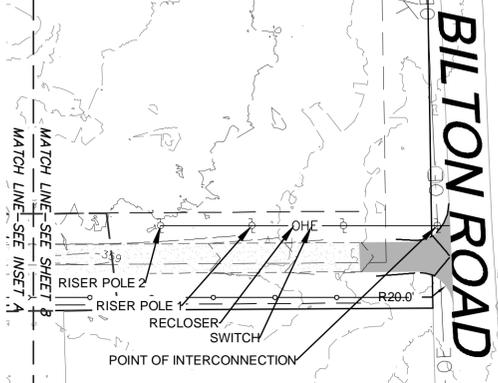
MATCH LINE—SEE SHEET 7  
 MATCH LINE—SEE SHEET 8

**NOTES:**

SEE SHEET 6



**INSET A**

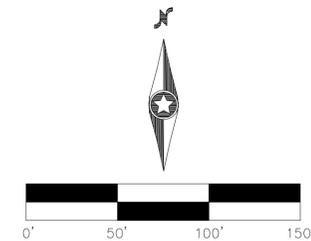


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 TOLLAND COUNTY

**SOUTH SITE & GRADING PLAN**

SITING BOARD REVIEW

DATE: 08/23/17

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**SEEDING NOTES:**

1. THE CONTRACTOR SHALL HYDROSEED ALL DISTURBED AREAS ASSOCIATED WITH THE CONSTRUCTION OF THE SOLAR FACILITY. CONTRACTOR SHALL USE AN APPROVED LOW GROWTH LOW MAINTENANCE SEED MIX APPROVED BY THE APPROPRIATE GOVERNING AUTHORITY.



**Westwood**

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 134 BILTON RD  
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 TOLLAND COUNTY

**OVERALL LANDSCAPE PLAN**

SITING BOARD REVIEW

DATE: 08/23/17  
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**ROAD DESIGN PARAMETERS**

- 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**

- CLEARING AND GRUBBING
  - 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.
- TOPSOIL STRIPPING
  - TOPSOIL SHALL BE STRIPPED FROM ALL ROADWAY AREAS THROUGH THE ROOT ZONE. TOPSOIL SHALL NOT BE STRIPPED OUTSIDE OF THE DESIGNATED DISTURBANCE AREAS.
  - 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.
- EMBANKMENT CONSTRUCTION.
  - 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".
  - SIDE SLOPES GREATER THAN 2.5:1 WILL NOT BE PERMITTED, UNLESS OTHERWISE NOTED ON THE PLAN.

**TESTING REQUIREMENTS:**

- TESTING SHALL BE PERFORMED BY A DESIGNATED INDEPENDENT TESTING AGENCY.
- SUBMIT TESTING AND INSPECTION RECORDS SPECIFIED TO THE CIVIL ENGINEER OF RECORD FOR REVIEW.
  - 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.
- PROOF ROLLING:
  - 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.
- SIEVE ANALYSIS:
  - SIEVE ANALYSIS SHALL BE CONDUCTED IN ACCORDANCE WITH AASHTO T27
- PROCTOR:
  - PROCTORS SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1557
- ATTERBERG LIMITS:
  - ATTERBERG LIMITS SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T89 AND T90
- MOISTURE DENSITY (NUCLEAR DENSITY):
  - MOISTURE DENSITY TESTING SHALL BE DONE IN ACCORDANCE WITH AASHTO T310

**SUBGRADE COMPACTION, TEST ROLLING AND AGGREGATE BASE COMPACTION:**

- FILL MATERIAL:
  - 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).
    - 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.
  - 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.
- COMPACTED SUBGRADE:
  - THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE TO IDENTIFY AREAS OF UNSTABLE SUBGRADE.
  - IF PROOF ROLLING DETERMINES THAT THE SUBGRADE STABILIZATION CANNOT BE ACHIEVED, THE FOLLOWING ALTERNATIVES WILL BE IMPLEMENTED:
    - REMOVE UNSUITABLE MATERIAL AND REPLACE WITH SUITABLE EMBANKMENT.
    - SCARIFY, DRY, AND RECOMPACT SUBGRADE AND PERFORM ADDITIONAL PROOF ROLL.
    - INCREASE ROAD BASE THICKNESS.
  - 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.
- AGGREGATE BASE:
  - AGGREGATE BASE SHALL BE PROOF-ROLLED OVER THE ENTIRE LENGTH. PROVIDE 1 SIEVE ANALYSIS PER 2500 CY OF ROAD BASE PLACED.
    - 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:**

- THE PLANIMETRIC FEATURES, GROUND SURFACE CONTOURS ON A LIDAR SURFACE PROVIDED NOAA.
- NO GRADING OR SOIL DISTURBANCE IS PERMITTED OUTSIDE OF THE GRADING LIMITS IDENTIFIED ON THE PLANS.
- GRADE ALL PROPOSED ROADS TO THE SLOPES PROPOSED ON THE PLANS.
- 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.
- THE CONTRACTOR SHALL NOTIFY DIGSAFE AT LEAST 48 HOURS BEFORE EXCAVATION ACTIVITIES COMMENCE.
- 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.
- 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 (SWPPP):**

- REFER TO THE SWPPP BOOKLET FOR SEDIMENT AND EROSION CONTROL PROCEDURES, LOCATIONS OF BMPs, DETAILS, AND INSPECTION INFORMATION.
- ALL AREAS DISTURBED DURING CONSTRUCTION ACTIVITIES AND NOT COVERED BY ROAD SURFACING MATERIALS, SHALL BE SEEDED IN ACCORDANCE WITH THE SWPPP PLAN.
- 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 SWPPP 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 REVEGETATION 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 MIRAFITM8 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.

- STABILIZATION WITH EROSION CONTROL AND REVEGETATION MAT (ECRM)
  - AREA MUST BE GRADED SMOOTH AND CLEAN TO FINISH GRADES, AND COMPACTED.
  - 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:**

- GRADE GROUND TO FINISH CONTOURS. REMOVE ALL ROCKS, DIRT CLOUDS, STUMPS, ROOTS, TRASH, AND OTHER OBSTRUCTIONS LYING IN DIRECT CONTACT WITH THE SOIL SURFACE.
- DIG MAT ANCHOR TRENCHES (MINIMUM 12" DEEP, 6" WIDE) AT TERMINAL ENDS AND PERIMETER SIDES WHERE MAT IS TO BE INSTALLED.
- INSTALL MAT BY ROLLING UPHILL PARALLEL TO WATER FLOW, STARTING AT TRENCH. OVERLAP ROLLS BY MINIMUM OF 3". FASTEN TO GROUND WITH 1/8" PINS AND 1 1/2" WASHERS, OR EQUIVALENT. PIN MAT AT ENDS, AND EVERY 3' TO 5' ALONG OVERLAPS. DO NOT 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.

**SEEDING:**

- COMPOSITION OF SEED MIX CHANGES YEARLY. SEED SPECIFICATIONS MUST BE SUBMITTED TO ENGINEER 2 WEEKS PRIOR TO INSTALLATION. ALL SPECIES MUST BE NATIVE TO WORCESTER COUNTY.
- RESTORED AREAS TO BE SEEDED WITH ABOVE MIX OR EQUAL (SUBJECT TO ENGINEERS APPROVAL). SEED TO BE LIGHTLY RAKED TO ALLOW FOR PROPER SEED/SOIL CONTACT.
- CONTRACTOR SHALL OVERSEED AND/OR RE-MULCH AS NECESSARY TO ESTABLISH A GOOD COVER OF VEGETATION, WHETHER DUE TO POOR INITIAL COVER, INCLEMENT WEATHER BEFORE/DURING/AFTER SEEDING, OR THE ONSET OF WINTER.
- RILLING, GULLIES, OR OTHER EROSION DUE TO POOR COVER SHALL BE RAKED AND/OR REFILLED AND REMULCH/RESEEDED.
- CONTRACTOR SHALL WARRANTEE SEEDING, MULCHING AND EROSION CONTROL FABRIC FOR ONE YEAR FROM THE SUBSTANTIAL COMPLETION OF THE RELEVANT AREA OF WORK.

**INVASIVE SPECIES:**

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



Designed: BTB

Checked: ADC

Drawn: JLB

Record Drawing by/date:

Revisions: # DATE DESCRIPTION

1 8/23/2017 CT SITING BOARD SUBMISSION

Prepared for:



**BILTON ROAD SOLAR**

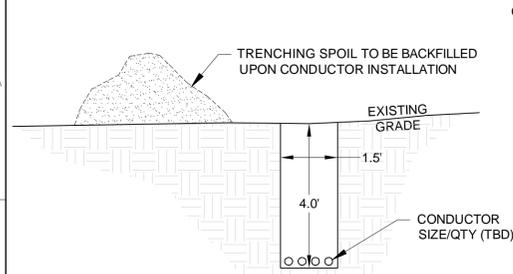
134 BILTON RD  
SOMERS, CT 06071  
TOLLAND COUNTY

**CIVIL NOTES**

**SITING BOARD REVIEW**

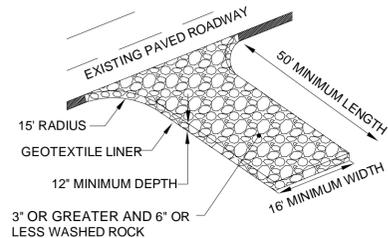
DATE: 08/23/17

SHEET: 10 of 14



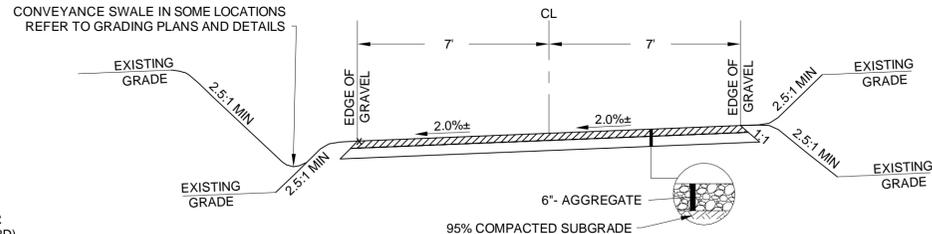
- NOTES:
1. CONDUCTOR CLEARANCES DEPENDENT ON GEOTECHNICAL PARAMETERS AND ELECTRICAL DESIGN CONDUCTOR SIZING AND QUANTITIES PER TRENCH DEPENDENT ON FINAL ELECTRICAL DESIGN TRENCH DIMENSIONS.

### TRENCHING DETAIL



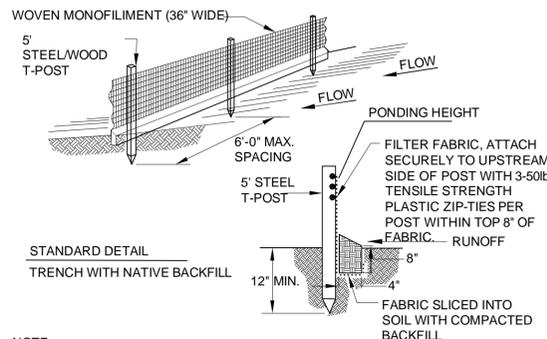
NOTE:  
ROCK CONSTRUCTION ENTRANCE SHOULD BE A MINIMUM THICKNESS OF 1.0' AND CONTAIN MAXIMUM SIDE SLOPES OF 4:1. ROCK ENTRANCE SHOULD BE INSPECTED AND MAINTAINED REGULARLY. ROCK ENTRANCE LENGTH MAY NEED TO BE EXTENDED IN CLAY SOILS.

### ROCK CONSTRUCTION ENTRANCE



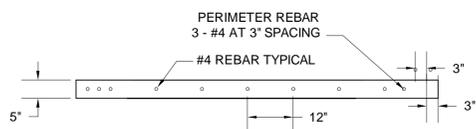
- NOTES:
1. CONTRACTOR TO SUBCUT ROADWAY TO EXISTING GRADE ELEVATION TO MAINTAIN EXISTING SITE DRAINAGE PATTERNS WHEREVER POSSIBLE.
  2. IN FILL LOCATIONS CONTRACTOR TO GRADE TOE OF SLOPE TO EXISTING GRADE, AND MAINTAIN NATURAL DRAINAGE PATTERNS.
  3. IN CUT LOCATIONS CONTRACTOR TO CREATE SWALE ON DOWNSTREAM 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



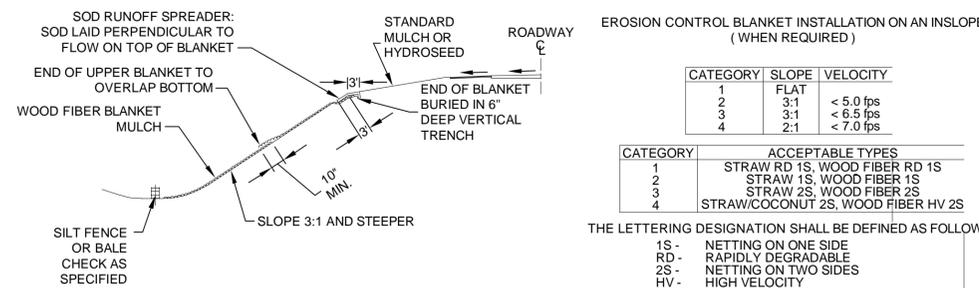
- NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO 1/3 THE HEIGHT OF THE FABRIC OR MORE.
  2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
  3. SILT FENCE SHALL BE PLACED ON 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



- NOTES:
1. REBAR 3" FROM ALL EDGES & CUTOUTS. 3" SPACING ON FIRST THREE PERIMETER REBARS, 12" ON ALL OTHER INTERIOR.
  2. 3,000 PSI CONCRETE. TOP TO BE SMOOTH AND LEVEL. TOP EDGES TO HAVE 1" BEVEL.
  3. FINAL PAD DESIGN DEPENDENT ON FINAL EQUIPMENT WEIGHT AND STRUCTURAL ENGINEERS DETERMINATION

### UTILITY PADS CONCRETE SECTION



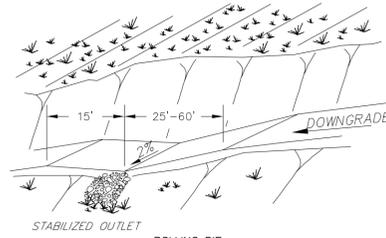
CATEGORY	SLOPE	VELOCITY
1	FLAT	< 5.0 fps
2	3:1	< 6.5 fps
4	2:1	< 7.0 fps

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 RAPIDLY DEGRADABLE  
 2S - NETTING ON TWO SIDES  
 HV - HIGH VELOCITY

### EROSION CONTROL BLANKET



- NOTE:
1. CONTRACTOR HAS THE ABILITY DEPENDING ON FIELD LOCATED GRADE AND GRADE TRANSITIONS TO INSTALL ROLLING DIPS OR WATERBARS AT THE RECOMMENDED SPACING IN TABLE 1.
  2. ROLLING DIPS AND WATERBARS WILL REQUIRE MAINTENANCE FOLLOWING RAINFALL EVENTS TO ENSURE FUNCTIONALITY.
  3. THE ROLLING DIPS AND WATERBARS SHOULD BE BUILT AT AN ANGLE OF 45° TO 60° FROM THE CENTERLINE.
  4. THE DIVERSION SHOULD HAVE A POSITIVE GRADE OF 2% MINIMUM.
  5. FOR ROLLING DIPS, THE HEIGHT FROM CHANNEL BOTTOM TO THE TOP OF THE SETTLED RIDGE SHALL BE 18 INCHES AND THE SIDE SLOPES OF THE RIDGE SHALL BE 2:1 OR FLATTER.
  6. STABLE OUTLETS SHALL EITHER BE AN EXTENSION OF AN ADJACENT SWALE, OR 2 CU. YD. 6" RIP RAP AT OTHER LOCATIONS.
  7. SEDIMENT SHALL BE REMOVED FROM THE FLOW AREA THROUGHOUT THE DURATION OF THE PROJECT. REFER TO THE PROJECTS STORMWATER O&M MANUAL.

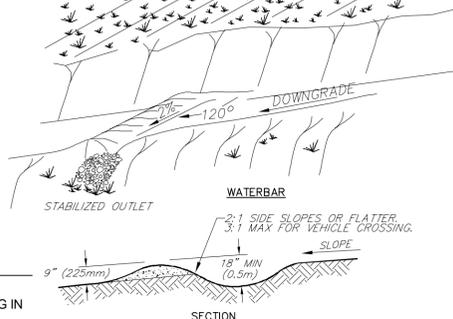
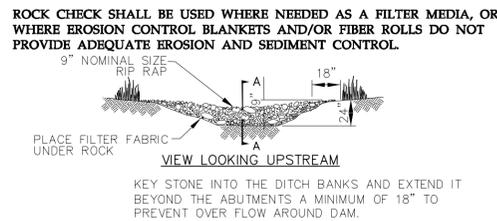


TABLE 1: ROLLING DIP AND WATERBAR SPACING RECOMMENDATIONS

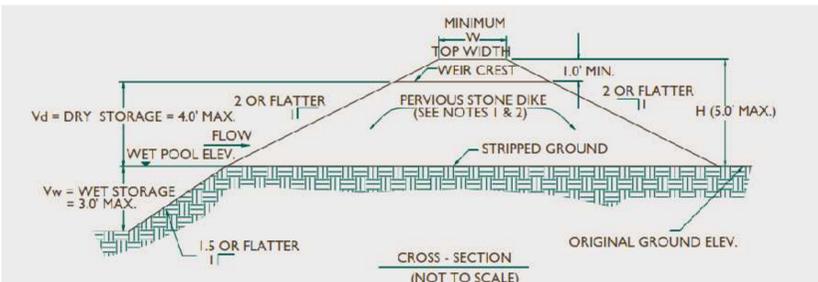
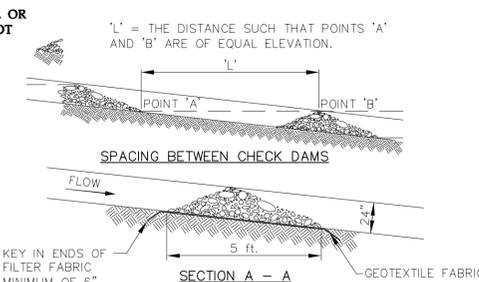
SLOPE (%)	SPACING (FT)
<5	125
5-10	100
10-20	75

### ROLLING DIP AND WATERBAR



- NOTE:
1. CONTRACTOR SHALL INSTALL ROCK CHECK DAMNS EVERY 100 LF OF DRAINAGE SWALE

### ROCK CHECK FOR SWALE



TOP WIDTH VS. HEIGHT  
 H = HEIGHT OF EMBANKMENT  
 W = TOP WIDTH OF EMBANKMENT

H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	2.5
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5

### TEMPORARY/PERMANENT SEDIMENT TRAP

BMP (ID#)	DRAINAGE AREA AC	REQUIRED TRAP CAPACITY CU.YD.	BOTTOM AREA SF	BOTTOM ELEVATION FT	TOTAL DEPTH FT	OVERFLOW AREA SF	OVERFLOW ELEVATION FT	WET STORAGE CU.YD.	WIER LENGTH FT	TOP AREA SF	TOP BASIN FT	DRY STORAGE CU.YD.	TOTAL TRAP STORAGE CU.YD.	EXCESS TRAP STORAGE CU.YD.	PERMANENT/TEMPORARY
R1	0.8	105	54	325	4	1888	328	108	20	2360	329	79	187	82	PERMANENT
R2	1.1	146	105	321	4	1952	324	114	20	2440	325	81	196	50	PERMANENT
R3	1.6	210	560	326	4	2952	329	195	20	3690	330	123	318	108	TEMPORARY
A1	2.2	291	1360	331.5	4	3960	334.5	296	20	4950	335.5	165	461	170	PERMANENT
A2	5.0	668	2655	328	4	6100	331	486	20	7625	332	254	741	73	PERMANENT
B1	3.6	483	1305	337	4	4380	340	316	20	5475	341	183	498	15	TEMPORARY
B2	2.9	394	1520	344	4	3520	347	280	20	4400	348	147	427	33	TEMPORARY
C1	1.2	162	190	355	4	1920	358	117	20	2400	359	80	197	36	TEMPORARY
C2	2.1	280	1920	348	4	3936	351	325	20	4920	352	164	489	210	TEMPORARY
D1	4.9	658	3045	270.5	6	5692	275.5	809	20	7115	276.5	237	1046	388	PERMANENT
D2	5.4	726	3790	278	6	6128	283	918	20	7660	284	255	1174	448	PERMANENT
D3	4.1	549	2320	270	4	4760	273	393	20	5950	274	198	592	42	PERMANENT

### TEMPORARY SEDIMENT TRAP BASIN DETAILS



Designed: BTB

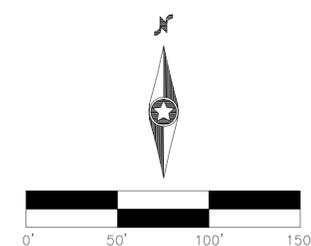
Checked: ADC

Drawn: JLB

Record Drawing by/date:

Revisions #	DATE	DESCRIPTION
1	8/23/2017	CT SITING BOARD SUBMISSION

Prepared for:



**BILTON ROAD SOLAR**  
 134 BILTON RD  
 SOMERS, CT 06071  
 TOLLAND COUNTY

### CIVIL DETAILS

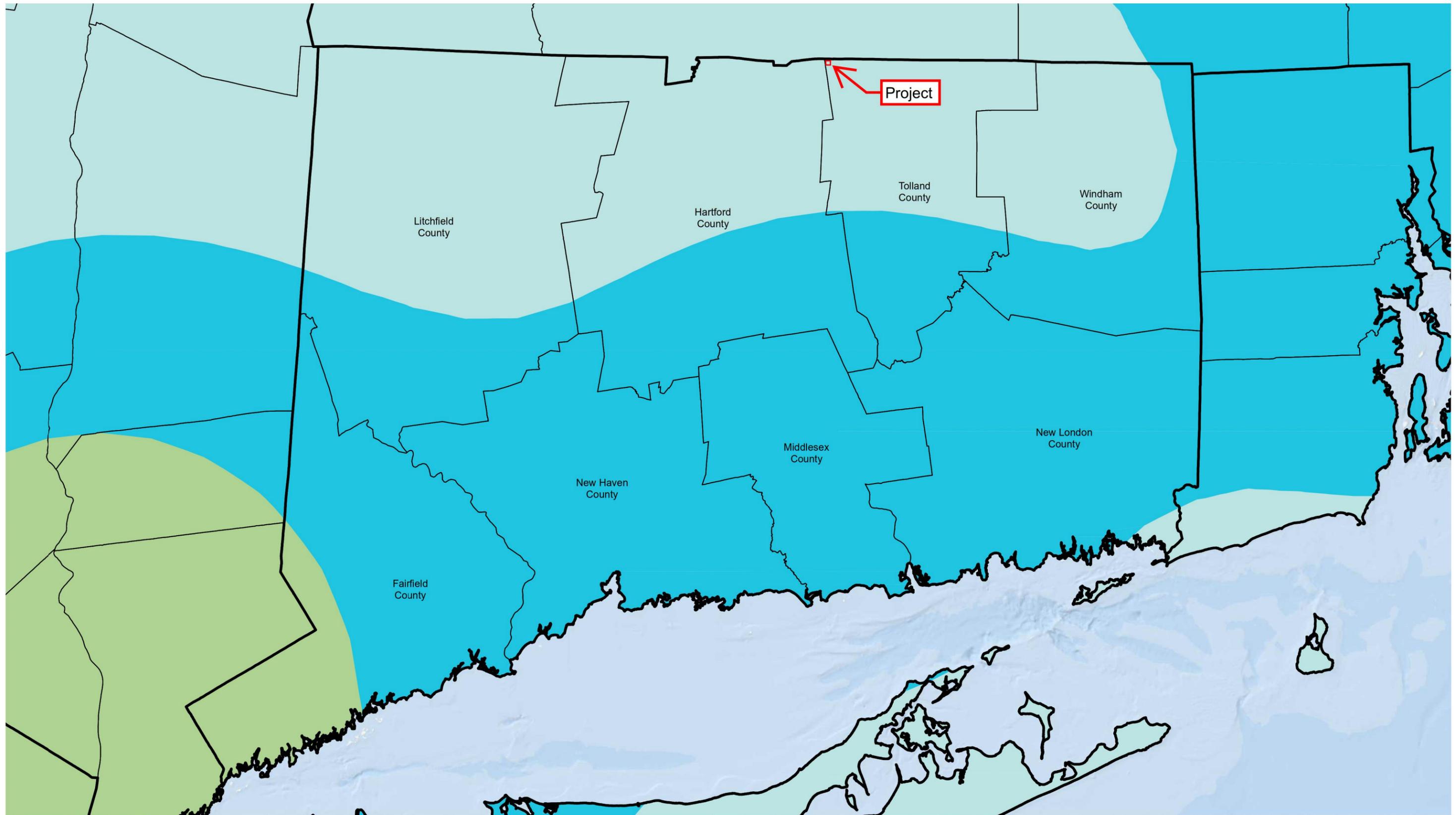
### SITING BOARD REVIEW

DATE: 08/23/17

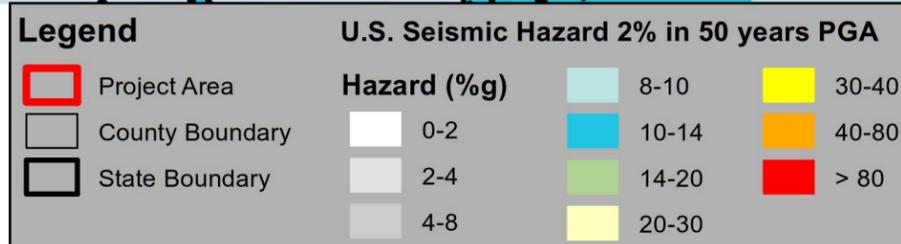
SHEET: 11 of 14

# **Exhibit B**

## **GIS Maps**



Data Source(s): World Oceans Map via Esri WMS (Accessed 2015);



**Bilton Solar**  
 Tolland County, Connecticut  
 Connecticut Hazard Map



Data Source(s): DEEP (2015)

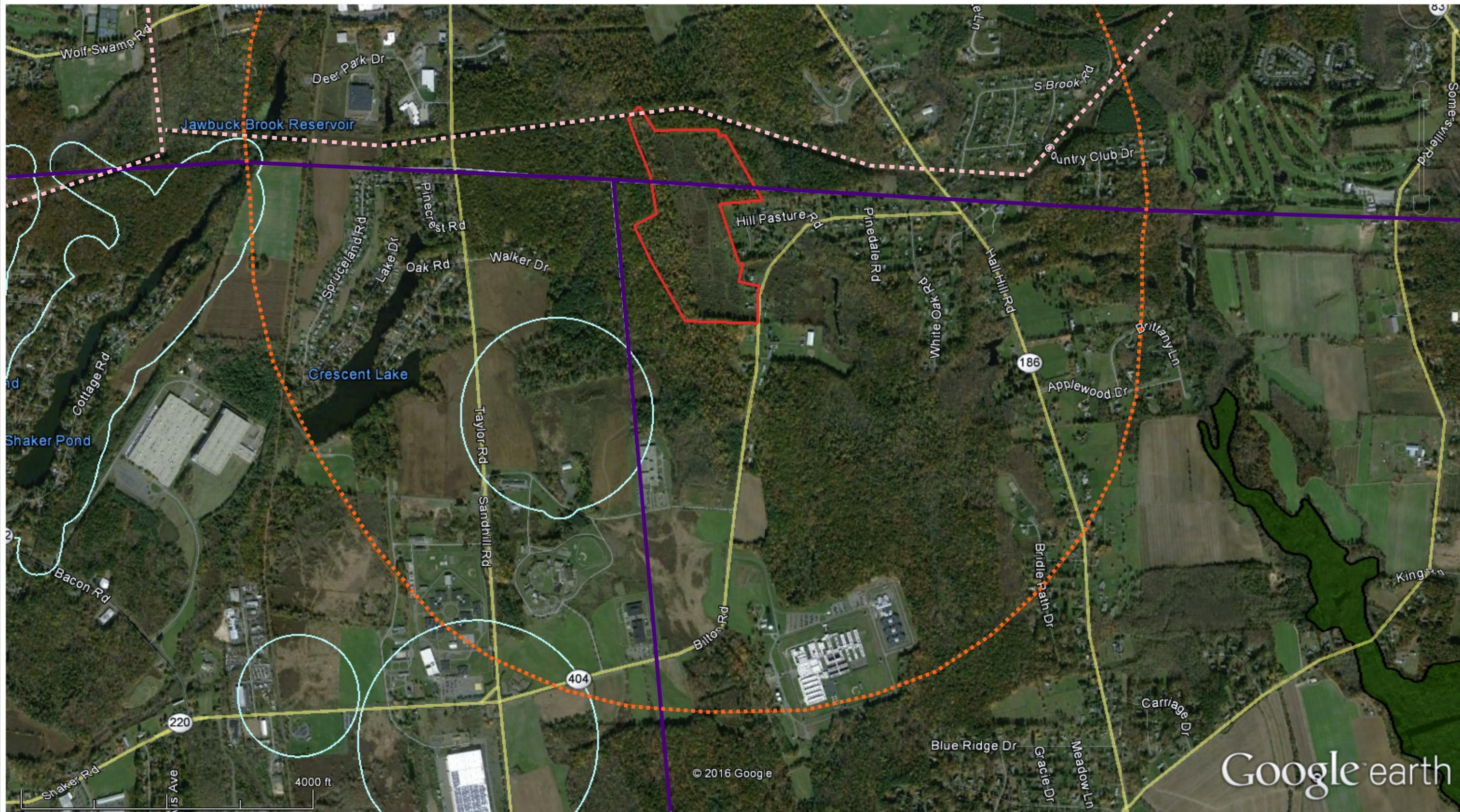
Notes:  
 1. Project site is not located within one mile of areas regulated under the Tidal Wetlands Act and Coastal Zone Management Act.

**Legend**

- Project Area
- Inland Wetland Soils**
- Poorly Drained and Very Poorly Drained Soils
- Alluvial and Floodplain Soils
- Wetland Delineated
- Wetland Buffer Delineated

Google earth

**Bilton Solar**  
 Tolland County, Connecticut  
**Soils and Delineated Wetlands**



Data Source(s): DEEP (2016);  
 Google Imagery (Accessed 2016).

**Notes:**

- 1.No hospitals within map extent.
- 2.No group homes within map extent.
- 3.No historic areas within map extent.
- 4.No areas of geologic or archaeological interest within map extent.

Legend		Critical Habitat	
	Project Area		Palustrine Forested
	1 Mile Project Buffer		Natural Diversity Area
	County Border		WMA
	School		Transmission Line
			Road

Google earth

**Bilton Solar**  
 Tolland County, Connecticut  
 Vicinity Map

# **Exhibit C**

## **Key Observation Point Plan**



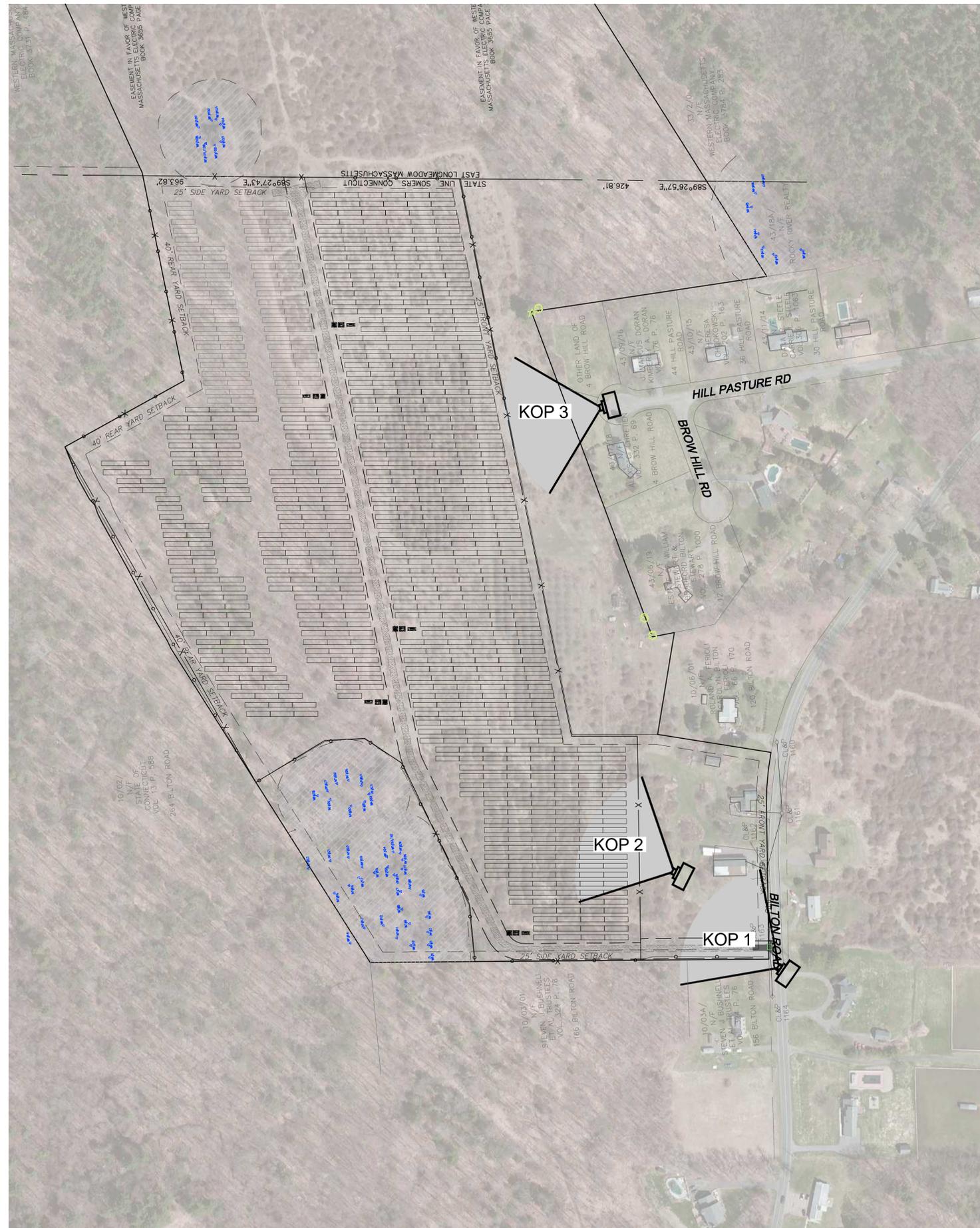
KOP 1 - BILTON ROAD SE CORNER OF PARCEL LOOKING NW



KOP 2 - ON SITE NEAR PROPOSED PROJECT ENTRANCE



KOP 3 - HILL PASTURE ROAD CUL-DE-SAC



# Westwood

Phone (480) 747-6558 6909 East Greenway Parkway, Suite 250  
 Fax (480) 376-8025 Scottsdale, AZ 85254  
 westwoodps.com

Westwood Professional Services, Inc.

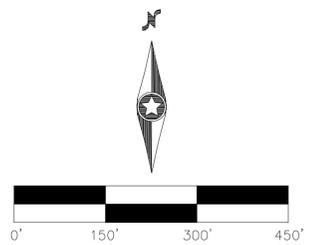


Designed: BTB  
 Checked: ADC  
 Drawn: JLB

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Revisions #	DATE	DESCRIPTION
1	8/23/2017	CT SITING BOARD SUBMISSION

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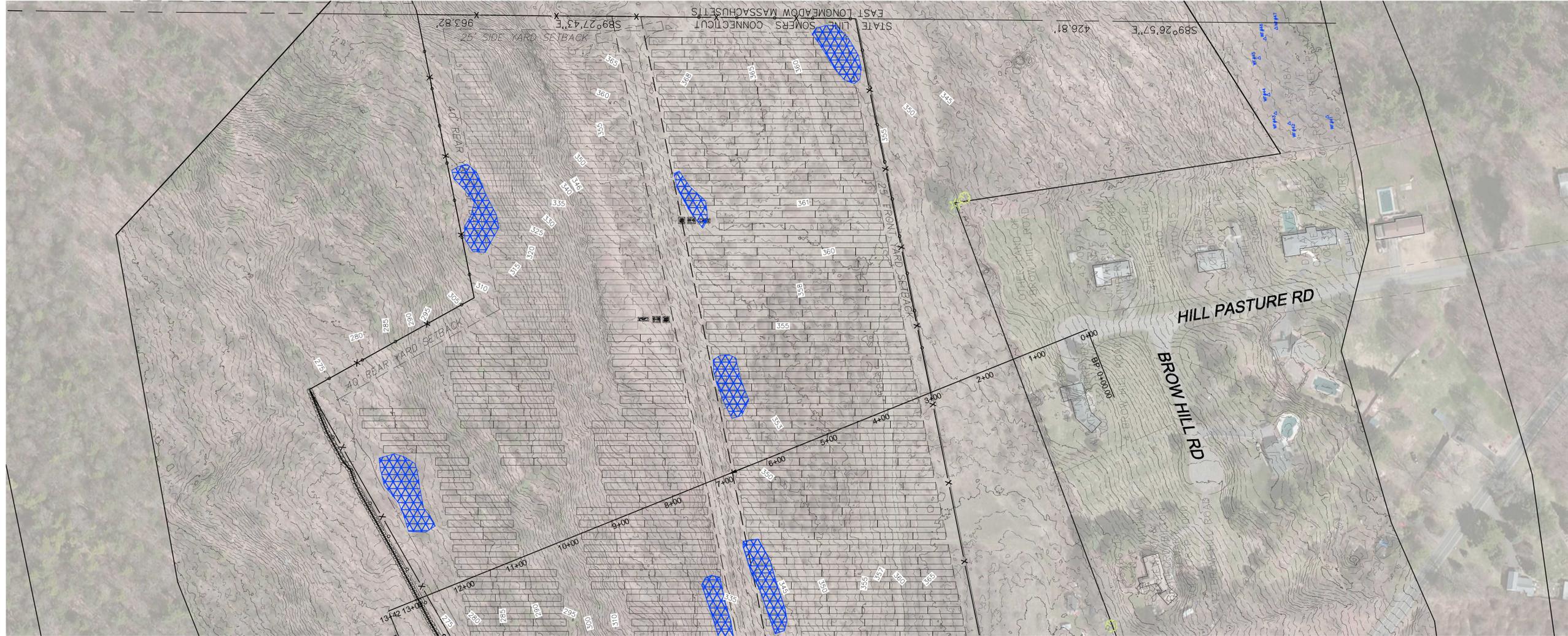
**BILTON ROAD SOLAR**  
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 TOLLAND COUNTY

## KEY OBSERVATION POINT PLAN

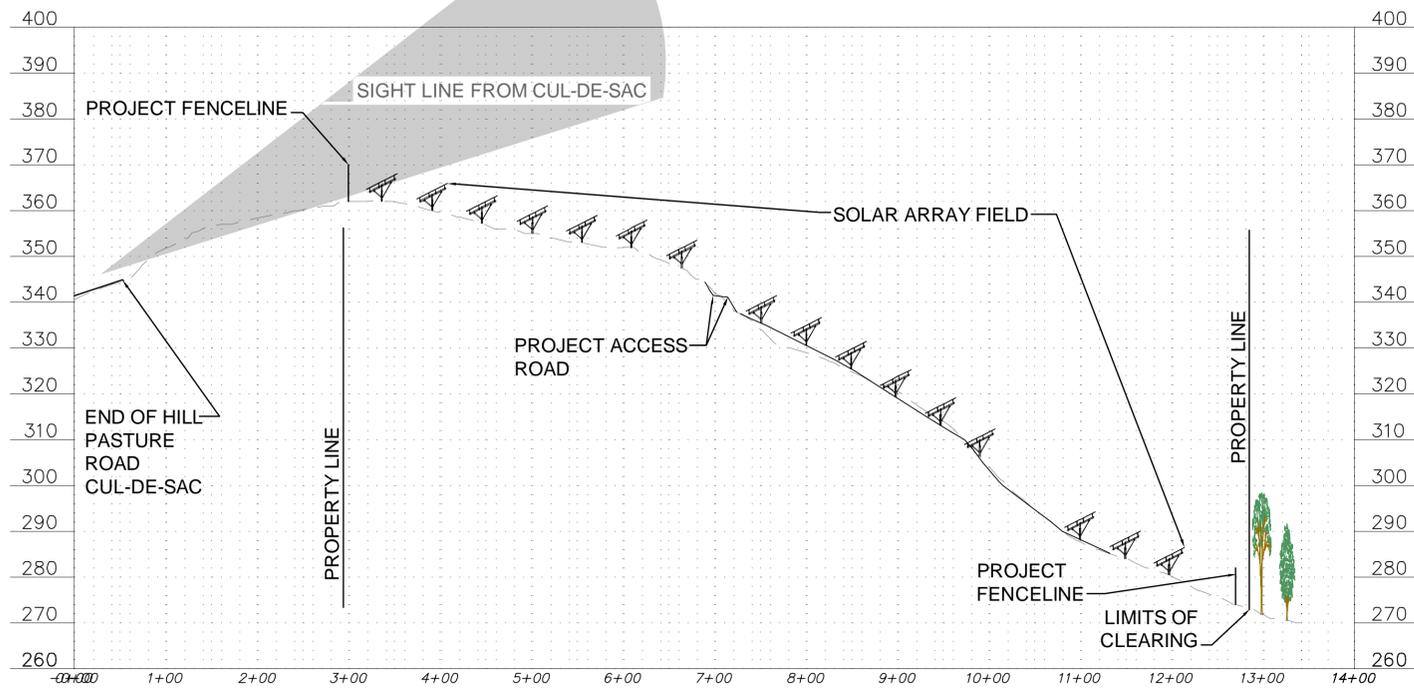
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DATE: 08/23/17  
 SHEET: 12 of 14

**PROJECT CROSS SECTION:**



**PROJECT PROFILE:**



**Westwood**

Phone (480) 747-6558 6909 East Greenway Parkway, Suite 250  
 Fax (480) 376-8025 Scottsdale, AZ 85254  
 westwoodps.com

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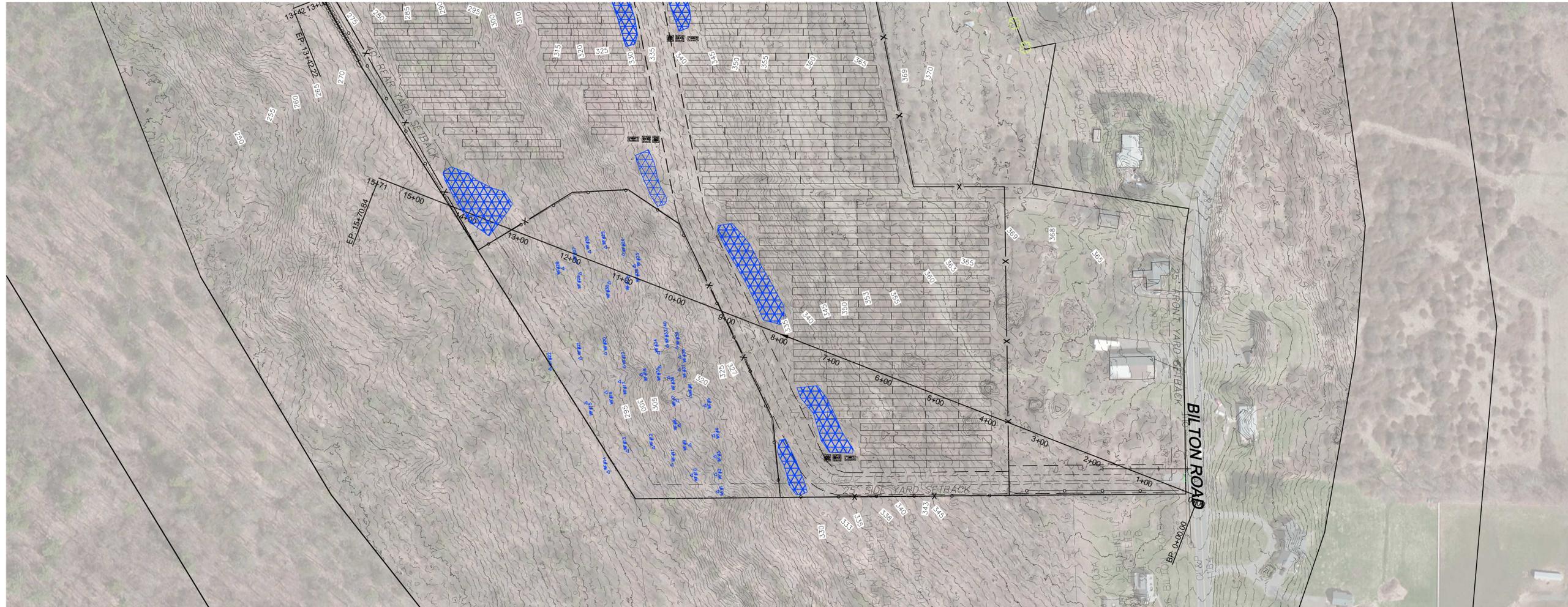
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 SOLAR**  
 134 BILTON RD  
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 TOLLAND COUNTY

**NORTH PROJECT  
 CROSS SECTION**

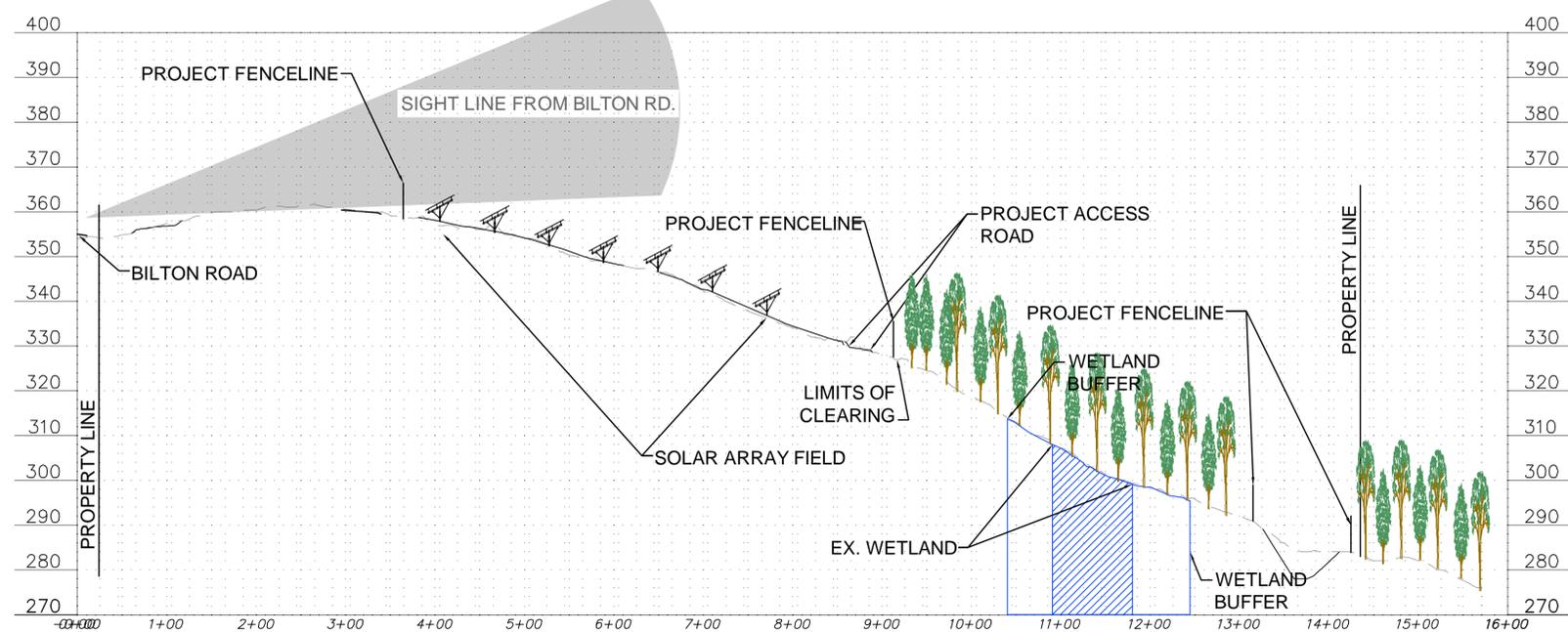
SITING BOARD REVIEW

DATE: 08/23/17  
 SHEET: 13 of 14

**PROJECT CROSS SECTION:**



**PROJECT PROFILE:**



**Westwood**

Phone (480) 747-6558 6909 East Greenway Parkway, Suite 250  
 Fax (480) 376-8025 Scottsdale, AZ 85254  
 westwoodps.com

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 SOLAR**

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 TOLLAND COUNTY

**SOUTH PROJECT  
 CROSS SECTION**

SITING BOARD REVIEW

DATE: 08/23/17  
 SHEET: 14 of 14

# **Exhibit D**

## **Notice Service List**

# Exhibit D

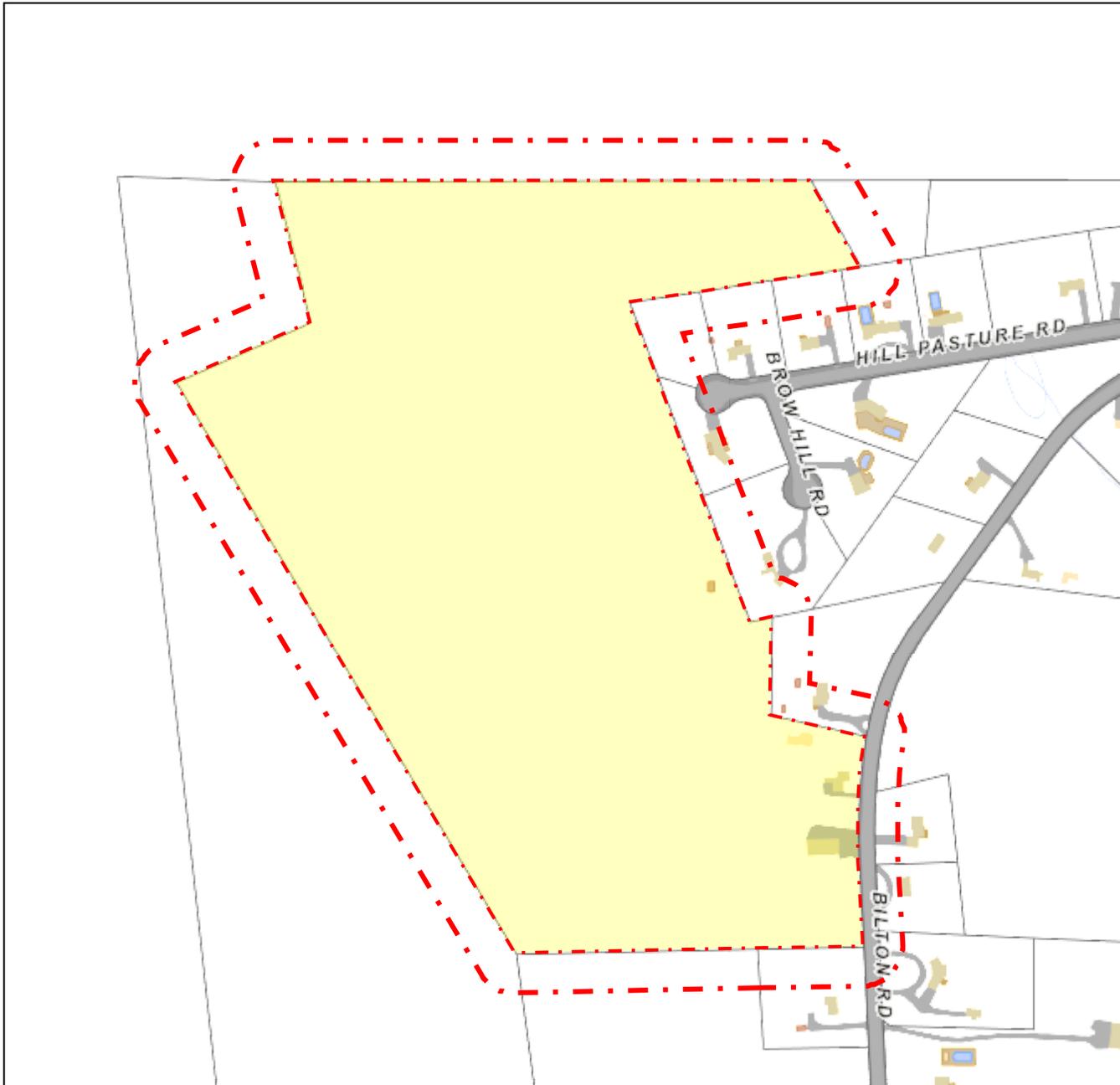
## Notice Service List

# Town of Somers

Geographic Information System (GIS)

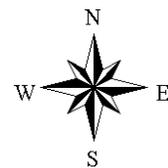


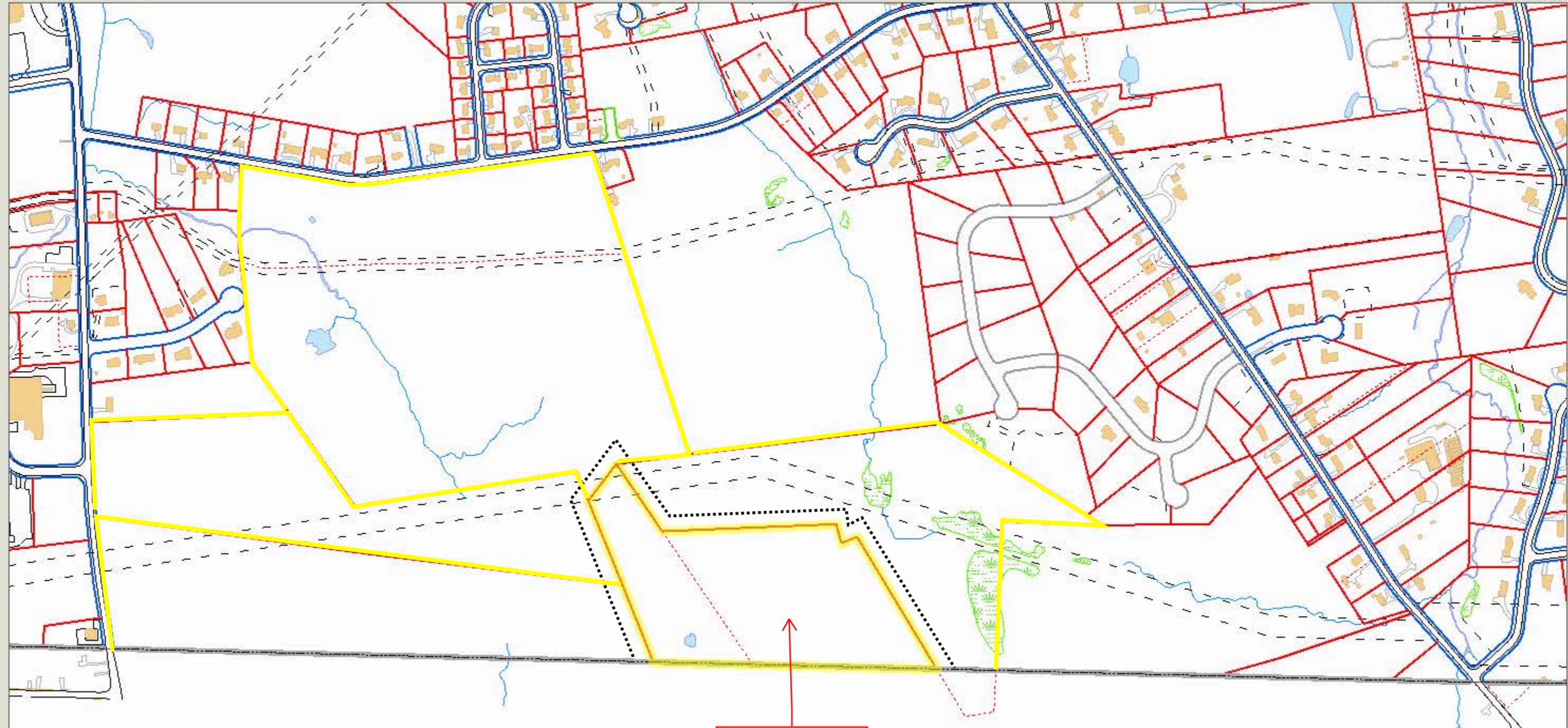
Date Printed: 8/22/2017



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Bilton Solar Parcel Boundary

WESTERN MASS ELECTRIC CO  
PO BOX 270  
HARTFORD, CT 06141

ROLAND A & CARYOLYN B FERIOLI  
120 BILTON RD  
SOMERS, CT 06071

ALEXIS C CHRETIEN  
4 BROW HILL RD  
SOMERS, CT 06071

THERESA CHODKOWSKI  
36 HILL PASTURE RD  
SOMERS, CT 06071

JAMES & DEANISE SHEWOKIS  
61 WHITE OAK RD  
SOMERS, CT 06071

DANA P & CARRIE L STEELE  
30 HILL PASTURE RD  
SOMERS, CT 06071

STATE OF CONNECTICUT  
264 BILTON RD PO BOX  
SOMERS, CT 06071

AMY BRICK  
8 APPLETREE LANE  
NORTH GRANBY, CT 06060

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SOMERS, CT 06071

JEAN M LU & DULCHINOS  
139 BILTON RD  
SOMERS, CT 06071

BRADFORD BILTON STEWART  
12 BROW HILL ROAD  
SOMERS, CT 06071

REDSTONE FARMS & BARNES LLC C/O  
JOHN PEARSON  
PO BOX 1003  
EAST LONGMEADOW, MA 01028

J MARCUS & KIMBERLY A DORAN  
44 HILL PASTURE RD  
SOMERS, CT 06071

STEVEN BUSHNELL ETAL TRUSTEES  
156 BILTON RD  
SOMERS, CT 06071

STEVEN J BUSHNELL ETAL TRUSTEES  
166 BILTON RD  
SOMERS, CT 06071

JOSHUA A & JAMIE L SCHAFER  
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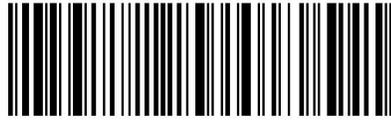


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AMY BRICK  
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Office of the Attorney General  
George C. Jepsen, Attorney General  
55 ELM ST STE 1  
HARTFORD CT 06106-1752



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Department of Public Health  
Dr. Raul Pino, Commissioner  
410 CAPITOL AVE  
PO BOX 340308  
HARTFORD CT 06106-1373



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Department of Agriculture  
Steven K. Reviczky, Commissioner  
165 CAPITOL AVE  
HARTFORD CT 06106-1659



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Office of Policy and Management  
Benjamin Barnes, Secretary  
450 CAPITOL AVE  
HARTFORD CT 06106-1379



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Department of Transportation  
James P. Redeker, Commissioner  
2800 BERLIN TPKE  
NEWINGTON CT 06111-4123



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Department of Consumer Protection  
Michelle H Seagull, Commissioner  
165 CAPITOL AVE STE 3  
165 CAPITOL AVENUE, ROOM 103  
HARTFORD CT 06106-1630



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Department of Labor  
Scott D. Jackson, Commissioner  
200 FOLLY BROOK BLVD  
WETHERSFIELD CT 06109-1153



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Dept of Energy and Environmental Protection  
Rob Klee, Commissioner  
79 ELM ST  
HARTFORD CT 06106-5127



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Council on Environmental Quality  
Susan D. Merrow, Chair  
79 ELM ST  
HARTFORD CT 06106-1650



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Public Utilities Regulatory Authority  
Katie Dykes, Chairman  
10 FRANKLIN SQ  
NEW BRITAIN CT 06051-2655



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Dept of Economic and Comm Development  
Catherine H. Smith, Commissioner  
505 HUDSON ST  
HARTFORD CT 06106-7106



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Dept of Emerg Services and Public Protection  
Dora B. Schriro, Commissioner  
1111 COUNTRY CLUB RD  
MIDDLETOWN CT 06457-2389



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Department of Administrative Services  
Melody A. Currey, Commissioner  
165 CAPITOL AVE RM 427  
STATE OFFICE BUILDING  
HARTFORD CT 06106-1629



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CT State Representative District 52  
Kurt Vail, State Representative  
Legislative Office Building  
Room 3802  
HARTFORD CT 06106-1591



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CT State Senate District 7  
John Kissel, State Senator  
Legislative Office Building  
Room 3400  
HARTFORD CT 06106



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Town of Somers  
Bud Knorr Jr, First Selectman  
PO BOX 308  
SOMERS CT 06071-0308



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Town of Somers Zoning Commission  
Jill Conklin, Chairperson  
PO BOX 308  
SOMERS CT 06071-0308



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Town of Somers Planning Commission  
Greg Genlot, Chairman  
PO BOX 308  
SOMERS CT 06071-0308



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Town of Somers Conservation Commission  
Joan Foremeister, Chairman  
PO BOX 308  
SOMERS CT 06071-0308



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Town of Somers Inland Wetlands Commission  
Joanna Shaprio  
PO BOX 308  
SOMERS CT 06071-0308



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Somers Town Clerk  
Ann Marie Logan  
PO BOX 308  
SOMERS CT 06071-0308



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Enfield Town Clerk  
Suzanne Olechnicki  
820 ENFIELD ST  
ENFIELD CT 06082-2964



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Enfield Town Manager  
Bryan Chodkowski  
820 ENFIELD ST  
ENFIELD CT 06082-2964



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Town of Enfield Conservation Commission  
Karen LaPlante  
820 ENFIELD ST  
ENFIELD CT 06082-2964



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Town of Enfield Inland Wetlands Commission  
Donna Corbin Sobinski  
820 ENFIELD ST  
ENFIELD CT 06082-2964



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Town of Enfield Mayor  
Scott Kaupin  
820 ENFIELD ST  
ENFIELD CT 06082-2964



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East Longmeadow Town Manager  
Denise Menard  
60 CENTER SQ  
EAST LONGMEADOW MA 01028-2486



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East Longmeadow Council President  
Kevin Manley  
60 CENTER SQ  
EAST LONGMEADOW MA 01028-2486



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*Petition for Declaratory Ruling for Bilton Solar Project*

**Exhibit E**  
**Phase I Environmental Site Assessment**

# Phase I Environmental Site Assessment

**134 Bilton Road  
Somers, Connecticut**

*Prepared for:*

**Ecos Energy, LLC**



*Prepared by:*

**Rincon Consultants, Inc.  
December 21, 2015**



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December 21, 2015  
Project 15-02082

Brad Wilson  
Project Manager, Ecos Energy LLC  
222 South 9<sup>th</sup> Street, #1600  
Minneapolis, Minnesota 55402

**Phase I Environmental Site Assessment  
134 Bilton Road, Somers, Connecticut**

Dear Mr. Wilson:

This report presents the findings of a Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for the site located at 134 Bilton Road in Somers, Connecticut. The Phase I ESA was performed in accordance with our proposal and contract dated October 8, 2015.

The accompanying report presents our findings and provides an opinion regarding the presence of recognized environmental conditions. Our work program for this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E-1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,  
**RINCON CONSULTANTS, INC.**

Sarah A. Larese  
Senior Environmental Scientist

Walt Hamann, PG, CEG, CHG  
Vice President

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*134 Bilton Road*  
*Somers, Connecticut*

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## EXECUTIVE SUMMARY

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the property located at 134 Bilton Road, Somers, Connecticut (Figure 1, Vicinity Map). The majority of the subject property consists of undeveloped woodland and former orchard areas, which are now overgrown and unused. The southeastern portion of the subject property is currently developed with a single-family residence, dilapidated barn, and a commercial building formerly used for fruit sales and sorting (now used for storage of furniture and miscellaneous household items). The subject property was formerly used as Bilton's Fruit Farm but has not been actively used for fruit production and sales for approximately 20 years. Overhead power transmission lines traverse the northern portion of the subject property.

Rincon Consultants performed a reconnaissance of the subject property on October 20, 2015 accompanied by Ms. Rebecca Richards, one of the owners of the subject property. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property. During the site reconnaissance, two pipes, likely fill ports, were observed adjacent to the north side of the single-family residence at the subject property. The soil beneath the two fill ports appeared to be stained with oil. Based on their location adjacent to the residence, the two fill ports could be associated with the heating oil tank for the residence. During the site reconnaissance, evidence of a potential fill port (stuffed with a rag) was observed in a cluster of vegetation on mounded soil to the northwest of the single-family residence, and south of the dilapidated barn. It is unclear if this fill port corresponds to the onsite septic system or a former gasoline underground storage tank (UST) reported by Ms. Richards. In a telephone conversation with Ms. Richards on November 11, 2015, Ms. Richards clarified that there are two USTs located in the area between the onsite single-family residence and the barn. One UST contained gasoline, formerly used to fuel tractors. The other UST was used to store heating oil for the single-family residence. Ms. Richards also indicated that there is a septic system on the subject property, but did not specify the location of the septic system. A rusted aboveground storage tank (AST) was observed adjacent to the east side of the dilapidated barn. This AST may correspond to a former diesel AST reported by Ms. Richards.

During the site reconnaissance, one 55-gallon drum labeled "Damoil" (an insecticide) was observed in the dilapidated barn at the subject property. It is unknown if the drum was empty, as the interior of the barn was not safe to access. Approximately four motor oil containers and one red gasoline container were observed within and around the barn on the subject property. The containers were observed from vantage points on the exterior of the barn due to the dilapidated condition of the structure. Therefore, it could not be ascertained whether the containers were empty, or whether there were indications of releases in the vicinity of the containers.

Several unidentified substance containers or unidentified containers that might contain hazardous substances were observed during the site reconnaissance, including rusted metal containers (possibly formerly used to store hazardous substances) within and near the barn structure. Approximately four heaters, one of which was labeled "Aura," were observed in the dilapidated barn. The heaters may have been formerly filled with oil. Debris such as rusted metal containers, wooden boxes, an air conditioning unit, and old farm equipment was



observed within and around the dilapidated barn on the subject property. Several old tires were also observed in the debris piles. The ground surface beneath and around the debris was not observable due to quantities of debris, vegetation, and unsafe conditions in the dilapidated barn.

According to Ms. Richards, a water well is located near the residence at the subject property. However, the exact location of the well could not be ascertained. Ms. Richards also indicated that the residence at the subject property is connected to a septic system. However, the exact location of the septic system could not be ascertained.

The subject property is located in an area that is primarily undeveloped woodlands with scattered residential development. Properties in the vicinity of the subject property include single-family residences, undeveloped woodland, and overhead power transmission lines.

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property and adjacent properties were not listed in any of the databases searched by EDR. However, two nearby properties were listed on release databases searched by EDR:

- **Connecticut Department of Correction Osborne/Correctional Institute (Somers) at 100 Bilton Road:** This property was plotted by EDR as located approximately 450 feet to the east of the subject property. However, based on the research conducted as part of this Phase I ESA, the correctional facility is located about 0.30 mile (about 1,600 feet) to the south of the subject property. Based on information provided by EDR, the correctional facility was listed on the CT MANIFEST, CT LUST, CT SPILLS, US AIRS, and CT CPCS databases.

The Connecticut Contaminated or Potentially Contaminated Sites database (CT CPCS) listing indicates that “a tank removal report by Fuss & O’Neill received on July 17, 1998 mentions the removal of a 3,000-gallon UST,” and that cleanup was initiated. The Connecticut Leaking Underground Storage Tank database (CT LUST) listing indicates that a release occurred on the correctional facility site in January 1998, and that the LUST status is “completed.” No additional information was provided in the EDR report.

The Connecticut Oil & Chemical Spill database (CT SPILLS) listing indicates that a release of one gallon of diesel fuel affected the ground surface on the correctional facility site in October 2002 due to hose failure. In addition, a release of 30 gallons of hydraulic oil occurred due to a blown seal in the mechanical room of the onsite building in March 2003. The listing noted that the “elevator service company cleaned [it] up,” the release was contained and cleaned. Furthermore, a release of 850 gallons of raw sewage occurred due to blockage/backup inside the onsite building in August 2005, and facility personnel cleaned up the release. Also, a release of 100 gallons of raw sewage affected ground surface onsite in December 2007 due to dumping, and the release was cleaned. In addition, a release of 18,000 gallons of raw sewage affected ground surface onsite occurred due to “blow back” in December 2008, and the release was cleaned. Furthermore, a release of 500 gallons of grey water affected the ground surface onsite due to line blockage in March 2012, and “bleach and water was used to clean it up.”



Based on the distance of this correctional facility from the subject property, and the anticipated groundwater flow direction to the west-southwest (away from the subject property), the correctional facility is not expected to be adversely impacting soil or groundwater beneath the subject property.

- ***State Correctional Facility at Walker Drive:*** This property, located approximately 0.25 mile to the west of the subject property, was listed on the CT LUST and CT CPCS databases.

The CT LUST listing indicates that a release occurred from an onsite commercial heating fuel tank greater than 2,100 gallons in size in June 1994. No additional information was provided in the EDR report.

The CT CPCS listing indicates that the site LUST status is “investigation.”

Based on the distance of this correctional facility/Walker Drive from the subject property and the anticipated groundwater flow direction to the west-southwest (away from the subject property), the correctional facility is not expected to be adversely impacting soil or groundwater beneath the subject property.

Historical sources reviewed as part of the Phase I ESA include aerial photographs, and topographic maps. The photos and maps reviewed indicate that the subject property was undeveloped woodland from 1934 to 1941, with one building located in the southeastern portion of the subject property. Central portions of the subject property were in use as orchards from approximately 1951 to 2002; from 2005 to 2012 the orchards appear to be fallow. Two buildings appear to be located in the southeastern portion of the subject property from approximately 1951 to 1957, and three buildings are present from 1966 to 2012; an east-west oriented transmission line traverses the northern portion of the subject property from approximately 1977 onwards. The historic topographic maps reviewed depict the subject property as undeveloped woodland in 1895, 1901 and 1919, one structure located on the subject property in 1946, orchards and two structures located on the subject property in 1958 and 1970, and three structures located on the subject property in 1979. City directories available for the subject property indicate that 134 Bilton Road was occupied by Bilton’s Fruit Farm in 1992, 1995, and 1999 and by residential tenants in 2003, 2008, and 2013.

Based on the findings of this Phase I ESA, it is our opinion that there are five potential Recognized Environmental Conditions (RECs) in connection with the subject property as follows:

***Potential Recognized Environmental Conditions***

1. Former use of the subject property as a fruit farm
2. Heating oil storage tank located at the onsite residence
3. Gasoline UST located near the onsite residence and barn
4. AST located near the onsite barn
5. Trash/debris located near the onsite barn



To evaluate the potential subject property impact associated with the former use of the subject property as a fruit farm, Rincon recommends collecting soil samples and analyzing the samples for organochlorine pesticides and arsenic.

To evaluate the potential subject property impact associated with the gasoline UST located between the residence and the barn on the subject property, Rincon recommends reviewing historic building permits and conducting a geophysical survey near the barn and residence to determine the exact location of the gasoline UST. Once the location of the gasoline UST has been confirmed, Rincon recommends collecting soil samples and analyzing the samples for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) and metals. In addition, Rincon recommends proper abandonment and removal of the UST if it is no longer in use and will not be used in the future.

To evaluate the potential subject property impact associated with the heating oil storage tank located near the residence on the subject property, Rincon recommends reviewing historic building permits and conducting a geophysical survey to determine the exact location of the heating oil storage tank. Once the location of the heating oil storage tank has been confirmed Rincon recommends collecting soil samples and analyzing the samples for TPH and VOCs. In addition, Rincon recommends proper abandonment and removal of the tank if it is no longer in use and will not be used in the future.

To evaluate the potential subject property impact associated with the AST located near the barn on the subject property, Rincon recommends collecting soil samples adjacent to the AST and analyzing the samples for VOCs and TPH.

Rincon recommends the removal and proper disposal of the trash and debris identified near the onsite barn in the southeastern portion of the subject property. Following the removal of the trash and debris, Rincon recommends conducting a visual survey in the vicinity of the barn to determine whether there is evidence of former releases from the heaters, unidentified substance containers, and fuel containers. If evidence of former releases is observed, soil sampling may be warranted.

Rincon also recommends reviewing building permits and conducting a geophysical survey to determine the exact location of the septic system and groundwater supply well located in the southeastern portion of the subject property.

Although not considered a REC, Rincon recommends proper abandonment of the groundwater supply well if it is not planned to be used following redevelopment of the subject property.

In addition, although not considered a REC, pursuant to ASTM E 1527-13, structures constructed prior to 1978 may contain lead-based paint (LBP) and structures constructed prior to 1981 may contain asbestos-containing building materials (ACBM). Based on the age of the onsite structures, there is the potential that LBP and ACBM were used during the construction of the onsite structures. To determine if LBP and ACBM are present in the onsite structures, LBP and ACBM surveys should be conducted.



## INTRODUCTION

This report presents the findings of a Phase I ESA conducted for the property located at 134 Bilton Road, Somers, Connecticut (Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. for Ecos Energy, LLC in general conformance with ASTM E 1527-13 and our proposal and contract dated October 8, 2015. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions.

### PURPOSE

The purpose of this Phase I ESA was to assess the environmental conditions of a property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 as,

*“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; 3) under conditions that pose a material threat of a future release to the environment”.*

A Controlled REC is defined pursuant to ASTM E 1527-13 as,

*“a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report”.*

A Historical REC is defined pursuant to ASTM E 1527-13 as,

*“a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition”.*



A de minimis condition is defined pursuant to ASTM E 1527-13 as,

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

## **SCOPE OF SERVICES**

The scope of services conducted for this study is outlined below:

- Perform a reconnaissance of the site to identify obvious indicators of the existence of hazardous materials.
- Observe adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtain and review an environmental records database search from Environmental Data Resources, Inc. (EDR) to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Review files for the subject property and immediately adjacent properties as identified in the EDR report, as applicable.
- Review the current U.S. Geological Survey (USGS) topographic map to obtain information about the subject property’s topography and uses of the subject property and properties in the vicinity of the subject property.
- Review additional pertinent record sources (e.g., online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Review reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provide a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Provide a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Conduct interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Review Client-provided information (e.g., previous environmental reports, title documentation), as applicable.

## **SIGNIFICANT ASSUMPTIONS, LIMITATIONS, DEVIATIONS, EXCEPTIONS, SPECIAL TERMS, AND CONDITIONS**

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and



historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary analysis.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce the client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E 1527-13 practice, our scope of services did not include any inquiries with respect to asbestos containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high voltage power lines.

## **USER RELIANCE**

Ecos Energy, LLC has requested this assessment and will use the assessment to provide information for the purposes of purchasing or acquiring said property. This Phase I ESA was prepared for use solely and exclusively by Ecos Energy, LLC. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

## **SITE DESCRIPTION**

### **Location**

The subject property is an approximately 76-acre property located west of Bilton Road and Brown Hill Road in Somers, Connecticut (Figure 2, Site Map). The northern portion of the subject property is located within Massachusetts state boundaries.

### **Subject Property and Vicinity General Characteristics**

The majority of the subject property consists of undeveloped woodland and former orchard areas, which are now overgrown and unused. The southeastern portion of the subject property is currently developed with a single-family residence, dilapidated barn, and a commercial building formerly used for fruit sales and sorting (now used for storage of furniture and miscellaneous household items). The subject property was formerly used as Bilton's Fruit Farm



but has not been actively used for fruit production and sales for approximately 20 years. Overhead power transmission lines traverse the northern portion of the subject property.

The subject property is located in an area that is primarily undeveloped woodlands with scattered residential development. Properties in the vicinity of the subject property include single-family residences, undeveloped woodland, and overhead power transmission lines. The current adjacent land uses are described in Table 1 and depicted on Figure 4, Adjacent Land Use Map.

**Table 1 - Current Uses of Adjacent Properties**

<b>Area</b>	<b>Use</b>
Northern Properties	Undeveloped woodlands and overhead power transmission lines
Eastern Properties	Undeveloped woodlands and single-family residences
Southern Properties	Undeveloped woodlands and single-family residences
Western Properties	Undeveloped woodlands

### **Descriptions of Structures, Roads, Other Improvements on the Site**

The southeastern portion of the subject property is developed with one single-family residence, constructed in approximately the 1890s and currently occupied by a residential tenant. A dilapidated wooden barn is present to the north of the residence. A concrete block commercial building, constructed in 1957 and formerly used for fruit sales and sorting, is also present at the southeastern portion of the subject property. This building is now used for storage of furniture and other household items. The subject property is otherwise generally vacant and undeveloped, with former fruit orchards (now overgrown) scattered throughout the central and northern portions of the subject property. An asphalt-paved driveway leads from Bilton Road to the commercial building, and unpaved trails and roads traverse the former orchards at the subject property.

Access to the subject property is available from a driveway on Bilton Road.

The site owner representative, Ms. Rebecca Richards, indicated that a water well is present at the southeastern portion of the property, near the residence. A belowground septic system for disposal of municipal sewage is also present at the western side of the residence.

EverSource provides electrical service. Solid waste collection and disposal services are provided by private vendors. There are no natural gas services for the subject property.

## **USER PROVIDED INFORMATION**

As described in ASTM E 1527-13 Section 6, Ecos Energy, LLC was interviewed for actual knowledge pertaining to the subject property to help identify recognized environmental conditions in connection with the property. Brad Wilson, Project Developer for Ecos Energy, LLC, completed the User Questionnaire as provided by ASTM Appendix X3. A copy of the completed questionnaire is included as Appendix 1.

Based on our review of the completed questionnaire, the user did not review the following sources of information and/or is unaware of information regarding the following:



- recorded land title records (or judicial records, where appropriate) that identify any environmental liens filed or recorded against the property
- recorded land title records (or judicial records, where appropriate) that identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law
- Title Report that identifies information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property
- specialized knowledge or experience related to the property or nearby properties
- commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases
- obvious indicators that point to the presence or likely presence of releases at the property
- pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site
- pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site
- notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products

Additionally, the user indicated that the purchase price being paid for the subject property reasonably reflects the fair market value of the property, and he is not aware of a reduction in value for the subject property relative to any known environmental issues.

## **RECORDS REVIEW**

### **PHYSICAL SETTING SOURCES**

#### **Topography**

The current USGS topographic map (Springfield South Quadrangle, 1979 photorevised from 1958) indicates that the subject property is situated at an elevation of about 350 feet above mean sea level with topography sloping to the west-southwest. The adjacent topography consists of gently sloping hills and valleys, and a marsh to the west.

#### **Geology and Hydrogeology**

According to *The Face of Connecticut: People, Geology, and the Land, State Geological and Natural History Survey of Connecticut, Bulletin 110*, Connecticut is fundamentally divided into a Collision terrane and a Great Crack terrane. The Collision terrane corresponds to the Eastern and Western Uplands, and the Great Crack corresponds to the Central Valley. The terranes may be further divided into four terranes from west to east of the state: the Proto-North American, Iapetos, Newark, Iapetos again, and Avalonian terranes. The Newark Terrane corresponds with the Central Valley Great Crack, and the others are subdivisions of the Uplands Collision terrane. Connecticut's present-day Uplands consist of moderate-sized plateaus and rolling hills.



## **Site Geology**

According to the Connecticut Geological and Natural History Survey, *Bedrock Geology of Connecticut, 2000*, the subject property is mainly underlain by Portland Arkose, which is described as “reddish-brown to maroon micaceous arkose and siltstone, and red to black fissile silty shale.” Arkose is described as “a feldspar-rich sandstone, commonly coarse-grained and pink or reddish, that is typically composed of angular to subangular grains that may be either poorly or moderately well sorted; quartz is usually the dominant material.”

According to the US Department of Agriculture’s Natural Resources Conservation Service online Web Soil Survey database, the subject property is mainly comprised of Broadbrook silt loam, very stony Narragansett silt loam, Narragansett silt loam, and very stony Wethersfield fine sandy loam in two to 15 percent slopes.

## **Regional Groundwater Occurrence and Quality**

According to the USGS Mineral Resources Online Spatial Data database, the subject property is located within the USGS Lower Connecticut hydrologic unit and the USGS Connecticut hydrologic subregion.

During the preparation of this Phase I ESA, we reviewed the USGS’s online Groundwater Watch database to determine groundwater elevation in the vicinity of the subject property:

- According to the field groundwater level measurement data for the USGS groundwater well (CT-SO 362) located near Turnpike Road, on September 17, 2015 groundwater was provisionally reported to be 26.59 feet below ground surface. An August 26, 2013 measurement indicates that groundwater was reported to be 28.18 feet below ground surface. This well is located approximately 3.5 miles to the southeast of the subject property.

Based on the site topography, groundwater in the vicinity of the subject property is anticipated to flow to the west-southwest in accordance with the topographic gradient.

## **STANDARD ENVIRONMENTAL RECORD SOURCES**

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix 2. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix 2 for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.



## Subject Property

The subject property was not listed on any of the regulatory databases reviewed.

## Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., LUST, National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed UST test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, “no further action”)
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

**Table 2 - EDR Listing Summary of Select Sites within One-Quarter Mile of the Subject Site**

Site Name	EDR Site ID	Site Address	Distance from Subject Property (miles)	Database Reference
<b>Nearby Release Sites</b>				
Connecticut Department of Correction Osborne/Correctional Institute (Somers)	A1, A3	100 Bilton Rd	<1/8 Mile – East*	<b>CT MANIFEST, CT LUST, CT SPILLS, US AIRS, CT CPCS</b>
State Correctional Facility	5	Walker Dr	1/8-1/4 Mile – West	<b>CT LUST, CT CPCS</b>

\* Location appears to be incorrectly plotted by EDR.

Note: EDR databases listed in bold are release databases.

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.



## Orphan Listings

EDR reported four orphan or unmapped site listings, which EDR is unable to plot due to insufficient address information. Based on Rincon's review of the limited address information or site descriptions for the orphan listings, none of the listings are expected to impact the subject property.

## ADDITIONAL ENVIRONMENTAL RECORD SOURCES

### Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, up-gradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., US EPA online RCRAInfo database) and/or files requested from the applicable regulatory agency, as described below. Copies of selected documents reviewed are included in Appendix 2.

### Subject Property

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

### Adjacent Properties

Adjacent properties were not listed in any of the databases searched by EDR.

### Nearby Release Sites

Two nearby properties were listed in databases searched by EDR:

- **Connecticut Department of Correction Osborne/Correctional Institute (Somers) at 100 Bilton Road:** This property was plotted by EDR as located approximately 450 feet to the east of the subject property. However, based on the research conducted as part of this Phase I ESA, the correctional facility is located about 0.30 mile (about 1,600 feet) to the south of the subject property. Based on information provided by EDR, the correctional facility was listed on the CT MANIFEST, CT LUST, CT SPILLS, US AIRS, and CT CPCS databases.

The Connecticut Contaminated or Potentially Contaminated Sites database (CT CPCS) listing indicates that "a tank removal report by Fuss & O'Neill received on July 17, 1998 mentions the removal of a 3,000-gallon UST," and that cleanup was initiated. The Connecticut Leaking Underground Storage Tank database (CT LUST) listing indicates that a release occurred on the correctional facility site in January 1998, and that the LUST status is "completed." No additional information was provided in the EDR report.

The Connecticut Oil & Chemical Spill database (CT SPILLS) listing indicates that a release of one gallon of diesel fuel affected the ground surface on the correctional facility site in October 2002 due to hose failure. In addition, a release of 30 gallons of hydraulic oil occurred due to a blown seal in the mechanical room of the onsite building in March 2003.



The listing noted that the “elevator service company cleaned [it] up,” the release was contained and cleaned. Furthermore, a release of 850 gallons of raw sewage occurred due to blockage/backup inside the onsite building in August 2005, and facility personnel cleaned up the release. Also, a release of 100 gallons of raw sewage affected ground surface onsite in December 2007 due to dumping, and the release was cleaned. In addition, a release of 18,000 gallons of raw sewage affected ground surface onsite occurred due to “blow back” in December 2008, and the release was cleaned. Furthermore, a release of 500 gallons of grey water affected the ground surface onsite due to line blockage in March 2012, and “bleach and water was used to clean it up.”

Based on the distance of this correctional facility from the subject property, and the anticipated groundwater flow direction to the west-southwest (away from the subject property), the correctional facility is not expected to be adversely impacting soil or groundwater beneath the subject property.

- **State Correctional Facility at Walker Drive:** This property, located approximately 0.25 mile to the west of the subject property, was listed on the CT LUST and CT CPCS databases.

The CT LUST listing indicates that a release occurred from an onsite commercial heating fuel tank greater than 2,100 gallons in size in June 1994. No additional information was provided in the EDR report.

The CT CPCS listing indicates that the site LUST status is “investigation.”

Based on the distance of this correctional facility/Walker Drive from the subject property and the anticipated groundwater flow direction to the west-southwest (away from the subject property), the correctional facility is not expected to be adversely impacting soil or groundwater beneath the subject property.

## **KNOWN OR SUSPECT CONTAMINATED RELEASE SITES WITH POTENTIAL VAPOR MIGRATION**

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-10, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If up-gradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons and other COCs.



### ***Petroleum Hydrocarbons***

Based on our review of the EDR report information as indicated above, there are no adjacent or up-gradient known or suspect petroleum hydrocarbon impacted soil or groundwater plumes located within 30 feet of the subject property.

### ***Other COCs***

Based on our review of the EDR report, there are no adjacent or up-gradient known or suspect contaminated soil or groundwater plumes located within 100 feet of the subject property.

### **Review of State of Connecticut Oil and Gas Sites**

EDR indicated that there are no oil wells in the state of Connecticut. In addition, a review of Connecticut oil and gas fracking sites<sup>1</sup> indicates that no natural gas drilling sites are located within ¼ mile of the subject property.

## **HISTORICAL USE INFORMATION ON THE PROPERTY AND THE ADJOINING PROPERTIES**

The historic records review completed for this Phase I ESA includes aerial photographs, topographic maps, and city directories as detailed in the following sections. Copies of the historical resources reviewed are included in Appendix 3. Table 3 provides a summary of the historical use information available for the subject property.

### **Review of Historic Aerial Photographs**

Aerial photographs from EDR's aerial photograph collection were obtained and reviewed.

### **Review of City Directory Listings**

EDR was contracted to provide copies of city directory listings for the subject property. As indicated in the attached report, no records were available for the northern and western adjacent properties.

### **Review of Fire Insurance Maps**

EDR was contracted to provide copies of fire insurance maps for the subject property. As indicated in the attached report, fire insurance maps were not available for the subject property or adjacent properties.

### **Review of Historic Topographic Maps**

Historic topographic maps from EDR's map collection were reviewed.

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<sup>1</sup> Drilling Maps: Map of Connecticut Oil & Gas Fracking Health & Safety Issues, <http://www.drillingmaps.com/connecticut.html#.VilePvIVhBc>



## Review of Town of Somers Building Permit Records

A review of land records available on the online Town of Somers Town Clerk database<sup>2</sup> did not reveal any building permits or occupancy permits for the subject property.

## Other Historic Sources

Based on information obtained during the completion of this Phase I ESA, other historic sources were not reviewed.

## Summary of Historic Uses

### Subject Property

Based on our review of the documents listed above and summarized in Table 3 below, it appears that the subject property was undeveloped woodland from 1934 to 1941, with one building located in the southeastern portion of the subject property. This building appears to be the existing onsite single-family residence. Central portions of the subject property were in use as orchards from approximately 1951 to 2002; from 2005 to 2012 the orchards appear to be fallow. Two buildings, the existing residence and barn, appear to be located in the southeastern portion of the subject property from approximately 1951 to 1957, and three buildings (the existing residence, barn, and commercial building) are present from 1966 to 2012. An east-west oriented transmission line traverses the northern portion of the subject property from approximately 1977 onwards. The historic topographic maps reviewed depict the subject property as undeveloped woodland in 1895, 1901 and 1919, one structure located on the subject property in 1946, orchards and two structures located on the subject property in 1958 and 1970, and three structures located on the subject property in 1979. City directories available for the subject property indicate that 134 Bilton Road was occupied by Bilton's Fruit Farm in 1992, 1995, and 1999 and by residential tenants in 2003, 2008, and 2013.

**Table 3 - Historical Use of the Subject Property**

Year	Use	Source
<b>134 Bilton Road, Somers, Connecticut</b>		
1895	The subject property is depicted as vacant.	Topographic Map (TM) – Springfield Quadrangle
1901	The subject property is depicted as vacant.	TM – Holyoke Quadrangle
1919	The subject property is depicted as covered in woodland.	TM – Springfield Quadrangle
1934	The subject property is mainly undeveloped woodland; the southern portion of the subject property is in use as orchards; a building (the existing single-family residence) is located in the southeastern portion of the subject property.	Aerial Photograph (AP) – USGS
1941	Similar to the 1934 AP.	AP - EDR
1946	One structure is depicted on the subject property.	TM – Springfield South

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<sup>2</sup> <https://connecticut-townclerks-records.com/LandRecords/protected/SrchQuickName.aspx>



Year	Use	Source
1951	The central portions of the subject property are in use as orchards; two buildings (the existing residence and barn) are located in the southeastern portion of the subject property.	AP - USGS
1957	Similar to the 1951 AP.	AP - USGS
1958	Orchards and two structures are depicted on the subject property.	TM – Springfield South
1966	The majority of the subject property is in use as orchards; three buildings (the existing residence, barn, and commercial building) are located in the southeastern portion of the subject property.	AP - EDR
1970	Similar to the 1958 TM.	TM – Springfield South
1970 (photorevised from 1958)	Similar to the 1966 AP.	AP - EDR
1977	Similar to the 1977 AP.	AP - USDA
1979 (photorevised from 1958)	Three structures are depicted on the subject property.	TM – Springfield South
1980	Three buildings are depicted in the southeastern portion of the subject property; the areas previously used for orchards appear to be cleared.	AP - EDR
1986	The majority of the subject property is in use as orchards; three buildings are located in the southeastern portion of the subject property.	AP - USGS
1990	Similar to the 1986 AP.	AP – USGS/DOQQ
1992	The subject property is listed as Bilton's Fruit Farm (134 Bilton Road).	City Directory (CD) – Cole Information Services
1995	Similar to the 1990 AP.	AP - EDR
1995	The subject property is listed as Bilton's Fruit Farm (134 Bilton Road).	CD – Cole Information Services
1999	The subject property is listed as Bilton's Fruit Farm (134 Bilton Road).	CD – Cole Information Services
2002	Central portions of the subject property are in use as orchards; three buildings are located in the southeastern portion of the subject property.	AP - EDR
2003	The subject property is occupied by a residential tenant.	CD – Cole Information Services
2005	The portions of the subject property previously used for orchards appear to be fallow; three buildings are located in the southeastern portion of the subject property.	AP – USDA/NAIP
2006	Similar to the 2005 AP.	AP – USDA/NAIP
2008	Similar to the 2006 AP.	AP – USDA/NAIP
2008	The subject property is occupied by a residential tenant.	CD – Cole Information Services
2010	Similar to the 2008 AP.	AP – USDA/NAIP
2012	Similar to the 2010 AP.	AP – USDA/NAIP
2013	The subject property is occupied by a residential tenant.	CD – Cole Information Services



### **Northern Adjacent Properties**

Based on our review of the documents listed above, it appears that the northern adjacent properties were undeveloped woodland from approximately 1934 to 2012. The historic topographic maps reviewed depict the northern adjacent properties as vacant land in 1895, 1901, 1919, and 1946, and woodland in 1958, 1970, and 1979. City directories were not available for the northern adjacent properties.

### **Eastern Adjacent Properties (4-12 Brow Hill Rd, 30-44 Hill Pasture Rd, and 120-151 Bilton Rd)**

Based on our review of the documents listed above, it appears that the eastern adjacent properties were undeveloped woodland, cleared land, and in use as orchards from approximately 1934 to 1957; by 1966, the eastern adjacent properties were undeveloped woodland, cleared land with dirt roads and two buildings present. By 1970, eight buildings were located on the eastern adjacent properties and from 1977 to 2012, 11 buildings were present. The historic topographic maps reviewed depict one structure located on the eastern adjacent properties in 1895 and 1946, depict the eastern adjacent properties as vacant in 1901 and 1919, depict orchards present in 1958, and depict at least 10 structures on the eastern adjacent properties in 1970 and 1979. City directories available for the eastern adjacent properties indicate the following:

- 120 Bilton Road: Occupied by residential tenants in 1992, 2003, 2008, and 2013
- 139 Bilton Road: Occupied by residential tenants in 2003, 2008, and 2013
- 145 Bilton Road: Occupied by residential tenants in 2003 and 2013
- 151 Bilton Road: Occupied by residential tenants in 1992, 1995, 2003, 2008, and 2013
- 30 Hill Pasture Road: Occupied by residential tenants in 1992, 1995, 1999, 2008, and 2013
- 33 Hill Pasture Road: Occupied by residential tenants in 1992, 1995, 1999, 2003, 2008, and 2013
- 36 Hill Pasture Road: Occupied by residential tenants in 1992, 1999, 2003, 2008, and 2013
- 44 Hill Pasture Road: Occupied by residential tenants in 1999, 2003, 2008, and 2013

### **Southern Adjacent Properties (156, 166, and 264 Bilton Rd)**

Based on our review of the documents listed above, it appears that the southern adjacent properties were in use as orchards near the southern boundary of the subject property and otherwise undeveloped woodland from approximately 1934 to 1941; a building was located on the southern adjacent properties from 1951 to 1966, and two buildings were present from 1970 to 2012. The historic topographic maps reviewed depict the southern adjacent properties as vacant in 1895 and 1901, as woodland in 1919, as vacant in 1946, as woodland, orchards with one structure in 1958 and 1970, and depict one structure on the southern adjacent properties in 1979. City directories available for the southern adjacent properties indicate that 156 Bilton Road was occupied by a residential tenant in 2003, 2008, and 2013. Farther to the south, 264 Bilton Road was occupied the State of Connecticut Department of Corrections in 1999, 2003, and 2013.

### **Western Adjacent Properties**

Based on our review of the documents listed above, it appears that the western adjacent properties were undeveloped woodland from approximately 1934 to 2012. The historic topographic maps reviewed depict the western adjacent properties as vacant land in 1895, 1901, 1919, and 1946, and woodland and marshes in 1958, 1970, and 1979. City directories were not available for the western adjacent properties.



## **Gaps in Historical Sources**

Several gaps of greater than 5 years were identified in the historical records reviewed, from 1895 to 1901, from 1901 to 1919, from 1919 to 1934, from 1934 to 1941, from 1951 to 1957, from 1958 to 1966, from 1970 to 1977, and from 1980 to 1986. These gaps are considered insignificant because the subject property use appears to be similar prior to and following the gaps.

## **INTERVIEWS**

Rincon Consultants performed interviews regarding the subject property and surrounding areas. The purpose of the interview was to discuss current and historical subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

### **INTERVIEW WITH OWNER**

An interview questionnaire was provided to the property owners. Ms. Rebecca Richards, one of the property owners, completed the questionnaire on November 1, 2015. A copy of the completed questionnaire is included in Appendix 1. In addition, Ms. Richards was interviewed during the site reconnaissance on October 20, 2015. The following information is based on information obtained during this interview and our review of the completed questionnaire.

In the questionnaire, Ms. Richards indicated the following:

- The subject property is currently open land.
- The northern adjacent properties are currently open land with a power line.
- The southern adjacent properties are currently used as single-family residences and state-owned correctional institute open land.
- The western adjacent properties are currently used as state-owned open land.
- The eastern adjacent properties are currently Bilton Road, single-family residences, and open land.
- The subject property was formerly owned and farmed by Merl Bilton until 1985.
- The northern adjacent properties were formerly open land.
- The southern adjacent properties were formerly single-family residences and partly owned by the Shakers.
- The western adjacent properties were formerly owned by the Shakers.
- The eastern adjacent properties were formerly Bilton Road, farmland, and open land.
- The current owners of the subject property are Rebecca S. Richards, Marion Dussault, Carolyn Ferioli, Jean M. Dulchinos, and Bradford Stewart.
- Ms. Ferioli and Ms. Dulchinos obtained ownership of the subject property in 1985, Mr. Stewart obtained ownership in 2003, and Ms. Richards and Ms. Dussault obtained ownership in 2006.
- The onsite cinderblock building was constructed in 1957, and all other onsite building ages are unknown.



- The former subject property owners were Alberta Bilton Schneider before Ms. Richards and Ms. Dussault, Merl Bilton before Ms. Ferioli and Ms. Duchinos, and Muriel Bilton Stewart before Mr. Stewart.

During the site reconnaissance, Ms. Richards indicated the following:

- The single-family residence on the subject property was built in approximately the 1890s and is now occupied by a residential tenant. The commercial building on the subject property was formerly used for fruit sales and sorting and was constructed in 1957.
- The subject property was formerly used for cultivation of various fruits, such as apples, peaches, plums, pears, and nectarines, and was known as Bilton's Fruit Farm. Some horses and cows were also kept at the property. However, the subject property has not been commercially active for approximately 20 years.
- Ms. Richards indicated that the subject property has been owned by her family since as early as the 1890s. Her father passed away approximately 20 years ago, and she has been an owner of the property since that time.

Ms. Richards also presented the following information regarding hazardous material and petroleum hydrocarbon storage and waste generation at the subject property.

- An underground storage tank (UST) is present near the residential building at the subject property. Ms. Richards was unaware of the exact location but indicated that it was likely on the western side of the residence. She believed that the UST was formerly used to store gasoline for tractors, and that the tank, although no longer used, was still present at the subject property. She was not aware of the date of installation of the UST. Fill ports and/or vent pipes observed during the site reconnaissance and possibly associated with the UST are discussed in the Storage Tanks section of this report.
- Ms. Richards was aware of a former diesel aboveground storage tank (AST) near the barn on the subject property. A diesel AST observed during the site reconnaissance is discussed in the Storage Tanks section of this report.
- She was unaware of whether maintenance of heavy equipment such as tractors was conducted at the subject property.
- Ms. Richards was unaware of whether pesticides or insecticides were applied to the former orchards or stored at the subject property.
- She was not aware of illegal dumping of wastes or debris at the subject property.
- Ms. Richards was aware of tractors and forklifts used on the subject property in connection with the previous farm operation.

In addition, Ms. Richards indicated that she is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, she is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

In a telephone conversation with Ms. Richards on November 11, 2015, Ms. Richards clarified that there are two USTs located in the area between the onsite single-family residence and the barn. One UST contained gasoline, formerly used to fuel tractors. The other UST was used to store heating oil for the single-family residence. Ms. Richards also indicated that there is a septic system and a private water well located on the subject property and currently used by the



onsite single-family residence; the water was tested by the Town of Somers in the past year or two and was determined to be safe for drinking.

## **INTERVIEW WITH SITE MANAGER**

A site manager (other than the owner) was not identified during the completion of this Phase I ESA.

## **INTERVIEWS WITH OCCUPANTS**

Based on information obtained from the subject property owner representative, no occupants were interviewed as part of this research effort.

## **INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS**

No local government officials were interviewed during the completion of this Phase I ESA.

## **INTERVIEWS WITH OTHERS**

Rincon did not attempt to interview neighboring property owners or others as part of this research effort.

## **SITE RECONNAISSANCE**

Rincon Consultants performed a reconnaissance of the subject property on October 20, 2015 accompanied by Ms. Rebecca Richards, one of the owners of the subject property. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

## **METHODOLOGY AND LIMITING CONDITIONS**

The site reconnaissance was conducted by 1) observing the subject property from public thoroughfares, 2) observing the adjacent properties from public thoroughfares, 3) observing the exterior of the onsite structures, and 4) observing the subject property from dirt roads and walking paths.

Because of the large size of the subject property, a tour of the subject property was provided by Ms. Richards and her husband via an all-terrain vehicle on accessible unpaved trails, and the majority of the undeveloped woodlands were not observed. Our observation of the subject property was limited by physical obstructions including the following: a locked commercial building, a single-family residence occupied by a tenant, and a dilapidated barn structure (unsafe to enter).



## **CURRENT USE OF THE PROPERTY AND ADJACENT PROPERTIES**

The subject property is currently vacant, except for the tenant-occupied single-family residence. A temporary camper occupied by a relative of Ms. Richards was also observed at the subject property. Adjacent businesses include undeveloped woodlands, single-family residences, and overhead power transmission lines. The overhead power transmission lines cross a section of the northern portion of the subject property.

## **PAST USE OF THE PROPERTY AND ADJACENT PROPERTIES**

The subject property was formerly used as Bilton's Fruit Farm, as evidenced by signage on the commercial building in the southeastern portion of the subject property, and as reported by Ms. Richards.

## **CURRENT OR PAST USES IN THE SURROUNDING AREAS**

The subject property is surrounded by residential and undeveloped land uses as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

## **GEOLOGIC, HYDROGEOLOGIC, HYDROLOGIC AND TOPOGRAPHIC CONDITIONS**

Geologic, hydrogeologic, hydrologic and topographic information are as previously stated in the Physical Settings section of this report.

## **GENERAL DESCRIPTION OF STRUCTURES**

Onsite structures are as described previously in the Site Description section of this report.

## **INTERIOR AND EXTERIOR OBSERVATIONS**

### **Storage Tanks**

During the site reconnaissance, evidence of a potential fill port (stuffed with a rag) was observed in a cluster of vegetation on mounded soil to the northwest of the single-family residence, and south of the dilapidated barn. It is unclear if this fill port corresponds to the septic system or the former gasoline UST.

During the site reconnaissance, two pipes, likely fill ports, were observed adjacent to the north side of the single-family residence at the subject property. The soil beneath the two fill ports appeared to be stained with oil. Based on their location adjacent to the residence, the two fill ports could be associated with the heating oil tank for the residence.

In a telephone conversation with Ms. Richards on November 11, 2015, Ms. Richards clarified that there are two USTs located in the area between the onsite single-family residence and the



barn. One UST contained gasoline, formerly used to fuel tractors. The other UST was used to store heating oil for the single-family residence. Ms. Richards also indicated that there is a septic system on the subject property, but did not specify the location of the septic system.

A rusted AST was observed adjacent to the east side of the dilapidated barn. This AST may correspond to the former diesel AST reported by Ms. Richards.

## **Drums**

During the site reconnaissance, one 55-gallon drum was observed in the dilapidated barn at the subject property. The drum was labeled "Damoil," which is an insecticide. It is unknown if the drum was empty, as the interior of the barn was not safe to access.

## **Hazardous Substances and Petroleum Products**

Approximately four motor oil containers and one red gasoline container were observed within and around the barn on the subject property. The containers were observed from vantage points on the exterior of the barn due to the dilapidated condition of the structure. Therefore, it could not be ascertained whether the containers were empty. No obvious indications of releases were observed in the vicinity of the containers; however, the ground surface could not be directly observed. No other hazardous substances or petroleum products were identified at the subject property.

## **Unidentified Substance Containers**

Several unidentified substance containers or unidentified containers that might contain hazardous substances were observed during the site reconnaissance, including rusted metal containers (possibly formerly used to store hazardous substances) within and near the barn structure.

## **Odors**

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

## **Pools of Liquid**

During the site reconnaissance, Rincon did not identify any pools of liquid including standing surface water. In addition, sumps containing liquids likely to be hazardous substances or petroleum products were not observed.

## **Indications of Polychlorinated Biphenyls (PCBs)**

During the site reconnaissance, Rincon observed a pole-mounted transformer located along the driveway from Bilton Road. There was no indication of a release in the vicinity of the transformer.



## **Other Conditions of Concern**

During the site reconnaissance Rincon did not note any of the following:

- stains or corrosion (except for stained soil, as discussed below)
- stained pavement
- clarifiers and sumps
- degreasers/parts washers
- pits, ponds, and lagoons
- stressed vegetation
- waste water

*Heating/Cooling* – As previously discussed in the Storage Tanks section above, two pipes (likely fill ports) were observed on the north side of the residence on the subject property. The fill ports could be associated with a heating oil UST used to heat the residential structure.

Approximately four heaters, one of which was labeled “Aura,” were observed in the dilapidated barn. The heaters may have been formerly filled with oil.

*Stained Soil* – As previously discussed in the Storage Tanks section above, oily staining was observed on the ground surface adjacent to the two fill ports on the north side of the residence.

*Solid Waste/Debris* – Debris such as rusted metal containers, wooden boxes, an air conditioning unit, and old farm equipment was observed within and around the dilapidated barn on the subject property. Several old tires were also observed in the debris piles. The ground surface beneath and around the debris was not observable due to quantities of debris, vegetation, and unsafe conditions in the dilapidated barn.

*Wells* – According to Ms. Rebecca Richards, a groundwater water supply well is located near the residence at the subject property. However, the exact location of the well could not be ascertained.

*Septic Systems/Effluent Disposal System* – According to Ms. Richards, the residence at the subject property is connected to a septic system. However, the exact location of the septic system could not be ascertained and was not identified by Ms. Richards.

## **EVALUATION**

### **FINDINGS**

Known or suspect environmental conditions associated with the property include the following:

- Former use of the subject property as a fruit farm
- Heating oil storage tank located at the onsite residence
- Gasoline UST located near the onsite residence and barn
- AST located near the onsite barn
- Trash/debris located near the onsite barn



- Onsite structures constructed prior to 1960

## OPINIONS

- A. **Former use of the subject property as a fruit farm** – Based on our review of historical sources, central portions of the subject property appeared to be in use as orchards from approximately 1951 to 2002. During the site reconnaissance, Ms. Rebecca Richards, one of the subject property owners, indicated that the subject property was formerly known as Bilton’s Fruit Farm and was used for cultivation of various fruits such as apples, peaches, plums, pears, and nectarines. According to Ms. Richards, some horses and cows were also kept onsite; however, the subject property has not been commercially active for approximately 20 years. Ms. Richards indicated that tractors and forklifts were used on the subject property in connection with the previous farm operation. In addition, Ms. Richards was unaware if maintenance on heavy equipment such as tractors was conducted at the subject property or if pesticides or insecticides were applied to the former orchards or stored at the subject property. Furthermore, one 55-gallon drum labeled “Damoil” (an insecticide) was observed in the dilapidated barn at the subject property during the site reconnaissance; it is unknown if the drum was empty, as the interior of the barn was not safe to access. Because orchards typically involve the use of organochlorine pesticides (OCPs) and arsenic, the former use of the subject property as a fruit farm is considered a *potential Recognized Environmental Condition (REC)*.
- B. **Heating oil storage tank located at the onsite residence** – During the site reconnaissance, two pipes, likely fill ports, were observed adjacent to the north side of the single-family residence located on the subject property. The soil beneath the fill ports appeared to be stained with oil. Based on their location adjacent to the residence, the fill ports could be associated with a heating oil storage tank to heat the residence. It is unknown whether any releases from the tank have occurred. Therefore, the presence of the heating oil storage tank located at the onsite residence is considered a *potential REC*.
- C. **Gasoline UST located near the onsite residence and barn** – During the site reconnaissance, two pipes, likely fill ports, were observed adjacent to the north side of the single-family residence located on the subject property and one fill pipe was located between the barn and the residence. Ms. Richards indicated that she was unaware of the exact location or date of installation of the gasoline UST. Ms. Richards believed that the UST was formerly used to store gasoline for tractors, and that the tank, although no longer used, was still present at the subject property. During the site reconnaissance, evidence of a potential fill port (stuffed with a rag) was observed in a cluster of vegetation on mounded soil to the northwest of the single-family residence, and south of the dilapidated barn. It is unclear if this fill port corresponds to the septic system or the former gasoline UST. The exact location of the UST and whether any releases from the tank occurred are unknown. Therefore, the gasoline UST located near the onsite residence and barn is considered a *potential REC*.
- D. **AST located near the onsite barn**– During the site reconnaissance, a rusted AST was observed adjacent to the east side of the dilapidated barn located on the subject property. This AST may correspond to the former diesel AST reported by Ms. Richards to be located onsite. Because it is unknown what the contents of the AST were and whether any releases from the tank occurred, the AST located near the onsite barn is considered a *potential REC*.



- E. *Trash/debris located near the onsite barn* – During the site reconnaissance, trash/ debris such as rusted metal containers, wooden boxes, an air conditioning unit, and old farm equipment were observed within and around the dilapidated barn on the subject property. Several old tires were also observed in the debris piles. The ground surface beneath and around the debris was not observable due to quantities of debris, vegetation, and unsafe conditions in the dilapidated barn. Approximately four heaters, one of which was labeled “Aura,” were also observed in the dilapidated barn; the heaters may have been formerly filled with oil. In addition, several unidentified substance containers or unidentified containers that might contain hazardous substances, including rusted metal containers (possibly formerly used to store hazardous substances), were observed within and near the barn structure. Furthermore, approximately four motor oil containers and one red gasoline container were observed within and around the barn on the subject property. It could not be ascertained whether the containers were empty because due to the dilapidated condition of the barn, the containers were observed from vantage points on the exterior of the barn. The presence of trash/ debris located near the onsite barn is considered a *potential REC*.
- F. *Onsite structures constructed prior to 1960* – Based on our review of historical sources and on information during the site reconnaissance, the existing single-family residence, wooden barn, and commercial building located in the southeastern portion of the subject property were built prior to 1978. It appears that the residence was present onsite from approximately 1895 onwards, the dilapidated wooden barn was present onsite from approximately 1951 onwards, and the cinderblock commercial building was present onsite from approximately 1957 onwards.

## CONCLUSIONS

Rincon has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E 1527-13 for the property located at 134 Bilton Road, Somers, Connecticut. This assessment has revealed evidence of five potential Recognized Environmental Conditions (RECs) in connection with the subject property as follows:

### *Potential Recognized Environmental Conditions*

1. Former use of the subject property as a fruit farm
2. Heating oil storage tank located at the onsite residence
3. Gasoline UST located near the onsite residence and barn
4. AST located near the onsite barn
5. Trash/ debris located near the onsite barn

## RECOMMENDATIONS

To evaluate the potential subject property impact associated with the former use of the subject property as a fruit farm, Rincon recommends collecting soil samples and analyzing the samples for organochlorine pesticides and arsenic.

To evaluate the potential subject property impact associated with the gasoline UST located between the residence and the barn on the subject property, Rincon recommends reviewing historic building permits and conducting a geophysical survey near the barn and residence to determine the exact location of the gasoline UST. Once the location of the gasoline UST has been



confirmed, Rincon recommends collecting soil samples and analyzing the samples for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) and metals. In addition, Rincon recommends proper abandonment and removal of the UST if it is no longer in use and will not be used in the future.

To evaluate the potential subject property impact associated with the heating oil storage tank located near the residence on the subject property, Rincon recommends reviewing historic building permits and conducting a geophysical survey to determine the exact location of the heating oil storage tank. Once the location of the heating oil storage tank has been confirmed Rincon recommends collecting soil samples and analyzing the samples for TPH and VOCs. In addition, Rincon recommends proper abandonment and removal of the tank if it is no longer in use and will not be used in the future.

To evaluate the potential subject property impact associated with the AST located near the barn on the subject property, Rincon recommends collecting soil samples adjacent to the AST and analyzing the samples for VOCs and TPH.

Rincon recommends the removal and proper disposal of the trash and debris identified near the onsite barn in the southeastern portion of the subject property. Following the removal of the trash and debris, Rincon recommends conducting a visual survey in the vicinity of the barn to determine whether there is evidence of former releases from the heaters, unidentified substance containers, and fuel containers. If evidence of former releases is observed, soil sampling may be warranted.

Rincon also recommends reviewing building permits and conducting a geophysical survey to determine the exact location of the septic system and groundwater supply well located in the southeastern portion of the subject property.

Although not considered a REC, Rincon recommends proper abandonment of the groundwater supply well if it is not planned to be used following redevelopment of the subject property.

In addition, although not considered a REC, pursuant to ASTM E 1527-13, structures constructed prior to 1978 may contain lead-based paint (LBP) and structures constructed prior to 1981 may contain asbestos-containing building materials (ACBM). Based on the age of the onsite structures, there is the potential that LBP and ACBM were used during the construction of the onsite structures. To determine if LBP and ACBM are present in the onsite structures, LBP and ACBM surveys should be conducted.

## **DEVIATIONS**

Deviations from ASTM Practice were encountered during the completion of this Phase I ESA. A lien search and chain of title review were not completed as part of this assessment.



## REFERENCES

The following published reference materials were used in preparation of this Phase I ESA:

Environmental database: Environmental Data Resources (EDR) report dated October 9, 2015.

Geology: Connecticut Department of Environmental Protection, State Geological and Natural History Survey of Connecticut, and Michael Bell, *Bulletin 110, The Face of Connecticut: People, Geology, and the Land*, 1985:  
[http://www.tmsc.org/face\\_of\\_ct/index.html](http://www.tmsc.org/face_of_ct/index.html); USGS Mineral Resources Online Spatial Data database, <https://mrdata.usgs.gov/geology/state/state.php?state=CT>; United States Department of Agriculture (USDA), National Resources Conservation Service (NRCS), *Web Soil Survey (WSS)*: <http://websoilsurvey.nrcs.usda.gov/app/>.

Groundwater: USGS Mineral Resources Online Spatial Data database, <https://mrdata.usgs.gov/geology/state/state.php?state=CT>; USGS Groundwater Watch Long-Term Groundwater Data Network, <http://groundwaterwatch.usgs.gov/Net/OGWNetworkLTN.asp?ncd=ltn&a=1&d=1>.

Topography: USGS topographic map (1979 photorevised from 1958, Springfield South Quadrangle).

Oil and gas records: Drilling Maps: Map of Connecticut Oil & Gas Fracking Health & Safety Issues, <http://www.drillingmaps.com/connecticut.html#.VilePvIVhBc>; EDR Report dated October 9, 2015.

Aerial photographs: Photos provided by EDR.

Fire insurance maps: Maps provided by EDR.

City directory listings: Listings provided by EDR.

Historic topographic maps: Maps provided by EDR.

Parcel data: Town of Somers online ArcGIS Server Parcel Application, Connecticut Council of Governments online GIS Map Viewer, [http://somers.mapxpress.net/ags\\_map/](http://somers.mapxpress.net/ags_map/).



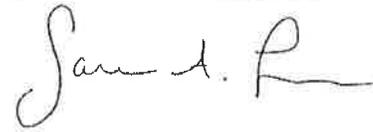
## SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The qualified environmental professionals that are responsible for preparing the report include Walt Hamann and Sarah A. Larese. Their qualifications are summarized in the following section.

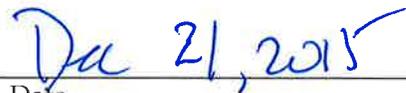
"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

  
\_\_\_\_\_  
Signature

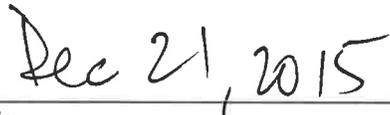
Walt Hamann, PG, CEG, CHG  
\_\_\_\_\_  
Name

  
\_\_\_\_\_  
Signature

Sarah A. Larese  
\_\_\_\_\_  
Name

  
\_\_\_\_\_  
Date

Vice President  
\_\_\_\_\_  
Title

  
\_\_\_\_\_  
Date

Senior Environmental Scientist  
\_\_\_\_\_  
Title



## QUALIFICATIONS OF ENVIRONMENTAL CONSULTANTS

The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Walt Hamann, Sarah A. Larese, Shannon Phelan, and Savanna Vrevich. Their qualifications are summarized below.

Environmental Professional Qualifications	X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience	X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries	X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience	X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience
Walt Hamann	PG, CHG, CEG		MS Geology	30 years
Sarah A. Larese			BA Environmental Studies	16 years
Shannon Phelan			BA Environmental Studies	10 years
Savanna Vrevich			BS Environmental Studies	1 year

**Walt Hamann**, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 30 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

**Sarah A. Larese** is a Senior Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in environmental studies from the University of California, Santa Barbara, California. Ms. Larese has experience in development, implementation and project management of environmental assessment and remediation projects, especially relating to underground storage tanks. Ms. Larese’s responsibilities at Rincon include implementation of Phase I and II Environmental Site Assessments as well as conducting site remediation field activities and preparation of environmental reports. She has 16 years of experience conducting research, assessment and remediation projects.

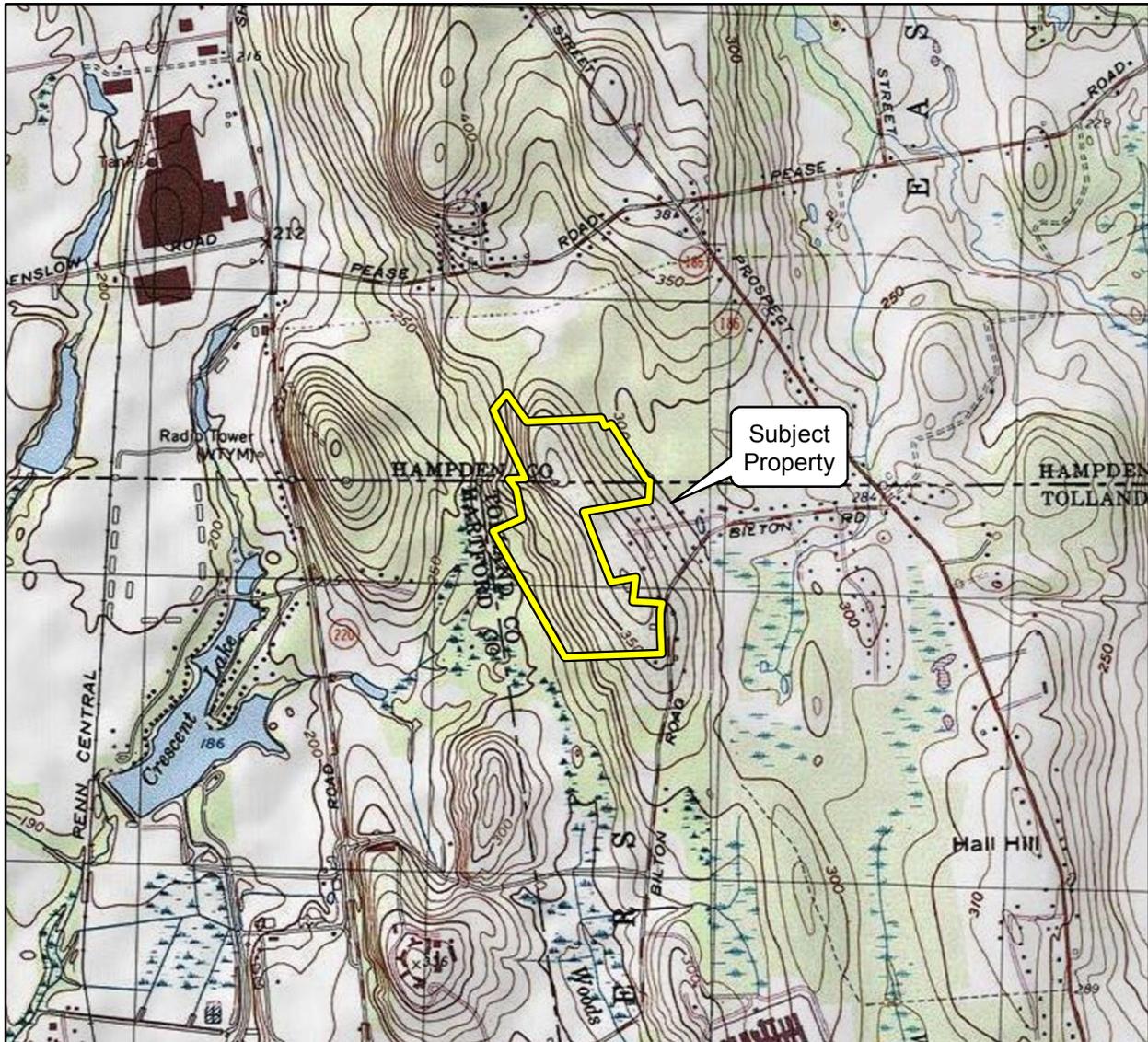
**Shannon Phelan** is an Environmental Scientist with Rincon Consultants. She holds a Bachelor of Arts degree in environmental studies from University of San Diego, California. Ms. Phelan has ten years of experience conducting environmental site assessments and related due diligence studies to support real estate transactions, as well as environmental history investigations and corridor and area-wide studies to be included in planning documents for large-scale infrastructural improvements. Ms. Phelan has prepared hundreds of Phase I and Phase II Environmental Site Assessments of a variety of properties on behalf of financial institutions, developers, real estate investors, and local, state, and federal governmental



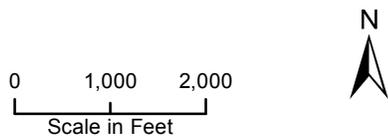
agencies. Ms. Phelan's experience also includes detailed historical and regulatory research for litigation support.

**Savanna Vrevich** is an Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Environmental Studies with an outside concentration of Ecology, Evolution, and Marine Biology from the University of California, Santa Barbara. Ms. Vrevich's responsibilities at Rincon include implementation of Phase I Environmental Site Assessment Reports.



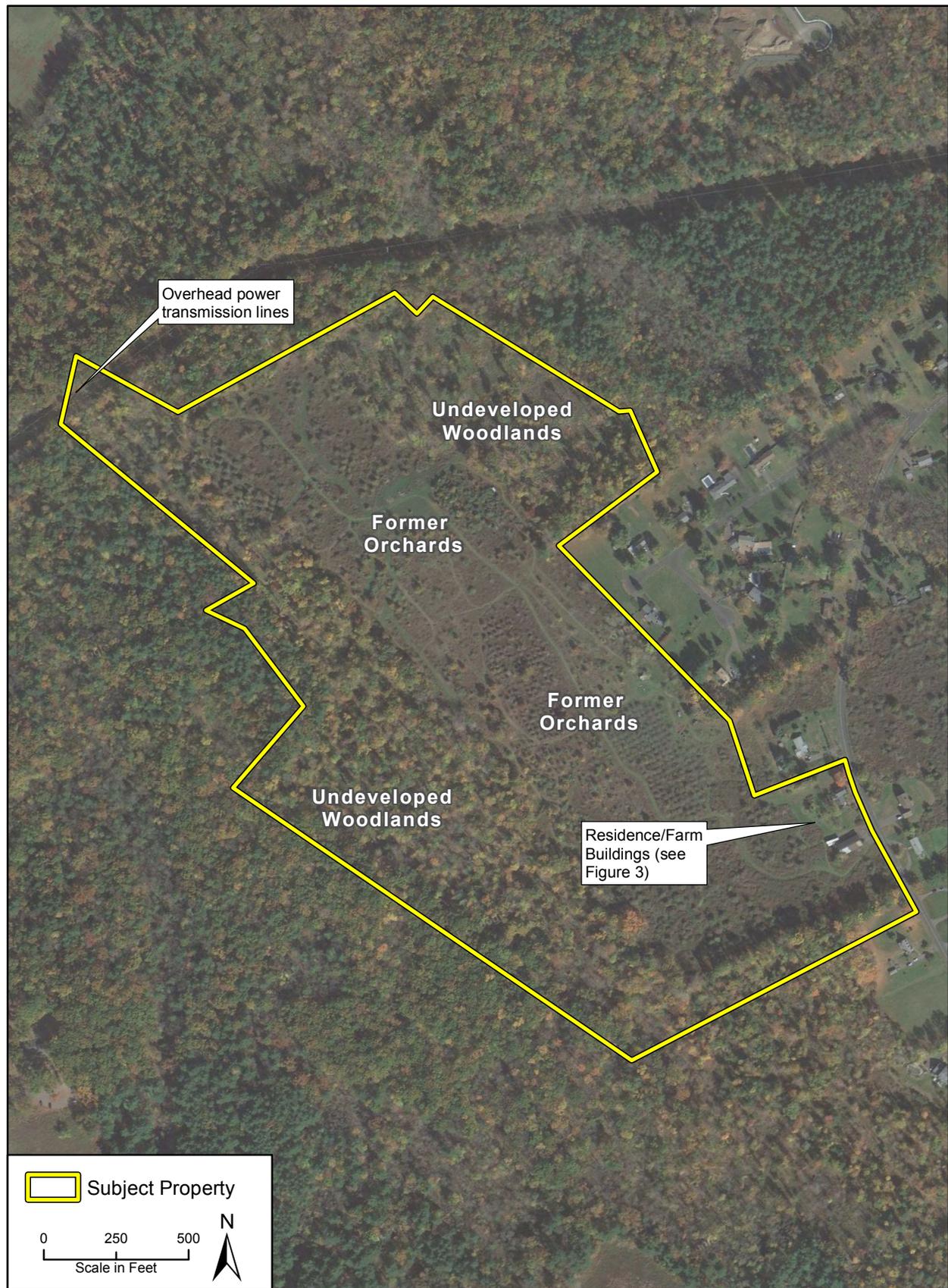


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Vicinity Map

Figure 1

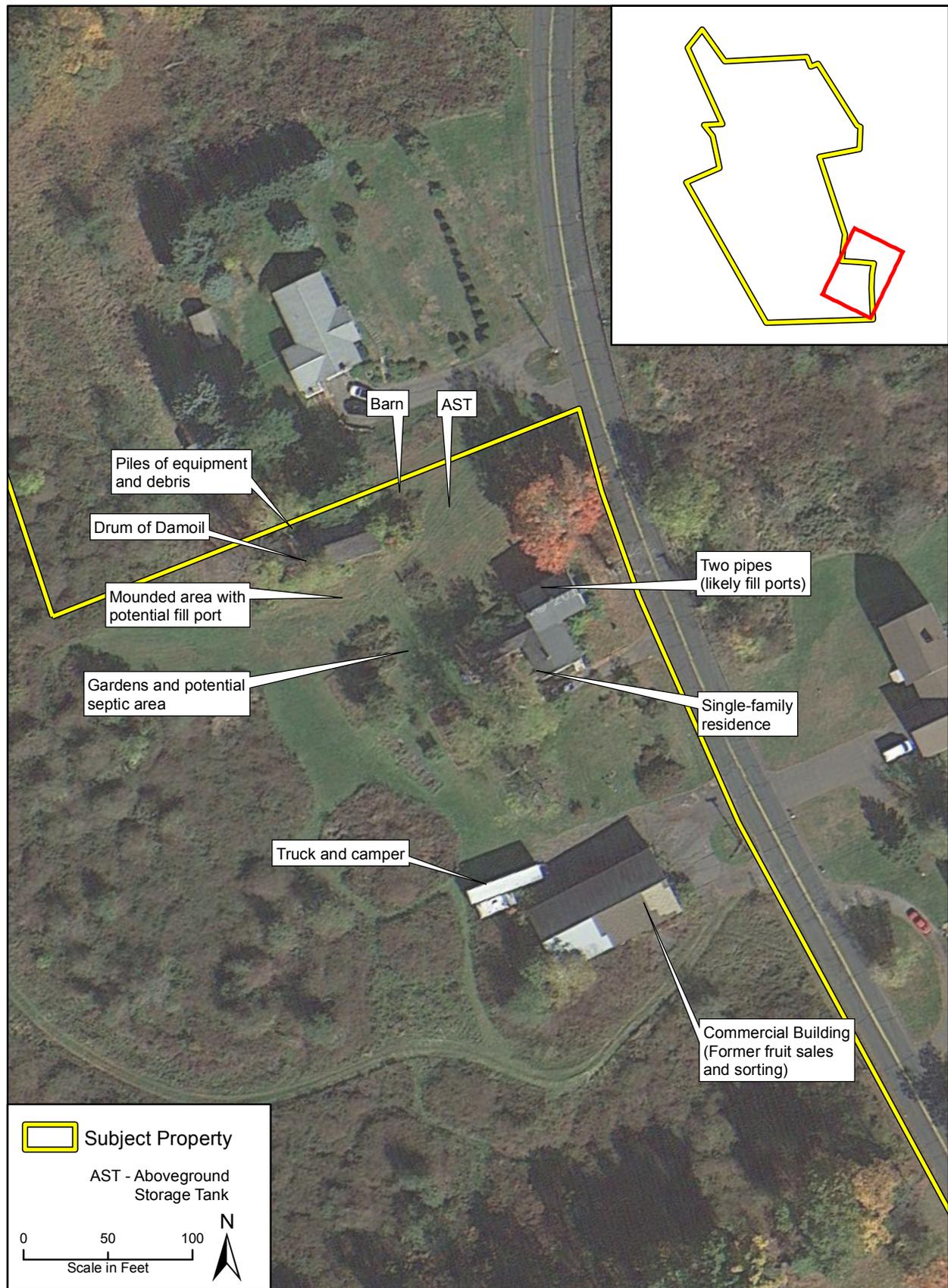


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Site Map

Figure 2





Site Map

Figure 3



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Adjacent Land Use Map

Figure 4



**Photograph 1:** View of the former fruit sales and sorting building on the subject property, facing west.



**Photograph 2:** View of the residence on the subject property, facing northwest.



**Photograph 3:** View of the garden and potential septic area west of the residence, facing north.



**Photograph 4:** View of unpaved roadway through the former orchards on the subject property, facing north.



**Photograph 5:** View of typical woodlands at the subject property.



**Photograph 6:** View of the overhead power line easement that crosses the northern portion of the subject property, facing west.

**Figure 5**





**Photograph 7:** View of a fill port and vent pipe on the northern side of the residence at the subject property.



**Photograph 8:** View of a vegetated mound with potential fill port, to the northwest of the residence, facing southeast.



**Photograph 9:** Close-up view of the potential fill port in the mounded area to the northwest of the residence.



**Photograph 10:** View of the barn and AST at the subject property, facing north.



**Photograph 11:** View of the interior of the barn, facing north.



**Photograph 12:** View of the drum of Damoil within the barn.

**Figure 6**





**Photograph 13:** View of piles of rusted debris adjacent to the barn at the subject property.



**Photograph 14:** View of the residence adjacent to the east of the subject property, facing east.



**Photograph 15:** View of the residence adjacent to the south of the subject property, facing southwest.

**Figure 7**



# **Appendix 1**

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*Interview Documentation*

**User Questionnaire**  
**Rincon Project 15-02082 – 134 Bilton Road, Somers, CT**

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To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the “Brownfields Amendments”), the user must provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that “all appropriate inquiries” is not complete.

*We respectfully request that you fill out this form and e-mail it to [Savanna Vrevich](mailto:Savanna.Vrevich@RinconConsultants.com) at [svrevich@RinconConsultants.com](mailto:svrevich@RinconConsultants.com) within one week from the date of this transmittal.*

1. Why is the Phase I ESA required or being performed?	Required by Connecticut solar project permitting process
2. What type of property transaction is planned? (i.e. sale, purchase, exchange, etc.)	Purchase
3. What is the entire site address?	134 Bilton Road, Somers, CT 06071
4. What is the Assessor’s Parcel Number(s)?	unknown
5. Are any considerations beyond the requirements of Practice E1527 to be considered? (i.e. lien search, asbestos & lead based paint, radon, etc.)	unknown
6. Identify all parties who will rely on the Phase I report.	PLH, LLC Ecos Energy, LLC Connecticut Solar Siting Board
7. Identify the Site Manager/Contact and how the contact can be reached.	Brad Wilson 612-460-8605
8. Identify the Site Owner and how the owner can be reached.	contact Brad Wilson with any questions for Site Owner 612-460-8605



9. Do you have copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning any other knowledge or experience with the property that may be pertinent to the environmental professional (i.e. title report, previous Ph I and II ESAs, Environmental Impact Studies, etc.)?	No
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1. Did a search of *recorded land title records* (or judicial records, where appropriate) identify any environmental liens filed or recorded against the *property*?

Please checkmark the most appropriate response:

- I *have not* reviewed the records and *do not know* if there are any filed or recorded environmental liens.
- I *have* reviewed the records, and *No, there aren't any* filed or recorded environmental liens.
- I *have* reviewed the records, and *Yes, there are* environmental liens. Explain:

2. Did a search of recorded land title records (or judicial records, where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?

Please checkmark the most appropriate response:

- I *have not* reviewed the records and *do not know* if there are any filed/recorded AULs or any AULs in place at the site.
- I *have* reviewed the records, and *No, there aren't any* filed/recorded AULs or any AULs in place at the site.
- I *have* reviewed the records, and *Yes, there are* AULs filed, recorded, and/or in place at the site. Explain:



3. Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?

Please checkmark the most appropriate response:

- I *have not* reviewed the Title Report and *do not know* if it provides environmental cleanup liens or AULs information.
- I *have* reviewed the Title Report, and *No, it does not* provide environmental cleanup liens or AULs information.
- I *have* reviewed the Title Report, and *Yes, it does provide* environmental cleanup liens or AULs information. Explain:

4. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Please checkmark the most appropriate response:

- No, I do not* have any specialized knowledge and/or experience related to the property or nearby properties.
- Yes, I do* have specialized knowledge and/or experience related to the property or nearby properties. Explain:

5. As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?

Please checkmark the most appropriate response:

- No, I do not* have any information about a reduction in property value relative to environmental issues.
- Yes, I do* have information about a reduction in property value relative to environmental issues. Explain:



6. Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

Please checkmark the most appropriate response:

- Yes, I *do* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.
- No, I *do not* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

- a. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (40 CFR 312.29)

Please checkmark the most appropriate response:

- No, I *have not* considered the idea that known or believed contamination at the site has caused the lower purchase price.
- Yes, I *have* considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain.

7. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,

- a. Do you know the past uses of the property?

- I *do not* know.
- I *do* know. Explain:

- b. Do you know of specific chemicals are present or once were present at the property?

- I *do not* know.
- I *do* know. Explain:

- c. Do you know of any spills or other chemical releases that have taken place at the property?

- I *do not* know.
- I *do* know. Explain:



d. Do you know of any environmental cleanups have taken place at the property?

- I *do not* know.
- I *do* know. Explain:

8. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

Please checkmark the most appropriate response:

- No, I do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.*
- Yes, I do know of and/or do have experience with obvious indicators that point to the presence or likely presence of contamination at the property. Explain:*

9. Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site?

- No, I am not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site.*
- Yes, I am aware of pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site. Explain:*

10. Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site?

- No, I am not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.*
- Yes, I am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site. Explain:*



11. Are you aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

- No, I am not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.
- Yes, I am aware of a notice, or notices, from a government entity (or multiple government entities) regarding a possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Explain:

This questionnaire was completed by (please print):

Name	Brad Wilson	
Title	Project Developer	
Firm	Ecos Energy, LLC	
Street Address	222 South 9th Street, Suite 1600	
City, State, Zip Code	Minneapolis, MN 55402	
Phone Number	612-460-8605	
Fax Number	no	
What is the preparer's relationship to the property (i.e., seller, buyer, occupant, property manager, employee, agent, consultant, etc.)?	Buyer	

The preparer represents that to the best of the preparer's knowledge the above statements and facts are **true and correct, and to** the best of the preparer's knowledge, no material facts have been **suppressed or misstated.**

Signature



Date 12/17/15

Please email this form to Savanna Vrevich at [svrevich@RinconConsultants.com](mailto:svrevich@RinconConsultants.com). This form may also be mailed or faxed to the following address:

Rincon Consultants, Inc.  
 Attention: Savanna Vrevich, Environmental Site Assessment Division  
 5135 Avenida Encinas, Suite A  
 Carlsbad, California 92008  
 Fax: (760) 918-9449



**Property Owner Interview Questionnaire**  
**Rincon Project 15-02082 – 134 Bilton Road, Somers, CT**

*(Answered questions including backside of Pease Rd in East Longmeadow (R.))*

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form (via fax 760-918-9449 or email Savanna Vrevich) to us within one week from the date of this transmittal.

1)	<p><b>Was the subject property or any adjoining property ever used as:</b></p> <table border="0"> <tr> <td><input type="checkbox"/> a gasoline or other fueling station</td> <td><input type="checkbox"/> a junkyard or landfill</td> </tr> <tr> <td><input type="checkbox"/> a motor vehicle repair facility</td> <td><input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility</td> </tr> <tr> <td><input type="checkbox"/> a commercial printing facility</td> <td><input type="checkbox"/> a machine shop</td> </tr> <tr> <td><input type="checkbox"/> a dry cleaners</td> <td><input type="checkbox"/> a manufacturing facility</td> </tr> <tr> <td><input type="checkbox"/> a photo developing laboratory</td> <td><input type="checkbox"/> an oil production facility (including oil wells)</td> </tr> <tr> <td><input type="checkbox"/> a metal plating facility</td> <td><input type="checkbox"/> any other industrial use</td> </tr> <tr> <td><input checked="" type="checkbox"/> a farm</td> <td></td> </tr> </table> <p>(please check all that apply and describe)</p>	<input type="checkbox"/> a gasoline or other fueling station	<input type="checkbox"/> a junkyard or landfill	<input type="checkbox"/> a motor vehicle repair facility	<input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility	<input type="checkbox"/> a commercial printing facility	<input type="checkbox"/> a machine shop	<input type="checkbox"/> a dry cleaners	<input type="checkbox"/> a manufacturing facility	<input type="checkbox"/> a photo developing laboratory	<input type="checkbox"/> an oil production facility (including oil wells)	<input type="checkbox"/> a metal plating facility	<input type="checkbox"/> any other industrial use	<input checked="" type="checkbox"/> a farm	
<input type="checkbox"/> a gasoline or other fueling station	<input type="checkbox"/> a junkyard or landfill														
<input type="checkbox"/> a motor vehicle repair facility	<input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility														
<input type="checkbox"/> a commercial printing facility	<input type="checkbox"/> a machine shop														
<input type="checkbox"/> a dry cleaners	<input type="checkbox"/> a manufacturing facility														
<input type="checkbox"/> a photo developing laboratory	<input type="checkbox"/> an oil production facility (including oil wells)														
<input type="checkbox"/> a metal plating facility	<input type="checkbox"/> any other industrial use														
<input checked="" type="checkbox"/> a farm															
2)	<p><b>Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.</b></p>														
2a	<p><b>Current Use of Subject Property</b> (please check all that apply)</p> <table border="0"> <tr> <td><input type="checkbox"/> Commercial (retail, offices, etc.)</td> <td rowspan="4" style="vertical-align: top;">(please include a brief description of current operation)  <i>Open Land</i></td> </tr> <tr> <td><input type="checkbox"/> Residential (single family or apartments)</td> </tr> <tr> <td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Other- Please Describe</td> </tr> </table>	<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>Open Land</i>	<input type="checkbox"/> Residential (single family or apartments)	<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)	<input checked="" type="checkbox"/> Other- Please Describe									
<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>Open Land</i>														
<input type="checkbox"/> Residential (single family or apartments)															
<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)															
<input checked="" type="checkbox"/> Other- Please Describe															
2b	<p><b>Current Use of Northern Adjoining Properties</b> (please check all that apply)</p> <table border="0"> <tr> <td><input type="checkbox"/> Commercial (retail, offices, etc.)</td> <td rowspan="4" style="vertical-align: top;">(please include a brief description of current operation)  <i>Powerline Openland</i></td> </tr> <tr> <td><input type="checkbox"/> Residential (single family or apartments)</td> </tr> <tr> <td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Other- Please Describe</td> </tr> </table>	<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>Powerline Openland</i>	<input type="checkbox"/> Residential (single family or apartments)	<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)	<input checked="" type="checkbox"/> Other- Please Describe									
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<input type="checkbox"/> Residential (single family or apartments)															
<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)															
<input checked="" type="checkbox"/> Other- Please Describe															
2c	<p><b>Current Use of Southern Adjoining Properties</b> (please check all that apply)</p> <table border="0"> <tr> <td><input type="checkbox"/> Commercial (retail, offices, etc.)</td> <td rowspan="4" style="vertical-align: top;">(please include a brief description of current operation)  <i>Part Single family Part State Owned Correctional Institute Open Land</i></td> </tr> <tr> <td><input checked="" type="checkbox"/> Residential (single family or apartments)</td> </tr> <tr> <td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Other- Please Describe</td> </tr> </table>	<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>Part Single family Part State Owned Correctional Institute Open Land</i>	<input checked="" type="checkbox"/> Residential (single family or apartments)	<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)	<input checked="" type="checkbox"/> Other- Please Describe									
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<input checked="" type="checkbox"/> Residential (single family or apartments)															
<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)															
<input checked="" type="checkbox"/> Other- Please Describe															
2d	<p><b>Current Use of Western Adjoining Properties</b> (please check all that apply)</p> <table border="0"> <tr> <td><input type="checkbox"/> Commercial (retail, offices, etc.)</td> <td rowspan="4" style="vertical-align: top;">(please include a brief description of current operation)  <i>State Owned Open land</i></td> </tr> <tr> <td><input type="checkbox"/> Residential (single family or apartments)</td> </tr> <tr> <td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Other- Please Describe</td> </tr> </table>	<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>State Owned Open land</i>	<input type="checkbox"/> Residential (single family or apartments)	<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)	<input checked="" type="checkbox"/> Other- Please Describe									
<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>State Owned Open land</i>														
<input type="checkbox"/> Residential (single family or apartments)															
<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)															
<input checked="" type="checkbox"/> Other- Please Describe															
2e	<p><b>Current Use of Eastern Adjoining Properties</b> (please check all that apply)</p> <table border="0"> <tr> <td><input type="checkbox"/> Commercial (retail, offices, etc.)</td> <td rowspan="4" style="vertical-align: top;">(please include a brief description of current operation)  <i>Part Bilton Rd Part Single family Part Open land</i></td> </tr> <tr> <td><input checked="" type="checkbox"/> Residential (single family or apartments)</td> </tr> <tr> <td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Other- Please Describe</td> </tr> </table>	<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>Part Bilton Rd Part Single family Part Open land</i>	<input checked="" type="checkbox"/> Residential (single family or apartments)	<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)	<input checked="" type="checkbox"/> Other- Please Describe									
<input type="checkbox"/> Commercial (retail, offices, etc.)	(please include a brief description of current operation)  <i>Part Bilton Rd Part Single family Part Open land</i>														
<input checked="" type="checkbox"/> Residential (single family or apartments)															
<input type="checkbox"/> Industrial (manufacturing, warehousing, processing)															
<input checked="" type="checkbox"/> Other- Please Describe															

**Property Owner Interview Questionnaire**

Rincon Project 15-02082 – 134 Bilton Road, Somers, CT

3)	<b>Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.</b>	
3a	<b>Previous Use of Subject Property</b> (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input checked="" type="checkbox"/> Other- Please Describe	(please include a brief description of previous operations, former property owners, and dates of operation)  <i>Merl Bilton owned and farmed until 1985</i>
3b	<b>Previous Use of Northern Adjoining Properties</b> (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input checked="" type="checkbox"/> Other- Please Describe	(please include a brief description of previous operations)  <i>Open Land</i>
3c	<b>Previous Use of Southern Adjoining Properties</b> (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input checked="" type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input checked="" type="checkbox"/> Other- Please Describe	(please include a brief description of previous operations)  <i>Part Single family Part Owned by Shakers</i>
3d	<b>Previous Use of Western Adjoining Properties</b> (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input checked="" type="checkbox"/> Other- Please Describe	(please include a brief description of previous operations)  <i>Owned by Shakers</i>
3e	<b>Previous Use of Eastern Adjoining Properties</b> (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input checked="" type="checkbox"/> Other- Please Describe	(please include a brief description of previous operations)  <i>Part Bilton Rd Part Farm land Part Open land</i>

4)	<b>Who is the current owner of the property?</b>	<i>Rebecca S Richards / Marion Dussault Carolyn Ferioli / Jean M Dulchinos / Bradford Stewart</i>
5)	<b>When did current ownership begin?</b>	<i>2006 - Richards / Dussault 1985 - Ferioli / Dulchinos 2003 - Bradford Stewart</i>
6)	<b>What is the age of the on-site facility?</b>	<i>Cinderblock Bid - 1957 / All others Unknown - Old</i>
7)	<b>Who is the previous owner of the property?</b>	<i>Alberta Bilton Schneider before Richards + Dussault Merl Bilton before Ferioli + Dulchinos Muriel Bilton Stewart before Bradford Stewart</i>

**Property Owner Interview Questionnaire**

Rincon Project 15-02082 – 134 Bilton Road, Somers, CT

8)	<b>Please indicate the property's current</b>	
	electrical service provider -	<i>Eversource</i>
	water service provider -	<i>Well</i>
	natural gas service provider -	<i>N/A</i>
	sewer service provider -	<i>Septic</i>
	solid waste hauler -	<i>N/A</i>

9)	<b>To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate? (if yes or unknown, include how many, type, and size)</b>	
	<input type="checkbox"/> Damaged or discarded automotive or industrial batteries	<i>No</i>
	<input type="checkbox"/> Paints	<i>No</i>
	<input type="checkbox"/> Oils or solvents	<i>No</i>
	<input type="checkbox"/> Motor vehicle fuel	<i>No</i>
	<input type="checkbox"/> Pesticides or herbicides	<i>Unknown (it was a farm)</i>
	<input type="checkbox"/> Other chemicals or hazardous substances	<i>Unknown (it was a farm)</i>

10)	<b>Please indicate any wastes generated at the facility.</b>		
	<b>Hazardous waste:</b>	<b>Quantity:</b>	<b>Disposal Method:</b>
	<i>N/A</i>		

11)	<b>Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	<i>Unknown (it was a farm)</i>
	<input checked="" type="checkbox"/> Unknown	

**Property Owner Interview Questionnaire**

**Rincon Project 15-02082 – 134 Bilton Road, Somers, CT**

12)	<b>Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

13)	<b>Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

14)	<b>Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

15)	<b>Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

16)	<b>Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?</b>	
	<input checked="" type="checkbox"/> Yes	If Yes or Unknown, please describe <i>Oil Tank for farm House</i> <i>Gas Tank Not in Use</i>
	<input type="checkbox"/> No	
<input type="checkbox"/> Unknown		

17)	<b>Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?</b>	
	<input checked="" type="checkbox"/> Yes	If Yes or Unknown, please describe <i>In use for tank in question 16</i>
	<input type="checkbox"/> No	
<input type="checkbox"/> Unknown		

18)	<b>If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?</b>
-----	--

**Property Owner Interview Questionnaire**

**Rincon Project 15-02082 – 134 Bilton Road, Somers, CT**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes or Unknown, please describe
--	------------------------------------

19) **Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes or Unknown, please describe
--	------------------------------------

20) **To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes or Unknown, please describe
--	------------------------------------

21) **Have any of the following ever been dumped above grade, buried and/or burned on the property? (please check all that apply and describe if possible)**

<input type="checkbox"/> Hazardous substances	No
<input type="checkbox"/> Petroleum products	No
<input type="checkbox"/> Unidentified waste materials	No
<input type="checkbox"/> Tires	No
<input type="checkbox"/> Automotive or industrial batteries	No
<input type="checkbox"/> Other waste materials (please describe)	No

22) **Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?**

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes or Unknown, please describe  <i>Tractors and Forklift used in connection with previous farm operation.</i>
--	---

**Property Owner Interview Questionnaire**

Rincon Project 15-02082 – 134 Bilton Road, Somers, CT

23)	<b>Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

24)	<b>Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe <i>It was a fruit farm</i>
	<input type="checkbox"/> No	
<input checked="" type="checkbox"/> Unknown		

25)	<b>Do you have any knowledge of environmental liens that may have been recorded against the property or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

26)	<b>Do you have any knowledge of activity and use limitations (AULs) such as engineering controls, deed restrictions, land use restrictions, or institutional controls that may have been recorded against the property?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

27)	<b>Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

28)	<b>Do you have any knowledge of any environmental site assessments of the property or facility?</b>	
	<input type="checkbox"/> Yes	If Yes or Unknown, please describe
	<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown		

29)	<b>Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?</b>
-----	---

**Property Owner Interview Questionnaire**

**Rincon Project 15-02082 – 134 Bilton Road, Somers, CT**

<input type="checkbox"/> Yes	If Yes or Unknown, please describe
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

<b>30)</b>	<b>Are there any site-specific geotechnical or geologic reports available for the subject property?</b>
<input type="checkbox"/> Yes	If Yes or Unknown, please describe
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

<b>31)</b>	<b>Is there a Title Report available for the subject property?</b>
<input type="checkbox"/> Yes	If Yes or Unknown, please describe
<input checked="" type="checkbox"/> No	
<input type="checkbox"/> Unknown	

<b>This questionnaire was completed by (please print)</b>	
<b>Name</b>	Rebecca S Richards
<b>Title</b>	one of the owners
<b>Firm</b>	
<b>Street Address</b>	35 Pinedale Rd
<b>City, State, Zip Code</b>	Somers Ct 06071
<b>Phone Number</b>	860 763 1807
<b>Fax Number</b>	
<b>What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.)?</b>	one of the Owners

**Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:**

Rincon Consultants, Inc.  
5135 Avenida Encinas, Suite A  
Carlsbad, CA 92008  
Attention: Savanna Vrevich, Environmental Site Assessment Division  
Fax: (760) 918-9449  
Email: svrevich@rinconconsultants.com

**Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.**

**Property Owner Interview Questionnaire**  
**Rincon Project 15-02082 – 134 Bilton Road, Somers, CT**

---

Signature Rebecca S Richards Date 11-1-15

## **Appendix 2**

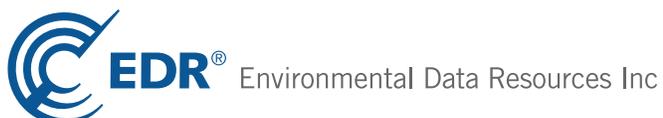
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*Regulatory Records Documentation*

**134 Bilton Road**  
134 Bilton Road  
Somers, CT 06071

Inquiry Number: 04435145.2r  
October 09, 2015

## The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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

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## 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) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

134 BILTON ROAD  
SOMERS, CT 06071

#### COORDINATES

Latitude (North): 42.0324000 - 42° 1' 56.64"  
Longitude (West): 72.5057000 - 72° 30' 20.52"  
Universal Transverse Mercator: Zone 18  
UTM X (Meters): 706479.8  
UTM Y (Meters): 4656170.0  
Elevation: 349 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5644794 SPRINGFIELD SOUTH, MA  
Version Date: 2012  
  
Northeast Map: 5642696 HAMPDEN, MA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20120706  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
 134 BILTON ROAD  
 SOMERS, CT 06071

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	CONNECTICUT CORRECTI	100 BILTON RD	CT MANIFEST	Lower	654, 0.124, East
<a href="#">A2</a>	RYE HILL CIRCLE/CT C	BILTON ROAD	CERCLIS, RCRA-SQG, ICIS, FINDS	Lower	654, 0.124, East
<a href="#">A3</a>	CONNECTICUT DEPARTME	100 BILTON ROAD	CT LUST, CT SPILLS, CT AIRS, CT CPCS	Lower	654, 0.124, East
<a href="#">4</a>	CTORRECTIONAL INST	175 BILTON RD	CT MANIFEST	Lower	965, 0.183, SSE
<a href="#">5</a>	STATE CORRECTIONAL F	WALKER DR.	CT LUST, CT CPCS	Lower	2136, 0.405, West
<a href="#">6</a>	SUDDEKOR	82 DEER PARK ROAD	MA SHWS, MA RELEASE, MA AIRS	Lower	2928, 0.555, WNW
<a href="#">7</a>	HASBRO	443 SHAKER RD	MA SHWS, MA RELEASE	Lower	4220, 0.799, NW
<a href="#">8</a>	BEHIND MILTON BRADLE	RAILROAD BETWEEN DEN	MA SHWS, MA RELEASE	Lower	4432, 0.839, NW
<a href="#">9</a>	CELECOM CORP	357 SHAKER RD	MA SHWS, MA RELEASE	Lower	4658, 0.882, NW

# 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

### ***Federal CERCLIS NFRAP site List***

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

### ***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-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

## EXECUTIVE SUMMARY

### **State- and tribal - equivalent CERCLIS**

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

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

CT SWF/LF..... List of Landfills/Transfer Stations  
MA SWF/LF..... Solid Waste Facility Database/Transfer Stations

### **State and tribal leaking storage tank lists**

MA LUST..... Leaking Underground Storage Tank Listing  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing  
CT UST..... Underground Storage Tank Data  
MA UST..... Summary Listing of all the Tanks Registered in the State of Massachusetts  
CT AST..... Marine Terminals and Tank Information  
MA AST..... Aboveground Storage Tank Database  
INDIAN UST..... Underground Storage Tanks on Indian Land

### **State and tribal institutional control / engineering control registries**

CT ENG CONTROLS..... Engineering Controls Listing  
CT AUL..... ELUR Sites

### **State and tribal voluntary cleanup sites**

CT VCP..... Voluntary Remediation Sites  
INDIAN VCP..... Voluntary Cleanup Priority Listing

### **State and tribal Brownfields sites**

CT BROWNFIELDS..... Brownfields Inventory  
MA BROWNFIELDS..... Completed Brownfields Covenants Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

CT 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

#### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... National Clandestine Laboratory Register

## EXECUTIVE SUMMARY

CT CDL..... Clandestine Drug Lab Listing  
US CDL..... Clandestine Drug Labs

### **Local Land Records**

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

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
CT SPILLS 90..... SPILLS 90 data from FirstSearch  
MA SPILLS 90..... SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated  
FUDS..... Formerly Used Defense Sites  
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  
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  
UMTRA..... Uranium Mill Tailings Sites  
LEAD SMELTERS..... Lead Smelter Sites  
US AIRS..... Aerometric Information Retrieval System Facility Subsystem  
US MINES..... Mines Master Index File  
CT DRYCLEANERS..... Drycleaner Facilities  
MA DRYCLEANERS..... Regulated Drycleaning Facilities  
CT ENF..... Enforcement Case Listing  
MA ENF..... Enforcement Action Cases  
CT Financial Assurance..... Financial Assurance Information Listing  
MA Financial Assurance..... Financial Assurance Information Listing  
CT LEAD..... Lead Inspection Database

## EXECUTIVE SUMMARY

MA LEAD.....	Lead Inspection Database
CT LWDS.....	Connecticut Leachate and Wastewater Discharge Sites
CT NPDES.....	Wastewater Permit Listing
MA NPDES.....	NPDES Permit Listing
CT SEH.....	List of Significant Environmental Hazards Report to DEEP

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat.....	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

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

#### ***Federal CERCLIS list***

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>RYE HILL CIRCLE/CT C</i></b>	<b><i>BILTON ROAD</i></b>	<b><i>E 0 - 1/8 (0.124 mi.)</i></b>	<b><i>A2</i></b>	<b><i>20</i></b>

## EXECUTIVE SUMMARY

### ***Federal RCRA generators list***

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/09/2015 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RYE HILL CIRCLE/CT C</b>	<b>BILTON ROAD</b>	<b>E 0 - 1/8 (0.124 mi.)</b>	<b>A2</b>	<b>20</b>

### ***State- and tribal - equivalent CERCLIS***

MA SHWS: Contains information on releases of oil and hazardous materials that have been reported to DEP.

A review of the MA SHWS list, as provided by EDR, and dated 04/23/2010 has revealed that there are 4 MA SHWS sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SUDEKOR</b> Release Tracking Number / Current Status: 1-0018747 / RAO	<b>82 DEER PARK ROAD</b>	<b>WNW 1/2 - 1 (0.555 mi.)</b>	<b>6</b>	<b>47</b>
<b>HASBRO</b> Release Tracking Number / Current Status: 1-0018059 / RAO	<b>443 SHAKER RD</b>	<b>NW 1/2 - 1 (0.799 mi.)</b>	<b>7</b>	<b>49</b>
<b>BEHIND MILTON BRADLE</b> Release Tracking Number / Current Status: 1-0011366 / RAO	<b>RAILROAD BETWEEN DEN</b>	<b>NW 1/2 - 1 (0.839 mi.)</b>	<b>8</b>	<b>51</b>
<b>CELECOM CORP</b> Release Tracking Number / Current Status: 1-0011273 / RAO	<b>357 SHAKER RD</b>	<b>NW 1/2 - 1 (0.882 mi.)</b>	<b>9</b>	<b>52</b>

### ***State and tribal leaking storage tank lists***

CT 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 CT LUST list, as provided by EDR, and dated 07/24/2015 has revealed that there are 2 CT LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONNECTICUT DEPARTME</b> Lust Status: 4 LUST Id: 32260	<b>100 BILTON ROAD</b>	<b>E 0 - 1/8 (0.124 mi.)</b>	<b>A3</b>	<b>34</b>
<b>STATE CORRECTIONAL F</b> Lust Status: 2	<b>WALKER DR.</b>	<b>W 1/4 - 1/2 (0.405 mi.)</b>	<b>5</b>	<b>44</b>

## EXECUTIVE SUMMARY

LUST Id: 30482

### ADDITIONAL ENVIRONMENTAL RECORDS

#### ***Other Ascertainable Records***

CT 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 CT CPCS list, as provided by EDR, and dated 06/15/2015 has revealed that there are 2 CT CPCS sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONNECTICUT DEPARTME</b> Lust Status: Cleanup Initiated	<b>100 BILTON ROAD</b>	<b>E 0 - 1/8 (0.124 mi.)</b>	<b>A3</b>	<b>34</b>
<b>STATE CORRECTIONAL F</b> Lust Status: Investigation	<b>WALKER DR.</b>	<b>W 1/4 - 1/2 (0.405 mi.)</b>	<b>5</b>	<b>44</b>

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

A review of the CT MANIFEST list, as provided by EDR, and dated 07/30/2013 has revealed that there are 2 CT MANIFEST sites within approximately 0.25 miles of the target property.

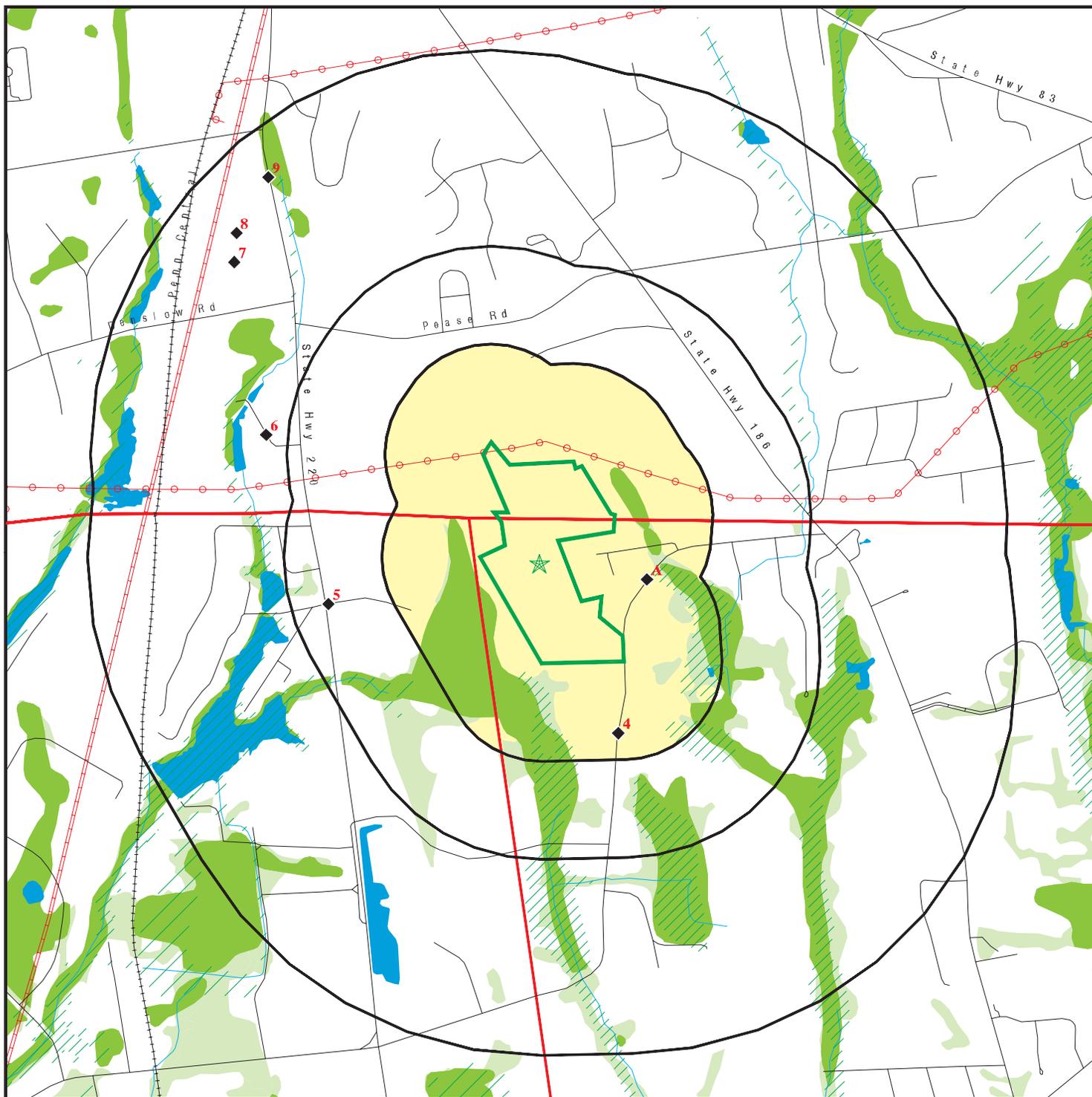
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CONNECTICUT CORRECTI EPA Id: CTD980522940	100 BILTON RD	E 0 - 1/8 (0.124 mi.)	A1	8
CTORRECTIONAL INST EPA Id: CT8607637347	175 BILTON RD	SSE 1/8 - 1/4 (0.183 mi.)	4	43

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

<u>Site Name</u>	<u>Database(s)</u>
EAST LONGMEADOW	MA SHWS, MA RELEASE
NEAR WATCHING BROOK	MA SHWS, MA RELEASE
POLE NO 22	MA SHWS, MA RELEASE
RYE HILL CIRCLE AREA	CT SDADB

# OVERVIEW MAP - 04435145.2R



-  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
-  County Boundary
-  Power transmission lines
-  Pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands

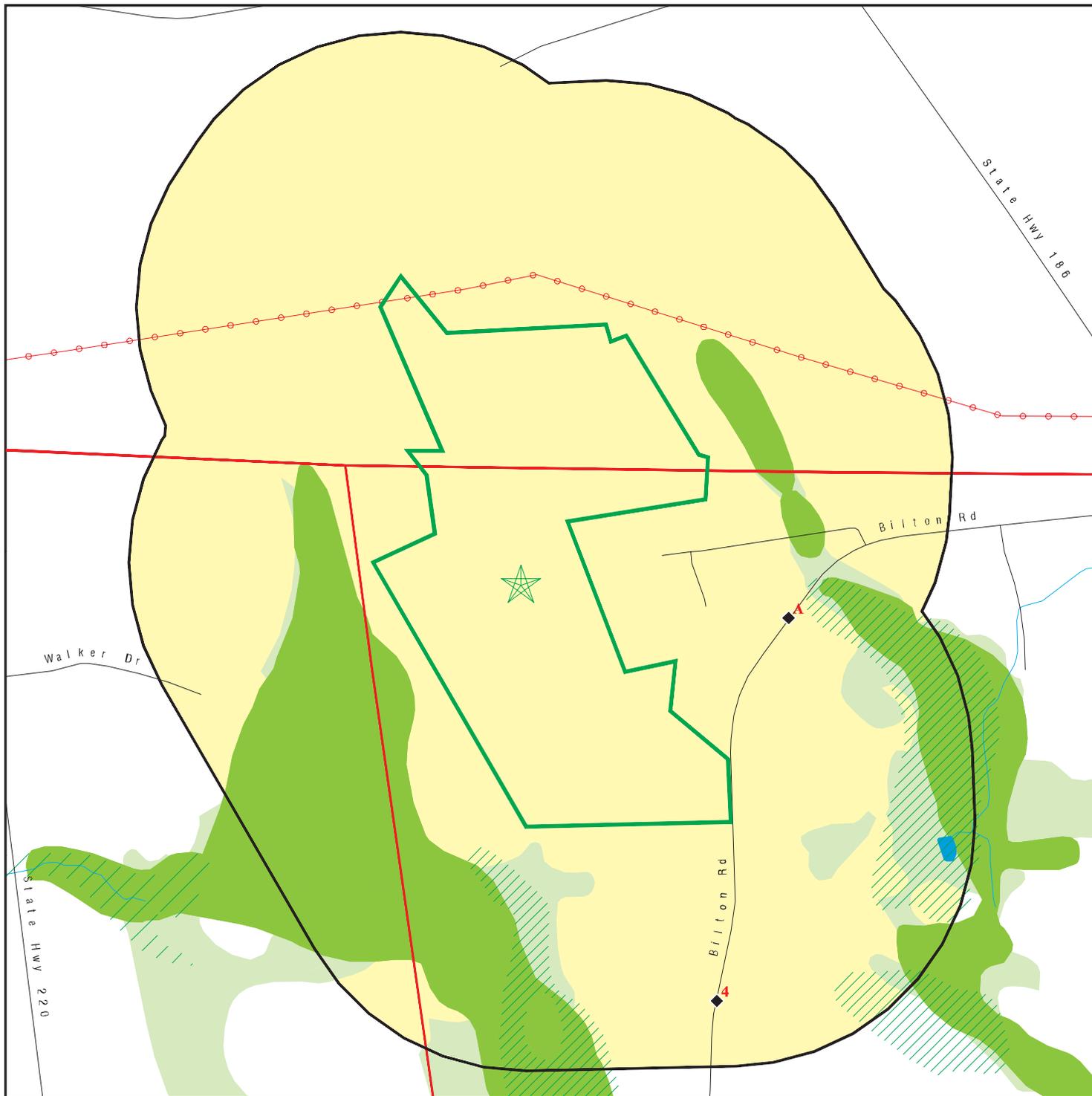


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 134 Bilton Road  
 ADDRESS: 134 Bilton Road  
 Somers CT 06071  
 LAT/LONG: 42.0324 / 72.5057

CLIENT: Rincon  
 CONTACT: Savanna Vrevich  
 INQUIRY #: 04435145.2r  
 DATE: October 09, 2015 7:42 pm

# DETAIL MAP - 04435145.2R



-  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
-  Indian Reservations BIA
-  County Boundary
-  Power transmission lines
-  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: 134 Bilton Road  
 ADDRESS: 134 Bilton Road  
 Somers CT 06071  
 LAT/LONG: 42.0324 / 72.5057

CLIENT: Rincon  
 CONTACT: Savanna Vrevich  
 INQUIRY #: 04435145.2r  
 DATE: October 09, 2015 7:43 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
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		1	0	0	NR	NR	1
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	0	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
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
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
CT SHWS	1.000		0	0	0	0	NR	0
MA SHWS	1.000		0	0	0	4	NR	4
CT SDADB	0.500		0	0	0	NR	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
CT SWF/LF	0.500		0	0	0	NR	NR	0
MA SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
CT LUST	0.500		1	0	1	NR	NR	2

## 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
MA LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
CT UST	0.250		0	0	NR	NR	NR	0
MA UST	0.250		0	0	NR	NR	NR	0
CT AST	0.250		0	0	NR	NR	NR	0
MA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
CT ENG CONTROLS	0.500		0	0	0	NR	NR	0
CT AUL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
CT VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
CT BROWNFIELDS	0.500		0	0	0	NR	NR	0
MA BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
CT 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
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CT CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<b>Local Land Records</b>								
CT PROPERTY	0.001		0	NR	NR	NR	NR	0
CT LIENS	0.001		0	NR	NR	NR	NR	0
MA LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	0.001		0	NR	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
CT SPILLS	0.001		0	NR	NR	NR	NR	0
MA RELEASE	0.001		0	NR	NR	NR	NR	0
CT SPILLS 90	0.001		0	NR	NR	NR	NR	0
MA SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
CT AIRS	0.001		0	NR	NR	NR	NR	0
MA AIRS	0.001		0	NR	NR	NR	NR	0
CT CPCS	0.500		1	0	1	NR	NR	2
CT DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CT ENF	0.001		0	NR	NR	NR	NR	0
MA ENF	0.001		0	NR	NR	NR	NR	0
CT Financial Assurance	0.001		0	NR	NR	NR	NR	0
MA Financial Assurance	0.001		0	NR	NR	NR	NR	0
CT LEAD	0.001		0	NR	NR	NR	NR	0
MA LEAD	0.001		0	NR	NR	NR	NR	0
CT LWDS	0.250		0	0	NR	NR	NR	0
CT MANIFEST	0.250		1	1	NR	NR	NR	2
CT NPDES	0.001		0	NR	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
MA NPDES	0.001		0	NR	NR	NR	NR	0
CT SEH	0.500		0	0	0	NR	NR	0
<b><u>EDR HIGH RISK HISTORICAL RECORDS</u></b>								
<b><i>EDR Exclusive Records</i></b>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
<b><u>EDR RECOVERED GOVERNMENT ARCHIVES</u></b>								
<b><i>Exclusive Recovered Govt. Archives</i></b>								
CT RGA HWS	0.001		0	NR	NR	NR	NR	0
MA RGA HWS	0.001		0	NR	NR	NR	NR	0
CT RGA LUST	0.001		0	NR	NR	NR	NR	0
MA RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	5	1	2	4	0	12

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

A1  
East  
< 1/8  
0.124 mi.  
654 ft.

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS)**  
**100 BILTON RD**  
**SOMERS, CT 06071**

**CT MANIFEST**    **S109729807**  
**N/A**

**Site 1 of 3 in cluster A**

**Relative:**  
**Lower**

CT MANIFEST:

**Actual:**  
**318 ft.**

Detail:

Year: 2008  
Manifest Id: 000131563UIS  
EPA ID: CTD980522940  
TSDf EPA ID: CTD021816889  
TSDf Name: UNITED OIL RECOVERY INC  
TSDf Address: 136 GRACEY AVE  
TSDf City,St,Zip: MERIDEN, CT 06451  
TSDf Country: USA  
TSDf Telephone: (203)238-6745  
Transport Date: 05/14/2008  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY INC  
Transporter Address: 47 GRACEY AVE  
Transporter City,St,Zip: MERIDEN, CT 06450-  
Transporter Country: USA  
Transporter Phone: (203)238-6745  
Trans 2 Date: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 8605667500  
Generator Mailing Addr: BOX 100  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: Not reported  
Date Shipped: 05/14/2008  
Date Received: 05/14/2008  
Last modified date: 04/14/2010  
Last modified by: CYF  
Comments: Not reported

Detail:

Year: 2007  
Manifest Id: 000003195UIS  
EPA ID: CTD980522940  
TSDf EPA ID: OHD000816629  
TSDf Name: SPRING GROVE RESOURCE RECOVERY  
TSDf Address: 4879 SPRING GROVE AVE  
TSDf City,St,Zip: CINCINNATI, OH 45232-  
TSDf Country: USA  
TSDf Telephone: (513)681-5738  
Transport Date: 06/25/2007  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY INC  
Transporter Address: 47 GRACEY AVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Transporter City,St,Zip: MERIDEN, CT 06451-  
Transporter Country: USA  
Transporter Phone: (203)238-6745  
Trans 2 Date: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 8605667500  
Generator Mailing Addr: BOX 100  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: Not reported  
Date Shipped: 06/25/2007  
Date Received: 07/06/2007  
Last modified date: 01/14/2013  
Last modified by: IR  
Comments: Not reported

**Waste:**

Year: 2007  
Manifest Id: 000003195UIS  
Waste Occurrence: 1  
UNNA: 3077  
Hazard Class: 9  
US Dot Description: HAZARDOUS WASTE, SOLID, N.O.S.  
No of Containers: 1  
Container Type: DM  
Quantity: 135  
Weight/Volume: P  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2009-03-03 00:00:00  
DEO Who Last Modified Record: CYF  
EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2009-03-03 00:00:00

**Detail:**

Year: 2006  
Manifest Id: ctf1255989  
EPA ID: CTD980522940  
TSDf EPA ID: CTD002593887  
TSDf Name: BRIDGEPORT UNITED RECYCLING  
TSDf Address: 50 Cross St  
TSDf City,St,Zip: BRIDGEPORT, CT 06610-  
TSDf Country: USA  
TSDf Telephone: Not reported  
Transport Date: 03/23/2006  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY INC  
Transporter Address: 14 WEST MAIN ST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Transporter City,St,Zip: MERIDEN, CT 06451-  
Transporter Country: USA  
Transporter Phone: (203)238-6745  
Trans 2 Date: 03/29/2006  
Trans 2 EPA ID: CTD021816889  
Trans 2 Name: UNITED OIL RECOVERY INC  
Trans 2 Address: 14 WEST MAIN ST  
Trans 2 City,St,Zip: MERIDEN, CT 06451-  
Trans 2 Country: USA  
Trans 2 Phone: (203)238-6745  
Generator Phone: 8605667500  
Generator Mailing Addr: BOX 100  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: Not reported  
Date Shipped: 03/23/2006  
Date Received: 03/31/2006  
Last modified date: 09/10/2007  
Last modified by: JEB  
Comments: Not reported

**Waste:**

Year: 2006  
Manifest Id: ctf1255989  
Waste Occurrence: 1  
UNNA: 1263  
Hazard Class: 3  
US Dot Description: PAINT OR PAINT RELATED MATERIAL  
No of Containers: 1  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2007-08-08 00:00:00  
DEO Who Last Modified Record: CYF  
EPA Waste Code: D021  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00

EPA Waste Code: D039  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00

EPA Waste Code: F003  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00

EPA Waste Code: F005  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00

Year: 2006  
Manifest Id: ctf1255989  
Waste Occurrence: 2  
UNNA: 3077

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Hazard Class: 9  
US Dot Description: HAZARDOUS WASTE, SOLID, N.O.S.  
No of Containers: 1  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2007-08-08 00:00:00  
DEO Who Last Modified Record: CYF  
EPA Waste Code: D021  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00  
  
EPA Waste Code: D039  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00  
  
EPA Waste Code: F003  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00  
  
EPA Waste Code: F005  
Recycled Waste?: False  
Date Record Was Last Modified: 2007-08-08 00:00:00

Detail:

Year: 2005  
Manifest Id: ctf1248145  
EPA ID: CTD980522940  
TSDf EPA ID: CTD021816889  
TSDf Name: UNITED OIL RECOVERY, INC.  
TSDf Address: 136 GRACEY AVENUE  
TSDf City,St,Zip: MERIDEN, CT 06451  
TSDf Country: USA  
TSDf Telephone: (203)238-6745  
Transport Date: 09/22/2005  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY, INC.  
Transporter Address: 14 WEST MAIN STREET  
Transporter City,St,Zip: MERIDEN, CT 06451  
Transporter Country: USA  
Transporter Phone: (203)238-6745  
Trans 2 Date: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 8605667500  
Generator Mailing Addr: BOX 100  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Date Shipped: 09/22/2005  
Date Received: 09/22/2005  
Last modified date: 01/30/2007  
Last modified by: JEB  
Comments: Not reported

Waste:

Year: 2005  
Manifest Id: ctf1248145  
Waste Occurrence: 1  
UNNA: 3082  
Hazard Class: 9  
US Dot Description: HAZARDOUS WASTE, LIQUID, N.O.S.  
No of Containers: 001  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2006-10-18 00:00:00  
DEO Who Last Modified Record: DMG  
EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2006-10-18 00:00:00

Detail:

Year: 2004  
Manifest Id: ctf1169135  
EPA ID: CTD980522940  
TSDf EPA ID: CTD021816889  
TSDf Name: UNITED OIL RECOVERY INC  
TSDf Address: 14 WEST MAIN ST  
TSDf City,St,Zip: MERIDEN, CT 06451  
TSDf Country: USA  
TSDf Telephone: (203)238-6745  
Transport Date: 11/10/2004  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY INC  
Transporter Address: 14 W MAIN ST  
Transporter City,St,Zip: MERIDEN, CT 06451  
Transporter Country: USA  
Transporter Phone: (203)238-6745  
Trans 2 Date: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 8605667500  
Generator Mailing Addr: BOX 100  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Date Shipped: 11/10/2004  
Date Received: 11/10/2004  
Last modified date: 06/02/2005  
Last modified by: CJS  
Comments: Not reported

Waste:

Year: 2004  
Manifest Id: ctf1169135  
Waste Occurrence: 1  
UNNA: 3077  
Hazard Class: 9  
US Dot Description: HAZARDOUS WASTE, SOLID, N.O.S.  
No of Containers: 4  
Container Type: DM  
Quantity: 220  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2005-06-02 00:00:00  
DEO Who Last Modified Record: CJS  
EPA Waste Code: F005  
Recycled Waste?: False  
Date Record Was Last Modified: 2005-06-02 00:00:00

Detail:

Year: 2003  
Manifest Id: CTF1143149  
EPA ID: CTD980522940  
TSDf EPA ID: CTD021816889  
TSDf Name: UNITED OIL RECOVERY INC  
TSDf Address: 136 GRACEY AVE  
TSDf City,St,Zip: MERIDEN, CT 06450  
TSDf Country: USA  
TSDf Telephone: Not reported  
Transport Date: 05/02/2003  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY INC  
Transporter Address: 14 WEST MAIN ST  
Transporter City,St,Zip: MERIDEN, CT 06451  
Transporter Country: USA  
Transporter Phone: Not reported  
Trans 2 Date: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 8605667500  
Generator Mailing Addr: 100 BILTON RD  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Date Shipped: 05/02/2003  
Date Received: 05/02/2003  
Last modified date: 05/26/2004  
Last modified by: IG  
Comments: Not reported

Detail:

Year: 2002  
Manifest Id: CTF1036388  
EPA ID: CTD980522940  
TSDf EPA ID: CTD021816889  
TSDf Name: UNITED OIL RECOVERY INC  
TSDf Address: 136 GRACEY AVE  
TSDf City,St,Zip: MERIDEN, CT 06450  
TSDf Country: USA  
TSDf Telephone: Not reported  
Transport Date: 11/14/2002  
Transporter EPA ID: CTD021816889  
Transporter Name: UNITED OIL RECOVERY INC  
Transporter Address: Not reported  
Transporter City,St,Zip: CT  
Transporter Country: USA  
Transporter Phone: Not reported  
Trans 2 Date: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 8605667500  
Generator Mailing Addr: 100 BILTON RD  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: No  
Date Shipped: 11/14/2002  
Date Received: 11/14/2002  
Last modified date: 04/27/2004  
Last modified by: IG  
Comments: Not reported

Waste:

Year: 2002  
Manifest Id: CTF1036388  
Waste Occurrence: 1  
UNNA: 3082  
Hazard Class: 9  
US Dot Description: env. Hazardous substance liquid nos  
No of Containers: 001  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Date Record Was Last Modified: 2004-04-27 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

EPA Waste Code: D007  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

Year: 2002  
Manifest Id: CTF1036388  
Waste Occurrence: 2  
UNNA: 3082  
Hazard Class: 9  
US Dot Description: env. Hazardous substance liquid nos  
No of Containers: 001  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-27 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

EPA Waste Code: D007  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

Year: 2002  
Manifest Id: CTF1036388  
Waste Occurrence: 3  
UNNA: 3082  
Hazard Class: 9  
US Dot Description: env. Hazardous substance liquid nos  
No of Containers: 001  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-27 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

EPA Waste Code: D007  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

**Detail:**

Year: 1997  
Manifest Id: MAK455227  
EPA ID: CTD980522940  
TSDf EPA ID: MAD000604447  
TSDf Name: LAIDLAW ENVIRON SVS NORTHEAST  
TSDf Address: 300 CANAL ST  
TSDf City,St,Zip: LAWRENCE, MA 01845  
TSDf Country: USA  
TSDf Telephone: Not reported  
Transport Date: 10/02/1997  
Transporter EPA ID: SCD987574647  
Transporter Name: LAIDLAW ENVIRONMENTAL SERVICES  
Transporter Address: Not reported  
Transporter City,St,Zip: CT  
Transporter Country: USA  
Transporter Phone: Not reported  
Trans 2 Date: 10/03/1997  
Trans 2 EPA ID: SCD987574647  
Trans 2 Name: LAIDLAW ENVIRONMENTAL SERVICES (TRANSPORTER)  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 2035667500  
Generator Mailing Addr: BILTON RD  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: Yes  
Date Shipped: 10/02/1997  
Date Received: 10/03/1997  
Last modified date: 04/26/2004  
Last modified by: IG  
Comments: Not reported

**Waste:**

Year: 1997  
Manifest Id: MAK455227  
Waste Occurrence: 1  
UNNA: 3082  
Hazard Class: 9  
US Dot Description: env. Hazardous substance liquid nos  
No of Containers: 002  
Container Type: DF  
Quantity: 400  
Weight/Volume: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-26 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D011  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

**Detail:**

Year: 1995  
Manifest Id: NJA1998344  
EPA ID: CTD980522940  
TSDf EPA ID: NJD980536593  
TSDf Name: ADVANCED ENV TECH CORP  
TSDf Address: 1 EDEN LANE  
TSDf City,St,Zip: MOUNT OLIVE, NJ 07836  
TSDf Country: USA  
TSDf Telephone: Not reported  
Transport Date: 06/06/1995  
Transporter EPA ID: NJD991291584  
Transporter Name: ENVIRONMENTAL TRANSFER CORP  
Transporter Address: Not reported  
Transporter City,St,Zip: CT  
Transporter Country: USA  
Transporter Phone: Not reported  
Trans 2 Date: 06/09/1995  
Trans 2 EPA ID: NJD000692061  
Trans 2 Name: ENVIRONMENTAL TRANSPORT GROUP, INC.,  
Trans 2 Address: Not reported  
Trans 2 City,St,Zip: CT  
Trans 2 Country: USA  
Trans 2 Phone: Not reported  
Generator Phone: 2035667500  
Generator Mailing Addr: BILTON RD  
Generator Mailing City/State/Zip: 06071  
Generator Mailing Country: USA  
Special Handling: Not reported  
Discrepancies: No  
Date Shipped: 06/06/1995  
Date Received: 06/09/1995  
Last modified date: 04/26/2004  
Last modified by: IG  
Comments: Not reported

**Waste:**

Year: 1995  
Manifest Id: NJA1998344  
Waste Occurrence: 1  
UNNA: 1954  
Hazard Class: 2.1  
US Dot Description: WASTE COMPRESSED GAS, FLAMMABLE  
No of Containers: 002  
Container Type: DM  
Quantity: 70  
Weight/Volume: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-26 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

Year: 1995  
Manifest Id: NJA1998344  
Waste Occurrence: 2  
UNNA: 1263  
Hazard Class: 3  
US Dot Description: WASTE PAINT RELATED MATERIAL  
No of Containers: 008  
Container Type: DM  
Quantity: 280  
Weight/Volume: P  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-26 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

Year: 1995  
Manifest Id: NJA1998344  
Waste Occurrence: 3  
UNNA: 1263  
Hazard Class: 3  
US Dot Description: WASTE PAINT RELATED MATERIAL  
No of Containers: 004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONNECTICUT CORRECTIONAL INSTITUTE (SOMERS) (Continued)**

**S109729807**

Container Type: DF  
Quantity: 330  
Weight/Volume: P  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-26 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

Year: 1995  
Manifest Id: NJA1998344  
Waste Occurence: 4  
UNNA: 1263  
Hazard Class: 3  
US Dot Description: WASTE PAINT RELATED MATERIAL  
No of Containers: 003  
Container Type: DF  
Quantity: 165  
Weight/Volume: P  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-26 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-26 00:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

A2  
East  
< 1/8  
0.124 mi.  
654 ft.

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES  
BILTON ROAD  
SOMERS, CT 06701**

**Site 2 of 3 in cluster A**

**CERCLIS 1015730781  
RCRA-SQG CTD980522940  
ICIS  
FINDS**

**Relative:  
Lower**

CERCLIS:

Site ID: 0102698  
EPA ID: CTD980522940  
Facility County: TOLLAND  
Short Name: RYE HILL CIRCLE/CT CORREC  
Congressional District: 03  
IFMS ID: Not reported  
SMSA Number: Not reported  
USGC Hydro Unit: 01100005  
Federal Facility: Not a Federal Facility  
DMNSN Number: 0.00000  
Site Orphan Flag: N  
RCRA ID: Not reported  
USGS Quadrangle: Not reported  
Site Init By Prog: Not reported  
NFRAP Flag: Not reported  
Parent ID: Not reported  
RST Code: Not reported  
EPA Region: 01  
Classification: Not reported  
Site Settings Code: Not reported  
NPL Status: Not on the NPL  
DMNSN Unit Code: Not reported  
RBRAC Code: Not reported  
RResp Fed Agency Code: Not reported  
Non NPL Status: Other Cleanup Activity: State-Lead Cleanup  
Non NPL Status Date: 02/11/02  
Site Fips Code: 09013  
CC Concurrence Date: / /  
CC Concurrence FY: Not reported  
Alias EPA ID: Not reported  
Site FUDS Flag: Not reported

**Actual:  
318 ft.**

CERCLIS Site Contact Name(s):

Contact ID: 13004278.00000  
Contact Name: Margaret Morris  
Contact Tel: Not reported  
Contact Title: Site Assessment Manager (SAM)  
Contact Email: Not reported

CERCLIS Site Alias Name(s):

Alias ID: 101  
Alias Name: CONNECTICUT CORRECTIONAL INDUSTRIES  
Alias Address: BILTON ROAD  
SOMERS, CT 06701  
Alias Comments: Not reported  
Site Description: CT DEP letter of 07-10-01 affirms that this site is being addressed by the state program. CT DEP letter of 07-10-01 affirms that this site is being addressed by the state program.

CERCLIS Assessment History:

Action Code: 001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Action: DISCOVERY  
Date Started: / /  
Date Completed: 08/11/93  
Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: EPA Fund-Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: PRELIMINARY ASSESSMENT  
Date Started: / /  
Date Completed: 01/03/95  
Priority Level: Higher priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: SITE INSPECTION  
Date Started: 06/19/95  
Date Completed: 10/18/96  
Priority Level: Higher priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

Action Code: 001  
Action: SITE REASSESSMENT  
Date Started: / /  
Date Completed: 08/02/01  
Priority Level: Low priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: EPA Fund-Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

**RCRA-SQG:**

Date form received by agency: 04/09/2002  
Facility name: CORRECTION DEPT OF OSBORN CI  
Facility address: 100 BILTON RD  
SOMERS, CT 06071  
EPA ID: CTD980522940  
Mailing address: BOX 100  
SOMERS, CT 06071  
Contact: MARK STRANGE  
Contact address: BOX 100

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

SOMERS, CT 06071  
Contact country: US  
Contact telephone: (860) 566-7500  
Contact email: Not reported  
EPA Region: 01  
Land type: Other land type  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: STATE OF CONNECTICUT  
Owner/operator address: OWNERSTREET  
OWNERCITY, CT 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (203) 555-1212  
Legal status: State  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

. Waste code: D000  
. Waste name: Not Defined

Historical Generators:

Date form received by agency: 02/25/2002  
Site name: CT CORRECTIONAL INDUSTRIES  
Classification: Large Quantity Generator  
. Waste code: D001  
. Waste name: IGNITABLE WASTE  
. Waste code: D011  
. Waste name: SILVER  
. Waste code: F003

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 02/27/1996  
Site name: CT CORRECTIONAL IND  
Classification: Large Quantity Generator

Date form received by agency: 02/22/1994  
Site name: CT CORRECTIONAL IND.  
Classification: Large Quantity Generator

Date form received by agency: 08/01/1992  
Site name: CT CORRECTIONAL IND.  
Classification: Large Quantity Generator

Date form received by agency: 07/20/1981  
Site name: CORRECTION DEPT OF OSBORN CI  
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: SR - 22a-449(c)-102(a)  
Area of violation: Generators - General  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-105(a) & 102(b)(2)  
Area of violation: Generators - Pre-transport  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-105(a) & 102(a)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Area of violation: Generators - Pre-transport  
Date violation determined: 05/16/2001  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)(1)  
Area of violation: Generators - General  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-105(a) & 102(a)  
Area of violation: Generators - Pre-transport  
Date violation determined: 05/16/2001  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)(1)  
Area of violation: Generators - General  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)(1)  
Area of violation: Generators - Records/Reporting

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FS - RCSA  
Area of violation: Generators - General  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-105(a)(b) & 102(a)  
Area of violation: Generators - Pre-transport  
Date violation determined: 05/16/2001  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FS - RCSA  
Area of violation: Generators - General  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-105(a)(b) & 102(a)  
Area of violation: Generators - Pre-transport  
Date violation determined: 05/16/2001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)  
Area of violation: Generators - General  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-105(a) & 102(b)(2)  
Area of violation: Generators - Pre-transport  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)(1)  
Area of violation: Generators - Records/Reporting  
Date violation determined: 05/16/2001  
Date achieved compliance: 04/04/2002  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.16  
Area of violation: Generators - General  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.23(a)(3)  
Area of violation: Generators - Manifest  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 102(b)(3)(A)  
Area of violation: Generators - Manifest  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 102(b)(3)(A)  
Area of violation: Generators - Manifest  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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Database(s)

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EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.16  
Area of violation: Generators - General  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(b)(2)  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/26/1994  
Date achieved compliance: 05/16/2001  
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.34(a)(2)  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/26/1994  
Date achieved compliance: 05/16/2001  
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.16  
Area of violation: Generators - General  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.23(a)(3)  
Area of violation: Generators - Manifest  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/07/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.23(a)(3)  
Area of violation: Generators - Manifest  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: SR - 102(b)(3)(A)  
Area of violation: Generators - Manifest  
Date violation determined: 09/26/1994  
Date achieved compliance: 08/23/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 08/09/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 265.53(a)  
Area of violation: Generators - Pre-transport  
Date violation determined: 09/26/1994  
Date achieved compliance: 05/16/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/08/1996  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 12/14/1988  
Date achieved compliance: 09/26/1994  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:  
Evaluation date: 02/02/2005  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State  
  
Evaluation date: 05/16/2001

Map ID  
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MAP FINDINGS

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**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Manifest  
Date achieved compliance: 08/23/2001  
Evaluation lead agency: State

Evaluation date: 05/16/2001  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 04/04/2002  
Evaluation lead agency: State

Evaluation date: 05/16/2001  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 04/04/2002  
Evaluation lead agency: State

Evaluation date: 05/16/2001  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 08/23/2001  
Evaluation lead agency: State

Evaluation date: 05/16/2001  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 04/04/2002  
Evaluation lead agency: State

Evaluation date: 05/16/2001  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 08/23/2001  
Evaluation lead agency: State

Evaluation date: 09/26/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 08/23/2001  
Evaluation lead agency: State

Evaluation date: 09/26/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 08/23/2001  
Evaluation lead agency: State

Evaluation date: 09/26/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Pre-transport  
Date achieved compliance: 05/16/2001  
Evaluation lead agency: State

Evaluation date: 09/26/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Manifest  
Date achieved compliance: 08/23/2001

Map ID  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Evaluation lead agency: State

Evaluation date: 12/14/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 09/26/1994  
Evaluation lead agency: State

ICIS:

Enforcement Action ID: 01-2007-2515  
FRS ID: 110022665757  
Program ID: BR CTD980522940  
Action Name: CONNECTICUT CORRECTIONAL INSTITUTIONS  
Full Address: 100 BILTON ROAD SOMERS CT 06071-1059  
State: Connecticut  
Facility Name: OSBORN CORRECTIONAL INSTITUTE  
Facility Address: 100 BILTON ROAD  
SOMERS, CT 06071-1059  
Enforcement Action Type: CWA 311B6B1 AO For Class I Penalty - SPCC Expedited Settlement Program  
Facility County: TOLLAND  
EPA Region #: 1

Enforcement Action ID: 01-2007-2515  
FRS ID: 110022665757  
Program ID: SIMS 1534524  
Action Name: CONNECTICUT CORRECTIONAL INSTITUTIONS  
Full Address: 100 BILTON ROAD SOMERS CT 06071-1059  
State: Connecticut  
Facility Name: OSBORN CORRECTIONAL INSTITUTE  
Facility Address: 100 BILTON ROAD  
SOMERS, CT 06071-1059  
Enforcement Action Type: CWA 311B6B1 AO For Class I Penalty - SPCC Expedited Settlement Program  
Facility County: TOLLAND  
EPA Region #: 1

Enforcement Action ID: 01-2007-2515  
FRS ID: 110022665757  
Program ID: RCRAINFO CTD980522940  
Action Name: CONNECTICUT CORRECTIONAL INSTITUTIONS  
Full Address: 100 BILTON ROAD SOMERS CT 06071-1059  
State: Connecticut  
Facility Name: OSBORN CORRECTIONAL INSTITUTE  
Facility Address: 100 BILTON ROAD  
SOMERS, CT 06071-1059  
Enforcement Action Type: CWA 311B6B1 AO For Class I Penalty - SPCC Expedited Settlement Program  
Facility County: TOLLAND  
EPA Region #: 1

Enforcement Action ID: 01-2007-2515  
FRS ID: 110022665757  
Program ID: FRS 110022665757  
Action Name: CONNECTICUT CORRECTIONAL INSTITUTIONS  
Full Address: 100 BILTON ROAD SOMERS CT 06071-1059  
State: Connecticut  
Facility Name: OSBORN CORRECTIONAL INSTITUTE  
Facility Address: 100 BILTON ROAD  
SOMERS, CT 06071-1059  
Enforcement Action Type: CWA 311B6B1 AO For Class I Penalty - SPCC Expedited Settlement Program

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

Facility County:	TOLLAND
EPA Region #:	1
Program ID:	BR CTD980522940
Facility Name:	OSBORN CORRECTIONAL INSTITUTE
Address:	100 BILTON ROAD
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Program ID:	FRS 110022665757
Facility Name:	OSBORN CORRECTIONAL INSTITUTE
Address:	100 BILTON ROAD
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Program ID:	RCRAINFO CTD980522940
Facility Name:	OSBORN CORRECTIONAL INSTITUTE
Address:	100 BILTON ROAD
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Program ID:	SIMS 1534524
Facility Name:	OSBORN CORRECTIONAL INSTITUTE
Address:	100 BILTON ROAD
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

**FINDS:**

Registry ID: 110022665757

**Environmental Interest/Information System**

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

**AIR SYNTHETIC MINOR**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

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MAP FINDINGS

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 EPA ID Number

**RYE HILL CIRCLE/CT CORRECTIONAL INDUSTRIES (Continued)**

**1015730781**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**HAZARDOUS WASTE BIENNIAL REPORTER**

Connecticut Site Information Management System (SIMS) is part of a suite of web-based applications designed to allow the Connecticut Department of Environmental Protection (DEP) staff to harmonize environmental interest information from disparate systems in a single agency-wide data repository (known as CFI). SIMS provides tools for identifying and resolving duplicate data, querying data (using both tabular and geospatial methods), and viewing/maintaining documents associated to the data.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

**A3**  
**East**  
**< 1/8**  
**0.124 mi.**  
**654 ft.**

**CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE**  
**100 BILTON ROAD**  
**SOMERS, CT 06071**  
**Site 3 of 3 in cluster A**

**CT LUST** **S105458266**  
**CT SPILLS** **N/A**  
**CT AIRS**  
**CT CPCS**

**Relative:**  
**Lower**

**LUST:**  
 LUST Id: 4088  
 UST Facility Id: 6864  
 LUST Case Id: 32260  
 LUST Status: Lust Completed  
 Processing Status: Not reported  
 EPA Reportable: True  
 Motor Fuel: False  
 Diesel: False  
 Gasoline: False  
 Other: False  
 Other Release: Not reported  
 No Release: False  
 Leak: False  
 Tank: False  
 Piping: False  
 Overfill: False  
 Removal: False  
 Incident Date: 01/14/1998  
 Entry Date: Not reported

**Actual:**  
**318 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Site Case Id: 200904179  
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: 6551  
LUST Owner Id: Not reported  
UST Event Id: 4183  
Contact Info: Not reported  
Contact EMail: Not reported  
Site Contact City,St,Zip: UNKNOWN  
2nd Contact: Fuss & O'Neill  
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: 129  
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: False  
Date Referred: Not reported  
Emergency: False  
Private Heating Fuel: False  
Commercial Heating Fuel: False  
Commercial HF < 2100 Gal.: False  
Commercial HF > 2100 Gal.: False  
Commercial HF - Size Unk: False  
No LUST Site: False  
Cost Recvry Prgm Candidate: False  
OCSR Complete: False  
Follow Up Flag: False  
Alternate Water Supply: False  
Relocation: False  
Responsible Party: False  
Responsible EMail: Not reported  
Resp Party Name: DEPARTMENT OF CORRECTION  
Resp Party Address: 24 WOLCOTT HILL ROAD  
Resp Party City,St,Zip: Wethersfield, CT 06109  
Resp Party Town Number: 159  
Resp Party Phone: 8606927889  
Resp Party Fax: Not reported  
Resp Party Name 2: Not reported  
Resp Party Address 2: Not reported  
Resp Party Phone 2: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Investigator Id: 7  
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 Outlaid: No  
Fund Judgment: No  
Fund Recovered: No  
Cellar Borings: False  
Install Micro Wells: False  
Ground Water Sample: False  
Soil Sample: False  
Soil Gas: False  
Site Inspect: False  
Soil Excavate: False  
Geo Probe: False  
Survey: False  
Potable Well Sample: False  
Sample MWS: False  
Ground Water Gauging: False  
Soil Venting: False  
Active: False  
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: False  
Release Invest Rpt: False  
DEP App Letter 1: False  
Correct Action Plan: False  
DEP App Letter 2: False  
Rem Sys Install: False  
Rem Sys Install Date: Not reported  
Closure Date: Not reported  
Rem Sys Monitoring Rpt: False  
Qrtly Gwater Mon Rpts: False

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Closure Req Rpt: False  
DEP Closure Letter: False  
Referred To: Not reported  
No Wells: Not reported  
Lph Wells: Not reported  
User Stamp: Allison Forrest/aforrest  
Date Stamp: 07/30/2009  
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: Not reported  
Work Performed: Not reported

SPILLS:

Year of Database: 2002  
Case Number: 200207632  
Who Took Spill: 934  
Assigned To: 0  
Report Date: 10/30/2002  
Report Time: 11:10:00  
Date Release: 10/30/2002  
Time Responded: Not reported  
Reported By: SCOTT SCHAUB  
Phone: 860 7497520  
Representing: Self  
Terminated: Not reported  
Recovd (Total): 1  
Total (Water): 0  
Facility Status: Closed  
Continuous Spill: False  
Released Substance: DIESEL FUEL  
Qty: 1 (Gallons)  
Emergency Measure: Not reported  
Water Body: N/A  
Discharger: DEPARTMENT OF CORRECTIONS  
Telephone: Not reported  
Responsible Party: YES  
RP Address 1: Not reported  
RP City,St,Zip: CT  
Historic: False  
Waterbody: False  
Time Stamp: 2002-10-30 11:12:27  
Sr Inspector: Williamson, Matt  
At Inspctor: \*\*NO RESPONSE  
User Stamp: Not reported  
Comments: Not reported  
Action: Removed  
Other Action: Not reported  
Agency ID: DEP Dispatch  
Other Agency: Not reported  
DEP Bureau: Not reported  
DEP Agency: Not reported  
Cause ID: Hose Failure

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Other Cause: Not reported  
Media ID: Ground Surface  
Other Media: Not reported  
Class ID: Governmental  
Other Class: Not reported  
Release Type: petroleum  
Other Release: Not reported  
Waterbody: Other  
Other Wtrbody: N/A

Year of Database: 2003  
Case Number: 200302287  
Who Took Spill: 935  
Assigned To: 0  
Report Date: 03/19/2003  
Report Time: 13:28:38  
Date Release: 03/18/2003  
Time Responded: 10:00:00  
Reported By: scott schaub-fire service supervisor  
Phone: 860 7497520  
Representing: state corrections  
Terminated: YES  
Recovd (Total): 0  
Total (Water): 0  
Facility Status: Closed  
Continuous Spill: False  
Released Substance: HYDRAULIC OIL  
Qty: 30 (Gallons)  
Emergency Measure: seal blew in mechanical room, elevator service co cleaned up  
Water Body: Not reported  
Discharger: state corrections-osborne facility  
Telephone: Not reported  
Responsible Party: YES  
RP Address 1: Not reported  
RP City,St,Zip: CT  
Historic: False  
Waterbody: False  
Time Stamp: 2003-03-20 07:42:22  
Sr Inspector: Torres, Neil  
At Inspctor: \*\*NO RESPONSE  
User Stamp: Not reported  
Comments: Not reported  
Action: Contained  
Other Action: Not reported  
Action: Cleaned  
Other Action: Not reported  
Agency ID: DEP Dispatch  
Other Agency: Not reported  
DEP Bureau: Not reported  
DEP Agency: Not reported  
Cause ID: Container Failure  
Other Cause: Not reported  
Media ID: Inside Building  
Other Media: Not reported  
Class ID: Governmental  
Other Class: Not reported  
Release Type: petroleum

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Other Release: Not reported  
Waterbody: Other  
Other Wtrbody: none

Year of Database: 2005  
Case Number: 200505736  
Who Took Spill: 201  
Assigned To: 0  
Report Date: 08/28/2005  
Report Time: 20:32:32  
Date Release: 08/28/2005  
Time Responded: 18:00:00  
Reported By: Robert Giro  
Phone: 860 5667500  
Representing: Osbourne Correctional Inst.  
Terminated: YES  
Recovd (Total): 0  
Total (Water): 0  
Facility Status: closed  
Continuous Spill: False  
Released Substance: RAW SEWAGE  
Qty: 850 (Gallons)  
Emergency Measure: Facility personnel cleaning.  
Water Body: none  
Discharger: Osbourne Correctional INST.  
Telephone: Not reported  
Responsible Party: YES  
RP Address 1: Not reported  
RP City,St,Zip: CT  
Historic: False  
Waterbody: False  
Time Stamp: 2005-10-06 09:56:21  
Sr Inspector: Hutchinson, Karen  
At Inspctor: \*\*NO RESPONSE  
User Stamp: Not reported  
Comments: Not reported  
Action: Cleaned  
Other Action: Not reported  
Agency ID: DEP Dispatch  
Other Agency: Not reported  
DEP Bureau: Not reported  
DEP Agency: Not reported  
Cause ID: Other  
Other Cause: blockage/back up  
Media ID: Inside Building  
Other Media: Not reported  
Class ID: Utility  
Other Class: Not reported  
Release Type: sewage related  
Other Release: Not reported  
Waterbody: Other  
Other Wtrbody: none

Year of Database: 2007  
Case Number: 200708287  
Who Took Spill: 207  
Assigned To: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Report Date: 12/29/2007  
Report Time: 10:19:53  
Date Release: 12/29/2007  
Time Responded: 10:19:00  
Reported By: RICH HARDY  
Phone: 860 8144755  
Representing: DEPARTMENT OF CORRECTIONS  
Terminated: YES  
Recovd (Total): 0  
Total (Water): 0  
Facility Status: CLOSED  
Continuous Spill: False  
Released Substance: RAW SEWAGE  
Qty: 100 (Gallons)  
Emergency Measure: Not reported  
Water Body: Not reported  
Discharger: Not reported  
Telephone: Not reported  
Responsible Party: Not reported  
RP Address 1: Not reported  
RP City,St,Zip: CT  
Historic: False  
Waterbody: False  
Time Stamp: 2008-01-03 16:29:41  
Sr Inspector: Gilmore, Pete  
At Inspctor: \*\*NO RESPONSE  
User Stamp: cguzman  
Comments: Not reported  
Action: Cleaned  
Other Action: Not reported  
Cause ID: Dumping  
Other Cause: Not reported  
Media ID: Ground Surface  
Other Media: Not reported  
Class ID: Governmental  
Other Class: Not reported  
Release Type: sewage related  
Other Release: Not reported

Year of Database: 2008  
Case Number: 200807708  
Who Took Spill: 208  
Assigned To: 0  
Report Date: 12/09/2008  
Report Time: 20:44:04  
Date Release: 12/09/2008  
Time Responded: Not reported  
Reported By: SCOTT SCHAUB  
Phone: 860 7636251  
Representing: CT DEPT OF CORRECTIONS  
Terminated: YES  
Recovd (Total): 0  
Total (Water): 0  
Facility Status: CLOSED  
Continuous Spill: False  
Released Substance: RAW SWEAGE  
Qty: 18000 (Gallons)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Emergency Measure: Storm drain.  
Water Body: Not reported  
Discharger: Not reported  
Telephone: Not reported  
Responsible Party: Not reported  
RP Address 1: Not reported  
RP City,St,Zip: CT  
Historic: False  
Waterbody: False  
Time Stamp: 2009-01-05 13:57:57  
Sr Inspector: Monarca, Vincent  
At Inspctor: \*\*NO RESPONSE  
User Stamp: mgranill  
Comments: Not reported  
Action: Cleaned  
Other Action: Not reported  
Agency ID: DEP Dispatch  
Other Agency: Not reported  
DEP Bureau: Not reported  
DEP Agency: Not reported  
Cause ID: Blow Back  
Other Cause: Not reported  
Media ID: Ground Surface  
Other Media: Not reported  
Class ID: Governmental  
Other Class: Not reported  
Class ID: Private  
Other Class: Not reported  
Release Type: sewage related  
Other Release: Not reported  
  
Year of Database: 2012  
Case Number: 201201560  
Who Took Spill: 212  
Assigned To: 0  
Report Date: 03/30/2012  
Report Time: 19:53:35  
Date Release: 03/30/2012  
Time Responded: Not reported  
Reported By: Rich Hardy  
Phone: 860 8144755  
Representing: DOC  
Terminated: YES  
Recovd (Total): 0  
Total (Water): 0  
Facility Status: CLOSED  
Continuous Spill: False  
Released Substance: GREY WATER  
Qty: 500 (Gallons)  
Emergency Measure: Bleach and water was used to clean it up.  
Water Body: None  
Discharger: SAA  
Telephone: Not reported  
Responsible Party: Not reported  
RP Address 1: Not reported  
RP City,St,Zip: CT  
Historic: False

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)

S105458266

Waterbody: False  
Time Stamp: 2012-04-02 12:00:46  
Sr Inspector: JOHNSTON, ALEXANDER  
At Inspctor: \*\*NO RESPONSE  
User Stamp: GuzmanCa  
Comments: Not reported  
Action: Cleaned  
Other Action: Not reported  
Agency ID: DEP Dispatch  
Other Agency: Not reported  
DEP Bureau: Not reported  
DEP Agency: Not reported  
Cause ID: Other  
Other Cause: Line Blockage  
Media ID: Ground Surface  
Other Media: Not reported  
Class ID: Governmental  
Other Class: Not reported  
Release Type: sewage related  
Other Release: Not reported

AIRS:

OBS: 1874  
Client No.: 1947  
Town No.: 166  
Prem No.: 8  
Contact: JONATHAN JAY  
Phone# Area Code: 8605667488  
Mail Street: PO BOX 100, BILTON RD  
Mail Town: SOMERS  
Mail State: CT  
Mail Zip: 6071  
X Utm Grid: 692  
Y Utm Grid: 4625.69999  
Sic: 9223  
Permit No: 4  
Description: MITSUBISHI S 12N-2 GEN;  
Date Permit Issued: 11/30/1990  
Date Permit Expires: .  
Carbon Monoxide Emissions (TPY): 1  
Actual Pm10(TPY): 0.29999999  
Actual So(TPY): 0.29999999  
Actual Nox(TPY): 4.5  
Actual Hc(TPY): 0.40000000  
Contact Title: Not reported  
Contact Email: Not reported

CPCS:

Site Type: LUST  
Lust Status code: 3  
Lust Status: Cleanup Initiated  
PTP Form: Not reported  
Program: Not reported  
Comments: A Tank Removal Report By Fuss & O'neill Received On 7/17/98 Mentions The Removal Of A 3k Gasoline Ust By Kessler. Associated Analytical Data Is Also Enclosed. The Report Is In The Ust Notification Files.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CONNECTICUT DEPARTMENT OF CORRECTION OSBORNE (Continued)**

**S105458266**

Site Type Definition: Leaking Underground Storage Tanks Rem. Started

Site Type: CERCLA  
 Lust Status code: Not reported  
 Lust Status: Not reported  
 PTP Form: Not reported  
 Program: Not on the NPL  
 Comments: Not reported  
 Site Type Definition: CERCLIS

**4**  
**SSE**  
**1/8-1/4**  
**0.183 mi.**  
**965 ft.**

**CTCORRECTIONAL INST**  
**175 BILTON RD**  
**SOMERS, CT 06071**

**CT MANIFEST** **S109722144**  
**N/A**

**Relative:**  
**Lower**

CT MANIFEST:

Detail:

**Actual:**  
**322 ft.**

Year: 2001  
 Manifest Id: MAQ031403  
 EPA ID: CT8607637347  
 TSDf EPA ID: MAD053452637  
 TSDf Name: CLEAN HARBORS OF BRAINTREE INC  
 TSDf Address: 1 HILL AVE  
 TSDf City,St,Zip: BRAINTREE, MA 02184  
 TSDf Country: USA  
 TSDf Telephone: Not reported  
 Transport Date: 06/26/2001  
 Transporter EPA ID: MAD039322250  
 Transporter Name: CLEAN HARBORS ENVIRONMENTAL SERVICES INC  
 Transporter Address: Not reported  
 Transporter City,St,Zip: CT  
 Transporter Country: USA  
 Transporter Phone: Not reported  
 Trans 2 Date: 06/27/2001  
 Trans 2 EPA ID: OHD009865825  
 Trans 2 Name: DART TRUCKING CO INC  
 Trans 2 Address: Not reported  
 Trans 2 City,St,Zip: CT  
 Trans 2 Country: USA  
 Trans 2 Phone: Not reported  
 Generator Phone: 8607638575  
 Generator Mailing Addr: 175 BILTON RD  
 Generator Mailing City/State/Zip: 06071  
 Generator Mailing Country: USA  
 Special Handling: Not reported  
 Discrepancies: No  
 Date Shipped: 06/26/2001  
 Date Received: 06/27/2001  
 Last modified date: 04/27/2004  
 Last modified by: IG  
 Comments: Not reported

Waste:

Year: 2001  
 Manifest Id: MAQ031403  
 Waste Occurrence: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CTORRECTIONAL INST (Continued)**

**S109722144**

UNNA: 1263  
Hazard Class: 3  
US Dot Description: paint related material, paint  
No of Containers: 001  
Container Type: DM  
Quantity: 55  
Weight/Volume: G  
Additional Description: Not reported  
Handling Code: Not reported  
Date Record Was Last Modified: 2004-04-27 00:00:00  
DEO Who Last Modified Record: IG  
EPA Waste Code: D001  
Recycled Waste?: False  
Date Record Was Last Modified: 2004-04-27 00:00:00

**5**  
**West**  
**1/4-1/2**  
**0.405 mi.**  
**2136 ft.**

**STATE CORRECTIONAL FACILITY**  
**WALKER DR.**  
**ENFIELD, CT 06082**

**CT LUST** **S101405519**  
**CT CPCS** **N/A**

**Relative:**  
**Lower**

**LUST:**  
LUST Id: 2411  
UST Facility Id: Not reported  
LUST Case Id: 30482  
Lust Status: Investigation  
Processing Status: Not reported  
EPA Reportable: False  
Motor Fuel: False  
Diesel: False  
Gasoline: False  
Other: False  
Other Release: Not reported  
No Release: False  
Leak: False  
Tank: False  
Piping: False  
Overfill: False  
Removal: False  
Incident Date: 06/30/1994  
Entry Date: Not reported  
Site Case Id: Not reported  
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: 2410  
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

**Actual:**  
**213 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**STATE CORRECTIONAL FACILITY (Continued)**

**S101405519**

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: 49  
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: False  
Date Referred: Not reported  
Emergency: False  
Private Heating Fuel: False  
Commercial Heating Fuel: True  
Commercial HF < 2100 Gal.: True  
Commercial HF > 2100 Gal.: False  
Commercial HF - Size Unk: False  
No LUST Site: False  
Cost Recvry Prgm Candidate: False  
OCSR Complete: False  
Follow Up Flag: False  
Alternate Water Supply: False  
Relocation: False  
Responsible Party: False  
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: 27  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**STATE CORRECTIONAL FACILITY (Continued)**

**S101405519**

Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlaid:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	False
Install Micro Wells:	False
Ground Water Sample:	False
Soil Sample:	False
Soil Gas:	False
Site Inspect:	False
Soil Excavate:	False
Geo Probe:	False
Survey:	False
Potable Well Sample:	False
Sample MWS:	False
Ground Water Gauging:	False
Soil Venting:	False
Active:	False
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:	False
Release Invest Rpt:	False
DEP App Letter 1:	False
Correct Action Plan:	False
DEP App Letter 2:	False
Rem Sys Install:	False
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	False
Qrtly Gwater Mon Rpts:	False
Closure Req Rpt:	False
DEP Closure Letter:	False
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:	Not reported
Work Performed:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

STATE CORRECTIONAL FACILITY (Continued)

S101405519

CPCS:

Site Type: LUST  
Lust Status code: 2  
Lust Status: Investigation  
PTP Form: Not reported  
Program: Not reported  
Comments: Not reported  
Site Type Definition: Leaking Underground Storage Tanks Investigation

6  
WNW  
1/2-1  
0.555 mi.  
2928 ft.

SUDEKOR  
82 DEER PARK ROAD  
EAST LONGMEADOW, MA 01001

MA SHWS S111380325  
MA RELEASE N/A  
MA AIRS

Relative:  
Lower

SHWS:

Actual:  
204 ft.

Release Tracking Number/Current Status: 1-0018747 / RAO  
Release Town: EAST LONGMEADOW  
Notification Date: 06/01/2012  
Category: TWO HR  
Associated ID: Not reported  
**Current Status: Response Action Outcome**  
Status Date: 06/26/2012  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.  
Oil Or Haz Material: Hazardous Material  
Location Type: INDUSTRIAL

[Click here to access the MA DEP site for this facility:](#)

Chemicals:

Chemical: AMMONIA  
Quantity: 150 gallons

Actions:

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 6/1/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 6/1/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FLDD1A  
Action Date: 6/1/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SUDDEKOR (Continued)**

**S111380325**

Action Date: 6/26/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNFE  
Action Status: Transmittal, Notice, or Notification Received  
Action Date: 6/26/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.  
Action Date: 6/5/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: Level I - Technical Screen Audit  
Action Date: 7/19/2012  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

**Release:**

Release Tracking Number/Current Status: 1-0018747 / RAO  
Primary ID: Not reported  
Official City: EAST LONGMEADOW  
Notification: 06/01/2012  
Category: TWO HR  
Status Date: 06/26/2012  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Hazardous Material

[Click here to access the MA DEP site for this facility:](#)

**AIRS:**

Facility Status: WITHD  
Permit Code: AQ01  
Permit Name: Plan Application Limited  
DEP Region: WE  
Application Tracking Number: X255713  
Date Closed: 04/24/2014  
Applicant Name: SUDDEKOR LLC  
Applicant Address: Not reported  
Applicant City,St,Zip: Not reported  
Applicant Telephone: 4138219000

Facility Status: APPROV  
Permit Code: AQ02  
Permit Name: Plan Application Non-Major Comprehensive  
DEP Region: WE  
Application Tracking Number: W092983  
Date Closed: 10/25/2006

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SUDEKOR (Continued)**

**S111380325**

Applicant Name: SUDEKOR LLC  
Applicant Address: 240 BOWLES RD  
Applicant City,St,Zip: AGAWAM, MA 01001  
Applicant Telephone: 4138219000  
  
Facility Status: APPROV  
Permit Code: AQ02  
Permit Name: Plan Application Non-Major Comprehensive  
DEP Region: WE  
Application Tracking Number: W054512  
Date Closed: 04/21/2005  
Applicant Name: SUDEKOR LLC  
Applicant Address: 240 BOWLES RD  
Applicant City,St,Zip: AGAWAM, MA 01001  
Applicant Telephone: 4138219000

7  
NW  
1/2-1  
0.799 mi.  
4220 ft.

**HASBRO**  
**443 SHAKER RD**  
**EAST LONGMEADOW, MA 01028**

**MA SHWS S101021758**  
**MA RELEASE N/A**

**Relative:**  
**Lower**

SHWS:

**Actual:**  
**220 ft.**

Release Tracking Number/Current Status: 1-0018059 / RAO  
Release Town: EAST LONGMEADOW  
Notification Date: 12/07/2010  
Category: TWO HR  
Associated ID: Not reported  
**Current Status: Response Action Outcome**  
Status Date: 01/21/2011  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.  
  
Oil Or Haz Material: Oil  
Location Type: COMMERCIAL  
Source: TANKER

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: #2 FUEL OIL  
Quantity: 25 gallons

Actions:

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 1/21/2011  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Completion Statement Received  
Action Date: 1/21/2011  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNFE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HASBRO (Continued)**

**S101021758**

Action Status: Transmittal, Notice, or Notification Received  
Action Date: 1/21/2011  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 12/7/2010  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action  
Action Status: Oral Approval of Plan or Action  
Action Date: 12/7/2010  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA  
Action Status: FLDD1A  
Action Date: 12/7/2010  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 12/8/2010  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO  
Action Status: Level I - Technical Screen Audit  
Action Date: 3/31/2011  
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Release:

Release Tracking Number/Current Status: 1-0018059 / RAO  
Primary ID: Not reported  
Official City: EAST LONGMEADOW  
Notification: 12/07/2010  
Category: TWO HR  
Status Date: 01/21/2011  
Phase: Not reported  
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.  
Oil / Haz Material Type: Oil

[Click here to access the MA DEP site for this facility:](#)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

8  
NW  
1/2-1  
0.839 mi.  
4432 ft.

**BEHIND MILTON BRADLEY  
RAILROAD BETWEEN DENSLOW RD ANDE  
EAST LONGMEADOW, MA 01028**

**MA SHWS S102083880  
MA RELEASE N/A**

**Relative:  
Lower**

SHWS:

Release Tracking Number/Current Status: 1-0011366 / RAO  
Release Town: EAST LONGMEADOW  
Notification Date: 05/15/1996  
Category: 120 DY  
Associated ID: Not reported  
**Current Status: Response Action Outcome**  
Status Date: 05/13/1997  
Phase: Not reported  
Response Action Outcome: B1 - Remedial actions have not been conducted because a level of No Significant Risk exists.  
Oil Or Haz Material: Hazardous Material

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: BENZO[A]ANTHRACENE  
Quantity: 1.1 milligrams per kilogram  
Chemical: BENZO[A]PYRENE  
Quantity: 1.2 milligrams per kilogram  
Chemical: BENZO[B]FLUORANTHENE  
Quantity: 1.7 milligrams per kilogram

Actions:

Action Type: Release Abatement Measure  
Action Status: Written Plan Received  
Action Date: 4/3/1997  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Release Abatement Measure  
Action Status: Written Approval of Plan  
Action Date: 4/4/1997  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Release Abatement Measure  
Action Status: Fee Received - FMCRA Use Only  
Action Date: 4/7/1997  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Response Action Outcome - RAO  
Action Status: Fee Received - FMCRA Use Only  
Action Date: 5/13/1997  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 5/13/1997  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BEHIND MILTON BRADLEY (Continued)**

**S102083880**

Significant Risk exists.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 5/15/1996  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 5/15/1996  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 5/20/1996  
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Release:

Release Tracking Number/Current Status: 1-0011366 / RAO  
Primary ID: Not reported  
Official City: EAST LONGMEADOW  
Notification: 05/15/1996  
Category: 120 DY  
Status Date: 05/13/1997  
Phase: Not reported  
Response Action Outcome: B1 - Remedial actions have not been conducted because a level of No Significant Risk exists.  
Oil / Haz Material Type: Hazardous Material

[Click here to access the MA DEP site for this facility:](#)

9  
NW  
1/2-1  
0.882 mi.  
4658 ft.

**CELECOM CORP**  
**357 SHAKER RD**  
**EAST LONGMEADOW, MA 01028**

**MA SHWS S102083814**  
**MA RELEASE N/A**

**Relative:**  
**Lower**

SHWS:

Release Tracking Number/Current Status: 1-0011273 / RAO  
Release Town: EAST LONGMEADOW  
Notification Date: 05/09/1996  
Category: TWO HR  
Associated ID: Not reported  
**Current Status: Response Action Outcome**  
Status Date: 03/31/2003  
Phase: PHASE II  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil Or Haz Material: Hazardous Material  
Location Type: INDUSTRIAL  
Location Type: COMMERCIAL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CELECOM CORP (Continued)**

**S102083814**

[Click here to access the MA DEP site for this facility:](#)

Chemicals:

Chemical:	LEAD
Quantity:	1910 milligrams per kilogram
Chemical:	ANTIMONY
Quantity:	13.9 milligrams per kilogram
Chemical:	CYANIDE
Quantity:	310 milligrams per kilogram

Actions:

Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Enforcement Conference
Action Date:	1/7/1997
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Tier Classification
Action Status:	Tier 2 Extension
Action Date:	10/24/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Tier Classification
Action Status:	Tier 2 Transfer
Action Date:	10/24/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	10/3/2000
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Phase 2
Action Status:	Scope of Work Received
Action Date:	12/21/1999
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Compliance and Enforcement Action
Action Status:	Interim Deadline Letter Issued
Action Date:	2/27/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	2/27/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CELECOM CORP (Continued)**

**S102083814**

Action Date: 3/1/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 3/1/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 3/1/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action  
Action Status: ACOP  
Action Date: 3/11/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)  
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.)  
Action Date: 3/13/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 3/20/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 3/25/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FLDRAN  
Action Date: 3/25/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: RAO Statement Received  
Action Date: 3/31/2003  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 3/7/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CELECOM CORP (Continued)**

**S102083814**

Action Type: RLFA  
Action Status: FOLFLD  
Action Date: 4/16/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 4/16/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO  
Action Status: Level I - Technical Screen Audit  
Action Date: 4/17/2003  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 4/2/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 4/29/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Completion Statement Received  
Action Date: 5/13/1997  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF  
Action Status: Reportable Release under MGL 21E  
Action Date: 5/24/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Imminent Hazard Evaluation Received  
Action Date: 5/24/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Written Plan Received  
Action Date: 5/24/1996  
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action  
Action Status: Written Approval of Plan  
Action Date: 5/31/1996

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CELECOM CORP (Continued)**

**S102083814**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition  
Action Status: Reportable Release under MGL 21E  
Action Date: 5/9/1996

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1  
Action Status: Completion Statement Received  
Action Date: 5/9/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification  
Action Status: Transmittal, Notice, or Notification Received  
Action Date: 5/9/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification  
Action Status: Tier 2 Classification  
Action Date: 5/9/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 7/15/1996

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action  
Action Status: Notice of Non-Compliance Issued  
Action Date: 8/19/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA  
Action Status: FOLOFF  
Action Date: 8/26/1996

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action  
Action Status: RFI  
Action Date: 8/28/1996

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Release:

Release Tracking Number/Current Status: 1-0011273 / RAO  
Primary ID: Not reported  
Official City: EAST LONGMEADOW  
Notification: 05/09/1996

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CELECOM CORP (Continued)**

**S102083814**

Category: TWO HR  
Status Date: 03/31/2003  
Phase: PHASE II  
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.  
Oil / Haz Material Type: Hazardous Material

[Click here to access the MA DEP site for this facility:](#)

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EAST LONGMEADOW	S110055533	EAST LONGMEADOW	PEASE RD	01028	MA SHWS, MA RELEASE
EAST LONGMEADOW	S102083575	NEAR WATCHING BROOK	PEASE RD	01028	MA SHWS, MA RELEASE
EAST LONGMEADOW	S110303586	POLE NO 22	SHAKER RD	01028	MA SHWS, MA RELEASE
SOMERS	S104254939	RYE HILL CIRCLE AREA	BILTON ROAD		CT SDADB

# 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: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	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: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	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	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***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: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	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: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 07/10/2015
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/29/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site List***

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/29/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (888) 372-7341  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (888) 372-7341  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (888) 372-7341  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (888) 372-7341  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***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: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/30/2015
	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: 06/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2015	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 68	Next Scheduled EDR Contact: 12/14/2015
	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: 06/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2015	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 68	Next Scheduled EDR Contact: 12/14/2015
	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: 06/22/2015	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-267-2180
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 06/26/2015
Number of Days to Update: 82	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Annually

## ***State- and tribal - equivalent CERCLIS***

### CT 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	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 04/23/2010	Telephone: 860-424-3705
Date Made Active in Reports: 05/25/2010	Last EDR Contact: 07/06/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MA SHWS: Site Transition List

Contains information on releases of oil and hazardous materials that have been reported to DEP.

Date of Government Version: 06/30/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/14/2015	Telephone: 617-292-5990
Date Made Active in Reports: 08/04/2015	Last EDR Contact: 07/14/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Quarterly

## CT 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	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 04/23/2010	Telephone: 860-424-3705
Date Made Active in Reports: 05/25/2010	Last EDR Contact: 07/06/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: No Update Planned

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

#### CT 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: 07/02/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 07/28/2015	Telephone: 860-424-3366
Date Made Active in Reports: 08/05/2015	Last EDR Contact: 07/28/2015
Number of Days to Update: 8	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Annually

#### MA LF PROFILES: Landfill Profiles Listing

This spreadsheet describes landfills that have actively accepted waste or have closed under MassDEP Solid Waste Regulations first adopted in 1971 (310 CMR 16.00 and 310 CMR 19.00). The list does not include landfills that closed before 1971 (and which never had a MassDEP permit or approval), or for which agency data is incomplete.

Date of Government Version: 06/26/2012	Source: Department of Environmental Protection
Date Data Arrived at EDR: 11/21/2014	Telephone: 617-292-5868
Date Made Active in Reports: 12/17/2014	Last EDR Contact: 07/10/2015
Number of Days to Update: 26	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Varies

#### MA SWF/LF: Solid Waste Facility Database/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: 01/29/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/09/2015	Telephone: 617-292-5989
Date Made Active in Reports: 04/21/2015	Last EDR Contact: 07/10/2015
Number of Days to Update: 12	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Quarterly

### ***State and tribal leaking storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CT 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: 07/24/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 07/29/2015	Telephone: 860-424-3376
Date Made Active in Reports: 08/05/2015	Last EDR Contact: 07/06/2015
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Semi-Annually

## MA LUST: Leaking Underground Storage Tank Listing

Sites within the Leaking Underground Storage Tank Listing that have a UST listed as its source.

Date of Government Version: 06/30/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/14/2015	Telephone: 617-292-5990
Date Made Active in Reports: 08/04/2015	Last EDR Contact: 07/14/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Quarterly

## 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: 04/30/2015	Source: EPA, Region 5
Date Data Arrived at EDR: 05/29/2015	Telephone: 312-886-7439
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 24	Next Scheduled EDR Contact: 11/09/2015
	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: 02/03/2015	Source: EPA Region 10
Date Data Arrived at EDR: 02/12/2015	Telephone: 206-553-2857
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## 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: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## 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: 04/30/2015	Source: EPA Region 8
Date Data Arrived at EDR: 05/05/2015	Telephone: 303-312-6271
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015	Source: EPA Region 7
Date Data Arrived at EDR: 04/28/2015	Telephone: 913-551-7003
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Date of Government Version: 03/17/2015	Source: EPA Region 6
Date Data Arrived at EDR: 05/01/2015	Telephone: 214-665-6597
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 52	Next Scheduled EDR Contact: 11/09/2015
	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: 09/30/2014	Source: EPA Region 4
Date Data Arrived at EDR: 03/03/2015	Telephone: 404-562-8677
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Semi-Annually

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: 02/03/2015	Source: EPA Region 1
Date Data Arrived at EDR: 04/30/2015	Telephone: 617-918-1313
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 11/09/2015
	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: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 07/10/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Varies

CT 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: 08/25/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 09/01/2015	Telephone: 860-424-3376
Date Made Active in Reports: 09/22/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Semi-Annually

MA UST: Summary Listing of all the Tanks Registered in the State of Massachusetts  
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: 07/13/2015	Source: Department of Fire Services, Office of the Public Safety
Date Data Arrived at EDR: 07/21/2015	Telephone: 617-556-1035
Date Made Active in Reports: 08/04/2015	Last EDR Contact: 07/21/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CT AST: Marine Terminals and Tank Information

A listing of bulk petroleum facilities that receive petroleum by a vessel.

Date of Government Version: 07/01/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/04/2015	Telephone: 860-424-3233
Date Made Active in Reports: 09/01/2015	Last EDR Contact: 08/03/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Varies

## MA AST: Aboveground Storage Tank Database Registered Aboveground Storage Tanks.

Date of Government Version: 10/22/2009	Source: Department of Public Safety
Date Data Arrived at EDR: 10/28/2009	Telephone: 617-556-1035
Date Made Active in Reports: 11/06/2009	Last EDR Contact: 07/20/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Quarterly

## 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: 04/30/2015	Source: EPA Region 8
Date Data Arrived at EDR: 05/05/2015	Telephone: 303-312-6137
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## 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: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/09/2015
	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: 03/17/2015	Source: EPA Region 6
Date Data Arrived at EDR: 05/01/2015	Telephone: 214-665-7591
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 52	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Semi-Annually

## 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: 04/30/2015	Source: EPA Region 5
Date Data Arrived at EDR: 05/26/2015	Telephone: 312-886-6136
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/09/2015
	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).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/03/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 04/30/2015	Telephone: 617-918-1313
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 11/09/2015
	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: 09/30/2014	Source: EPA Region 4
Date Data Arrived at EDR: 03/03/2015	Telephone: 404-562-9424
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Semi-Annually

## 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: 05/06/2015	Source: EPA Region 10
Date Data Arrived at EDR: 05/19/2015	Telephone: 206-553-2857
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## 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: 12/14/2014	Source: EPA Region 9
Date Data Arrived at EDR: 02/13/2015	Telephone: 415-972-3368
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## ***State and tribal institutional control / engineering control registries***

### CT 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	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 05/07/2013	Telephone: 860-424-3000
Date Made Active in Reports: 06/19/2013	Last EDR Contact: 08/07/2015
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Varies

### CT AUL: ELUR Sites

Environmental Land Use Restriction sites.

Date of Government Version: 08/18/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/21/2015	Telephone: 860-424-3912
Date Made Active in Reports: 09/22/2015	Last EDR Contact: 08/07/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal voluntary cleanup sites***

### CT VCP: Voluntary Remediation Sites

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 08/18/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/21/2015	Telephone: 860-424-3705
Date Made Active in Reports: 09/22/2015	Last EDR Contact: 08/07/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Varies

### 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: 09/29/2014	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2014	Telephone: 617-918-1102
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 06/26/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

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

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

## ***State and tribal Brownfields sites***

### CT 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: 06/20/2015	Source: Connecticut Brownfields Redevelopment Authority
Date Data Arrived at EDR: 06/24/2015	Telephone: 860-258-7833
Date Made Active in Reports: 07/21/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Varies

### CT 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 contaminant?]"

Date of Government Version: 11/30/2004	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 06/26/2009	Telephone: 860-424-3705
Date Made Active in Reports: 07/09/2009	Last EDR Contact: 06/25/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Varies

### MA BROWNFIELDS: Completed Brownfields Covenants Listing

Under Massachusetts law, M.G.L. c. 21E is the statute that governs the cleanup of releases of oil and/or hazardous material to the environment. The Brownfields Act of 1998 amended M.G.L. c. 21E by establishing significant liability relief and financial incentives to spur the redevelopment of brownfields, while ensuring that the Commonwealth's environmental standards are met. Most brownfields are redeveloped with the benefit of liability protections that operate automatically under M.G.L. c. 21E.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/01/2014  
Date Data Arrived at EDR: 11/06/2014  
Date Made Active in Reports: 11/10/2014  
Number of Days to Update: 4

Source: Office of the Attorney General  
Telephone: 617-963-2423  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Annually

## MA BROWNFIELDS 2: Potential Brownfields Listing

A listing of potential brownfields site locations in the state.

Date of Government Version: 12/17/2014  
Date Data Arrived at EDR: 05/06/2015  
Date Made Active in Reports: 05/11/2015  
Number of Days to Update: 5

Source: Department of Environmental Protection  
Telephone: 617-556-1007  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 11/16/2015  
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: 06/22/2015  
Date Data Arrived at EDR: 06/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 7

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 06/24/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Semi-Annually

### **Local Lists of Landfill / Solid Waste Disposal Sites**

#### CT SWRCY: Recycling Facilities

A listing of recycling facilities.

Date of Government Version: 04/16/2015  
Date Data Arrived at EDR: 04/23/2015  
Date Made Active in Reports: 04/30/2015  
Number of Days to Update: 7

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3223  
Last EDR Contact: 06/10/2015  
Next Scheduled EDR Contact: 09/28/2015  
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: 05/01/2015  
Next Scheduled EDR Contact: 08/17/2015  
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: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **Local Lists of Hazardous waste / Contaminated Sites**

### US HIST CDL: National Clandestine Laboratory Register

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: 06/01/2015	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/02/2015	Telephone: 202-307-1000
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 106	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: No Update Planned

### CT CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab locations included in the Spills database.

Date of Government Version: 07/28/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 07/31/2015	Telephone: 860-424-3361
Date Made Active in Reports: 09/01/2015	Last EDR Contact: 07/06/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/19/2015
	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: 05/15/2015	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/02/2015	Telephone: 202-307-1000
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 106	Next Scheduled EDR Contact: 12/14/2015
	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: 08/18/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/21/2015	Telephone: 860-424-3705
Date Made Active in Reports: 09/22/2015	Last EDR Contact: 08/07/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CT LIENS: Environmental Liens Listing

A listing of environmental liens placed by the Cost Recovery Program.

Date of Government Version: 05/20/2014  
Date Data Arrived at EDR: 05/23/2014  
Date Made Active in Reports: 06/03/2014  
Number of Days to Update: 11

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3120  
Last EDR Contact: 05/18/2015  
Next Scheduled EDR Contact: 08/31/2015  
Data Release Frequency: Varies

## MA LIENS: Liens Information Listing

A listing of environmental liens.

Date of Government Version: 02/24/2014  
Date Data Arrived at EDR: 02/27/2014  
Date Made Active in Reports: 03/14/2014  
Number of Days to Update: 15

Source: Department of Environmental Protection  
Telephone: 617-292-5628  
Last EDR Contact: 05/22/2015  
Next Scheduled EDR Contact: 09/07/2015  
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: 02/18/2014  
Date Data Arrived at EDR: 03/18/2014  
Date Made Active in Reports: 04/24/2014  
Number of Days to Update: 37

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## **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: 06/24/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 68

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Annually

### CT SPILLS: Oil & Chemical Spill Database

Oil and Chemical Spill Data.

Date of Government Version: 07/28/2015  
Date Data Arrived at EDR: 07/31/2015  
Date Made Active in Reports: 09/01/2015  
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3024  
Last EDR Contact: 07/06/2015  
Next Scheduled EDR Contact: 10/19/2015  
Data Release Frequency: Semi-Annually

### MA RELEASE: Reportable Releases

Contains information on all releases of oil and hazardous materials that have been reported to DEP

Date of Government Version: 06/30/2015  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 21

Source: Department of Environmental Protection  
Telephone: 617-292-5990  
Last EDR Contact: 07/14/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Quarterly

### CT 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

## MA 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: 12/11/2012  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 02/08/2013  
Number of Days to Update: 36

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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (888) 372-7341  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

### 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: 06/06/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 07/08/2015  
Next Scheduled EDR Contact: 09/21/2015  
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: 07/14/2015  
Next Scheduled EDR Contact: 10/28/2015  
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: 07/14/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: N/A

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 05/21/2015
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/31/2015
	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: 06/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/02/2015	Telephone: 202-566-1917
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 106	Next Scheduled EDR Contact: 11/30/2015
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 08/04/2015
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/23/2015
	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: 04/22/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2015	Telephone: 703-308-4044
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 05/14/2015
Number of Days to Update: 6	Next Scheduled EDR Contact: 08/24/2015
	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: 12/31/2012	Source: EPA
Date Data Arrived at EDR: 01/15/2015	Telephone: 202-260-5521
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 06/25/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Every 4 Years

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 12/31/2013	Source: EPA
Date Data Arrived at EDR: 02/12/2015	Telephone: 202-566-0250
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 01/29/2015
Number of Days to Update: 110	Next Scheduled EDR Contact: 06/08/2015
	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	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 07/22/2015
Number of Days to Update: 77	Next Scheduled EDR Contact: 11/09/2015
	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: 11/25/2013	Source: EPA
Date Data Arrived at EDR: 12/12/2013	Telephone: 703-416-0223
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 06/12/2015
Number of Days to Update: 74	Next Scheduled EDR Contact: 09/21/2015
	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: 02/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/13/2015	Telephone: 202-564-8600
Date Made Active in Reports: 03/25/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 11/09/2015
	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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 05/14/2015
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/24/2015
	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: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 07/17/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/28/2015
	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: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 10/28/2015
	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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/20/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/07/2015
	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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/20/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/07/2015
	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: 03/31/2015	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 04/09/2015	Telephone: 301-415-7169
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 06/04/2015
Number of Days to Update: 63	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 07/13/2015
Number of Days to Update: 76	Next Scheduled EDR Contact: 10/28/2015
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/12/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/21/2015
	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: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 07/31/2015
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/09/2015
	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: 07/07/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2015	Telephone: 202-343-9775
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 10/19/2015
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 Transportation, 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 Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 08/04/2015  
Next Scheduled EDR Contact: 11/16/2015  
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: 12/31/2014  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/02/2015  
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 08/28/2015  
Next Scheduled EDR Contact: 12/07/2015  
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: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 07/14/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Semi-Annually

## 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: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 05/26/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/25/2014  
Date Data Arrived at EDR: 11/26/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 64

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 07/07/2015  
Next Scheduled EDR Contact: 10/19/2015  
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 1931 and 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: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/22/2015  
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: 05/14/2015  
Date Data Arrived at EDR: 06/03/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 09/01/2015  
Next Scheduled EDR Contact: 12/14/2015  
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: 06/05/2015  
Next Scheduled EDR Contact: 09/14/2015  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 06/05/2015
Number of Days to Update: 97	Next Scheduled EDR Contact: 09/14/2015
	Data Release Frequency: Varies

## 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: 01/18/2015	Source: EPA
Date Data Arrived at EDR: 02/27/2015	Telephone: (617) 918-1111
Date Made Active in Reports: 03/25/2015	Last EDR Contact: 06/10/2015
Number of Days to Update: 26	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Quarterly

## CT AIRS: Permitted Air Sources Listing

A listing of permitted air sources in Connecticut.

Date of Government Version: 01/30/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 01/30/2015	Telephone: 860-424-3026
Date Made Active in Reports: 02/03/2015	Last EDR Contact: 07/24/2015
Number of Days to Update: 4	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

## MA AIRS: Permitted Facilities Listing

A listing of Air Quality permit applications.

Date of Government Version: 01/26/2015	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/27/2015	Telephone: 617-292-5789
Date Made Active in Reports: 02/10/2015	Last EDR Contact: 07/20/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Varies

## CT 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: 06/15/2015	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/17/2015	Telephone: 860-424-3766
Date Made Active in Reports: 09/01/2015	Last EDR Contact: 08/07/2015
Number of Days to Update: 15	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Quarterly

## CT DRYCLEANERS: Drycleaner Facilities

A listing of drycleaner facility locations.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/10/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Varies

## MA DRYCLEANERS: Regulated Drycleaning Facilities

A listing of Department of Environmental Protection regulated drycleaning facilities that use perchloroethylene under the Environmental Results Program.

Date of Government Version: 08/03/2015  
Date Data Arrived at EDR: 08/03/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 30

Source: Department of Environmental Protection  
Telephone: 617-292-5633  
Last EDR Contact: 08/03/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Varies

## CT 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: 07/24/2015  
Date Data Arrived at EDR: 07/27/2015  
Date Made Active in Reports: 08/05/2015  
Number of Days to Update: 9

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3265  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Varies

## MA ENFORCEMENT: Enforcement Action Cases

A listing of enforcement action cases tracked by Department of Environmental Protection programs, including Solid Waste and Hazardous Waste.

Date of Government Version: 08/31/2015  
Date Data Arrived at EDR: 09/03/2015  
Date Made Active in Reports: 09/22/2015  
Number of Days to Update: 19

Source: Department of Environmental Quality  
Telephone: 617-292-5979  
Last EDR Contact: 08/31/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Varies

## CT 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: 07/23/2014  
Date Data Arrived at EDR: 07/01/2014  
Date Made Active in Reports: 07/09/2014  
Number of Days to Update: 8

Source: Department of Energy & Environmental Protection  
Telephone: 860-418-5930  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Varies

## MA Financial Assurance 1: Financial Assurance Information Listing

Information for hazardous 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: 12/01/2010  
Date Data Arrived at EDR: 12/23/2010  
Date Made Active in Reports: 02/03/2011  
Number of Days to Update: 42

Source: Department of Environmental Protection  
Telephone: 617-292-5970  
Last EDR Contact: 06/11/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Varies

## CT 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/17/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 09/01/2015  
Number of Days to Update: 25

Source: Department of Energy & Environmental Protection  
Telephone: 860-418-5930  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Varies

## MA Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tanks. 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: 10/21/2011  
Date Data Arrived at EDR: 10/25/2011  
Date Made Active in Reports: 11/18/2011  
Number of Days to Update: 24

Source: Office of State Fire Marshal  
Telephone: 978-567-3100  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Quarterly

## MA Financial Assurance 3: Financial Assurance Information listing

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: 10/01/2014  
Date Data Arrived at EDR: 10/30/2014  
Date Made Active in Reports: 11/10/2014  
Number of Days to Update: 11

Source: Department of Environmental Protection  
Telephone: 617-292-5970  
Last EDR Contact: 07/17/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Varies

## CT 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: 06/05/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Varies

## MA LEAD: Lead Inspection Database

The Massachusetts Childhood Lead Poisoning Prevention Program data of lead inspection for the state.

Date of Government Version: 07/09/2015  
Date Data Arrived at EDR: 07/15/2015  
Date Made Active in Reports: 08/04/2015  
Number of Days to Update: 20

Source: Department of Health & Human Services, Childhood Lead Poisoning Prevention Program  
Telephone: 617-624-5757  
Last EDR Contact: 07/06/2015  
Next Scheduled EDR Contact: 10/19/2015  
Data Release Frequency: Varies

## CT 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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 07/30/2013  
Date Data Arrived at EDR: 08/19/2013  
Date Made Active in Reports: 10/03/2013  
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 05/18/2015  
Next Scheduled EDR Contact: 08/31/2015  
Data Release Frequency: No Update Planned

## CT NPDES: Wastewater Permit Listing

A listing of permits issued by the DEP.

Date of Government Version: 08/07/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 09/01/2015  
Number of Days to Update: 25

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3832  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

## MA NPDES: NPDES Permit Listing

Listing of treatment plants in Massachusetts that hold permits to discharge to groundwater.

Date of Government Version: 01/01/2015  
Date Data Arrived at EDR: 02/17/2015  
Date Made Active in Reports: 03/05/2015  
Number of Days to Update: 16

Source: Department of Environmental Protection  
Telephone: 508-767-2781  
Last EDR Contact: 05/22/2015  
Next Scheduled EDR Contact: 08/31/2015  
Data Release Frequency: Varies

## CT 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: 06/30/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 08/05/2015  
Number of Days to Update: 12

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3766  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EDR US Hist Auto Stat: EDR Exclusive Historic Gas 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	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## EDR US Hist Cleaners: EDR Exclusive Historic Dry 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	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### CT 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	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/02/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 185	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

#### MA 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 Environmental Protection in Massachusetts.

Date of Government Version: N/A	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/24/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 176	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

#### CT 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

## MA 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 Environmental Protection in Massachusetts.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of 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: 12/31/2013  
Date Data Arrived at EDR: 07/17/2015  
Date Made Active in Reports: 08/12/2015  
Number of Days to Update: 26

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/28/2015  
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: 08/01/2015  
Date Data Arrived at EDR: 08/06/2015  
Date Made Active in Reports: 08/24/2015  
Number of Days to Update: 18

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 08/06/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Annually

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 08/18/2015  
Number of Days to Update: 25

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 06/19/2015  
Date Made Active in Reports: 07/15/2015  
Number of Days to Update: 26

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 05/26/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.

Date of Government Version: 03/26/2015  
Date Data Arrived at EDR: 06/03/2015  
Date Made Active in Reports: 07/20/2015  
Number of Days to Update: 47

Source: Department of Environmental Conservation  
Telephone: 802-241-3443  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information Hazardous waste manifest information.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 03/19/2015  
Date Made Active in Reports: 04/07/2015  
Number of Days to Update: 19

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/11/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Annually

## Oil/Gas Pipelines

Source: PennWell Corporation  
Telephone: 281-546-1505

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  
Telephone: 800-823-6277

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**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.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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: Wetland Soils  
Source: Department of Environmental Protection  
Telephone: 860-871-4047

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

### **STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

134 BILTON ROAD  
134 BILTON ROAD  
SOMERS, CT 06071

### TARGET PROPERTY COORDINATES

Latitude (North):	42.0324 - 42° 1' 56.64"
Longitude (West):	72.5057 - 72° 30' 20.52"
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	706479.8
UTM Y (Meters):	4656170.0
Elevation:	349 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	5644794 SPRINGFIELD SOUTH, MA
Version Date:	2012
Northeast Map:	5642696 HAMPDEN, MA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

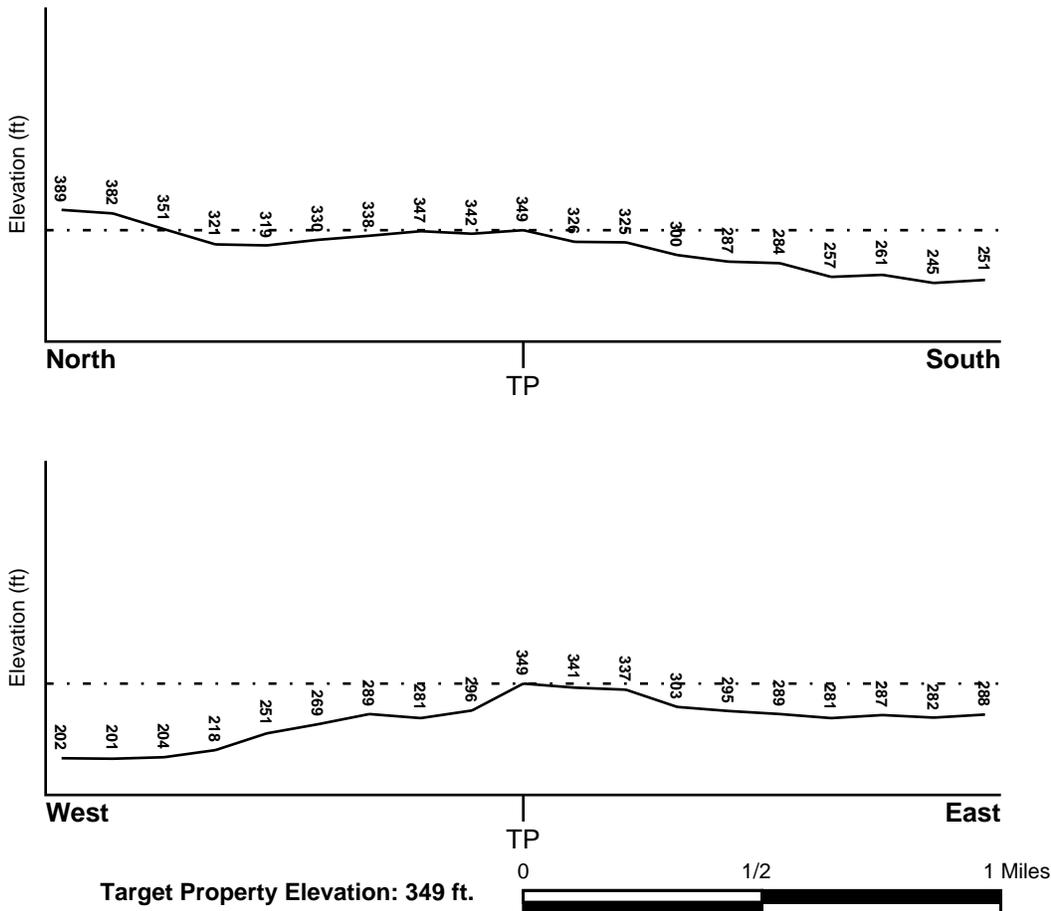
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' 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.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

Target Property County  
TOLLAND, CT

FEMA Flood  
Electronic Data  
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0901120003B - FEMA Q3 Flood data

Additional Panels in search area: 2501380005B - FEMA Q3 Flood data  
09003C - FEMA DFIRM Flood data  
0901120006B - FEMA Q3 Flood data

## NATIONAL WETLAND INVENTORY

NWI Quad at Target Property  
SPRINGFIELD SOUTH

NWI Electronic  
Data Coverage  
YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius: 1.25 miles  
Status: Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u> <u>FROM TP</u>	<u>GENERAL DIRECTION</u> <u>GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

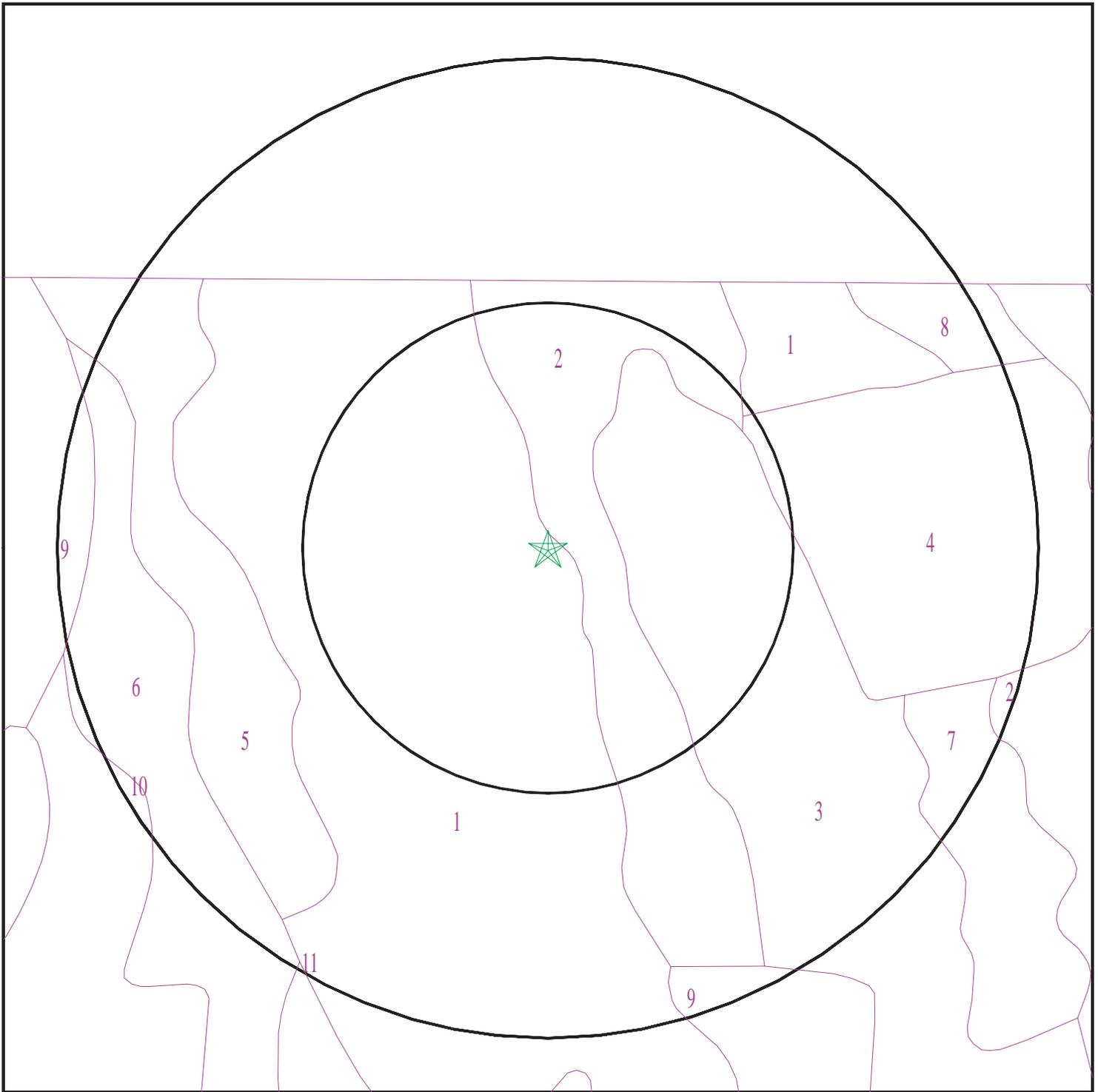
Era:	Mesozoic
System:	Triassic
Series:	Triassic
Code:	Tr ( <i>decoded above as Era, System &amp; Series</i> )

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 04435145.2r



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: 134 Bilton Road  
ADDRESS: 134 Bilton Road  
Somers CT 06071  
LAT/LONG: 42.0324 / 72.5057

CLIENT: Rincon  
CONTACT: Savanna Vrevich  
INQUIRY #: 04435145.2r  
DATE: October 09, 2015 7:43 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: Narragansett

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	5 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	14 inches	24 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
4	24 inches	27 inches	gravelly silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
5	27 inches	59 inches	very gravelly loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5

**Soil Map ID: 2**

Soil Component Name: Narragansett

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	5 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	14 inches	24 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	24 inches	27 inches	gravelly silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
5	27 inches	59 inches	very gravelly loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5

### Soil Map ID: 3

Soil Component Name: Broadbrook

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	7 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	14 inches	25 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	25 inches	64 inches	gravelly fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.01	Max: 6 Min: 4.5

### Soil Map ID: 4

Soil Component Name: Cheshire

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 4	Max: 6 Min: 4.5
2	7 inches	16 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 4	Max: 6 Min: 4.5
3	16 inches	25 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 4	Max: 6 Min: 4.5
4	25 inches	64 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 4	Max: 6 Min: 4.5

### Soil Map ID: 5

Soil Component Name: Wapping

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	11 inches	15 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	15 inches	20 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	20 inches	27 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6 Min: 4.5
5	27 inches	35 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5
6	35 inches	79 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 6**

Soil Component Name: Scarborough

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 10 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	muck	A-8	Highly organic soils, Peat.	Max: 42 Min: 14	Max: 6 Min: 4.5
2	11 inches	16 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5
3	16 inches	31 inches	stratified sand to loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6 Min: 4.5
4	31 inches	72 inches	stratified very gravelly coarse sand to loamy fine sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 7.3 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 7**

Soil Component Name: Narragansett

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	5 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	14 inches	24 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	24 inches	27 inches	gravelly silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
5	27 inches	59 inches	very gravelly loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 8**

Soil Component Name: Wapping

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	11 inches	15 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	15 inches	20 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	20 inches	27 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
5	27 inches	35 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5
6	35 inches	79 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5

**Soil Map ID: 9**

Soil Component Name: Narragansett

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	5 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	14 inches	24 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	24 inches	27 inches	gravelly silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
5	27 inches	59 inches	very gravelly loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 14	Max: 6 Min: 4.5

### Soil Map ID: 10

Soil Component Name: Raypol

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	7 inches	11 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	11 inches	20 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	20 inches	25 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
5	25 inches	29 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
6	29 inches	51 inches	stratified very gravelly coarse sand to loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 5.5 Min: 4.5
7	51 inches	64 inches	stratified very gravelly coarse sand to loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 11**

Soil Component Name: Wilbraham

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 23 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	3 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	7 inches	20 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
4	20 inches	64 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.01	Max: 6 Min: 4.5

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40000230731	1/4 - 1/2 Mile SE
2	USGS40000230719	1/2 - 1 Mile South
3	USGS40000230762	1/2 - 1 Mile East
4	USGS40000230759	1/2 - 1 Mile West
5	USGS40000230765	1/2 - 1 Mile East
A6	USGS40000230757	1/2 - 1 Mile East
A7	USGS40000230754	1/2 - 1 Mile East
8	USGS40000230730	1/2 - 1 Mile WSW
9	USGS40000230747	1/2 - 1 Mile East
10	USGS40000230706	1/2 - 1 Mile SW
14	USGS40000230748	1/2 - 1 Mile East
15	USGS40000230672	1/2 - 1 Mile SSW
C16	USGS40000230703	1/2 - 1 Mile SW

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
C17	USGS40000230704	1/2 - 1 Mile SW
C18	USGS40000230705	1/2 - 1 Mile SW
D19	USGS40000230669	1/2 - 1 Mile SSE
20	USGS40000230670	1/2 - 1 Mile SSW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

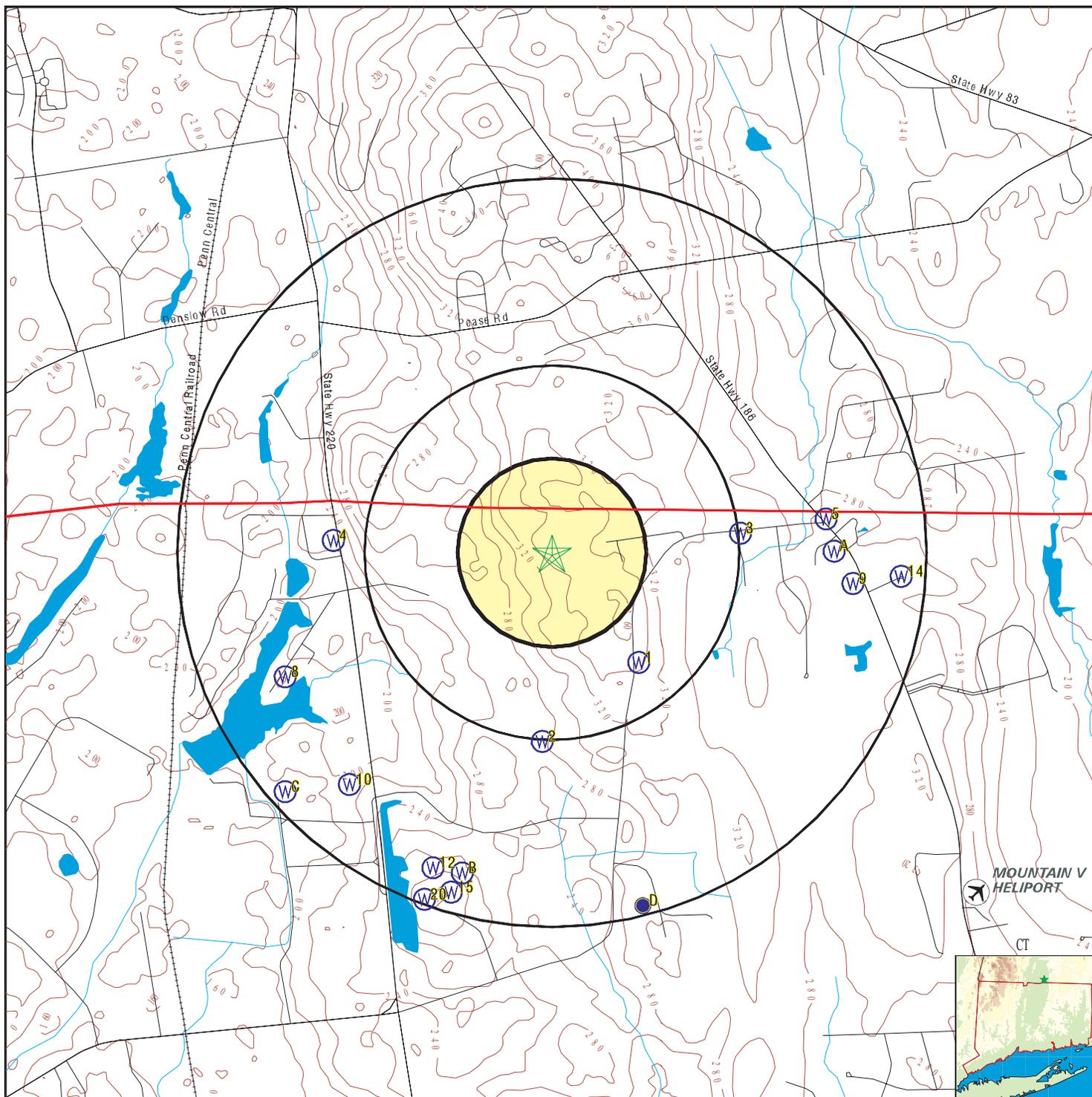
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
B11	CTC000000001386	1/2 - 1 Mile SSW
12	CTC000000001385	1/2 - 1 Mile SSW
B13	CTC000000000010	1/2 - 1 Mile SSW
D21	CTC000000000007	1/2 - 1 Mile SSE

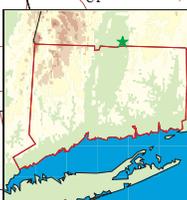
# PHYSICAL SETTING SOURCE MAP - 04435145.2r



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- EPA Designated Sole Src. Aq.



MOUNTAIN V  
HELIPORT



SITE NAME: 134 Bilton Road  
 ADDRESS: 134 Bilton Road  
 Somers CT 06071  
 LAT/LONG: 42.0324 / 72.5057

CLIENT: Rincon  
 CONTACT: Savanna Vrevich  
 INQUIRY #: 04435145.2r  
 DATE: October 09, 2015 7:43 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**1**  
**SE**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000230731**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420141072300601		
Monloc name:	CT-SO 295		
Monloc type:	Well		
Monloc desc:	155 BILTON RD		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0281515
Longitude:	-72.5011969	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	342
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		
Aquifer type:	Unconfined single aquifer		
Construction date:	19720829	Welldepth:	128
Welldepth units:	ft	Wellholedepth:	128
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

	Feet below	Feet to
Date	Surface	Sealevel
-----		
1972-08-29	55	

**2**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230719**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420130072302401		
Monloc name:	CT-SO 361		
Monloc type:	Well		
Monloc desc:	OCCI WELL 204		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0250959
Longitude:	-72.506197	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	260
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Unconfined single aquifer	Welldepth:	665
Construction date:	Not Reported	Wellholedepth:	665
Welldepth units:	ft		
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1995-08	72.9	

**3**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230762**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420159072294701		
Monloc name:	CT-SO 294		
Monloc type:	Well		
Monloc desc:	53 BILTON RD		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0331514
Longitude:	-72.4959189	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	287
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		
Aquifer type:	Unconfined single aquifer		
Construction date:	19730105	Welldepth:	140
Welldepth units:	ft	Wellholedepth:	140
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-01-05	60	

**4**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230759**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420158072310301		
Monloc name:	CT-EF 48		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0328736
Longitude:	-72.5170307	Sourcemap scale:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	210.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1956	Welldepth:	122
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1956-04-01	15.00	

**5**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230765**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420201072293101		
Monloc name:	CT-SO 135		
Monloc type:	Well		
Monloc desc:	732 HALL HILL RD		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0337069
Longitude:	-72.4914744	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	285
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		
Aquifer type:	Unconfined single aquifer		
Construction date:	19900515	Welldepth:	182
Welldepth units:	ft	Wellholedepth:	182
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1990-05-15	25	

**A6**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230757**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420157072293001		
Monloc name:	CT-SO 68		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0325958
Longitude:	-72.4911966	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	285.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1945	Welldepth:	102
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1948-01-01	20.00	

**A7**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230754**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420156072292901		
Monloc name:	CT-SO 136		
Monloc type:	Well		
Monloc desc:	697 HALL HILL RD		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.032318
Longitude:	-72.4909188	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	285
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Unconfined single aquifer	Welldepth:	177
Construction date:	19861211	Wellholedepth:	177
Welldepth units:	ft		
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1986-12-11	30	

**8**  
**WSW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230730**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420139072311201		
Monloc name:	CT-EF 47		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0275959
Longitude:	-72.5195308	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	190.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Drift, Stratified		
Aquifer type:	Not Reported		
Construction date:	1956	Welldepth:	88
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1956-04-01	1.00	

**9**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230747**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420152072292601		
Monloc name:	CT-SO 137		
Monloc type:	Well		
Monloc desc:	679 HALL HILL RD		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0312069
Longitude:	-72.4900854	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	285
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		
Aquifer type:	Unconfined single aquifer		
Construction date:	19881223	Welldepth:	182
Welldepth units:	ft	Wellholedepth:	182
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1995-08	16.86	

**10  
SW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000230706**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420124072310001		
Monloc name:	CT-EF 255		
Monloc type:	Well		
Monloc desc:	OCCI WELL 202		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0234293
Longitude:	-72.5161973	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	195
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	555
Welldepth units:	ft	Wellholedepth:	555
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1995-08	16.9	

**B11  
SSW  
1/2 - 1 Mile  
Lower**

**CT WELLS      CTC00000001386**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

CT Community Well

Well ID:	1468	Well Name:	Enfield Well 3
Supply System ID:	49003	Supply System Name:	CONNECTICUT CORRECTIONAL INSTITUTE
Source Status:	Emergency	Type:	Drilled
Groundwater Aquifer Type:	Bedrock	GIS Date/Method:	1997 Screen Digitize
Depth:	0 Feet	Depth to Bedrock:	0 Feet
Well Diameter:	0	Casing Diameter:	0
Pump Capacity:	0	Safe Yield:	0

**12**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**CT WELLS    CTC000000001385**

CT Community Well

Well ID:	1467	Well Name:	Enfield Well 1
Supply System ID:	49003	Supply System Name:	CONNECTICUT CORRECTIONAL INSTITUTE
Source Status:	Inactive	Type:	Unknown
Groundwater Aquifer Type:	Unknown	GIS Date/Method:	1997 Screen Digitize
Depth:	0 Feet	Depth to Bedrock:	0 Feet
Well Diameter:	0	Casing Diameter:	0
Pump Capacity:	0	Safe Yield:	0

**B13**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**CT WELLS    CTC000000000010**

CT Community Well

Well ID:	10	Well Name:	Enfield Well 2
Supply System ID:	49003	Supply System Name:	CONNECTICUT CORRECTIONAL INSTITUTE
Source Status:	Active	Type:	Drilled
Groundwater Aquifer Type:	Bedrock	GIS Date/Method:	1984 Tablet Digitize
Depth:	700 Feet	Depth to Bedrock:	0 Feet
Well Diameter:	0	Casing Diameter:	0
Pump Capacity:	225	Safe Yield:	.243

**14**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS    USGS40000230748**

Org. Identifier:	USGS-CT	Drainagearea value:	Not Reported
Formal name:	USGS Connecticut Water Science Center	Contrib drainagearea:	Not Reported
Monloc Identifier:	USGS-420153072291701	Latitude:	42.0314847
Monloc name:	CT-SO 138	Sourcemap scale:	24000
Monloc type:	Well		
Monloc desc:	660 HALL HILL RD		
Huc code:	01080205		
Drainagearea Units:	Not Reported		
Contrib drainagearea units:	Not Reported		
Longitude:	-72.4875854		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	295
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Portland Formation		
Aquifer type:	Unconfined single aquifer		
Construction date:	19790812	Welldepth:	249
Welldepth units:	ft	Wellholedepth:	249
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1979-08-12	25	

**15**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230672**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420109072304101		
Monloc name:	CT-EF 111		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0192627
Longitude:	-72.5109194	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	325.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1959	Welldepth:	700
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1959-01-01	100.00	

**C16**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230703**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420123072311201		
Monloc name:	CT-EF 120		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0231515
Longitude:	-72.5195308	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	190
Vert measure units:	feet	Vertacc measure val:	005
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Drift, Stratified		
Aquifer type:	Unconfined single aquifer		
Construction date:	19880615	Welldepth:	60.02
Welldepth units:	ft	Wellholedepth:	60.02
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1988-08-12	4.65	

**C17**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230704**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420123072311202		
Monloc name:	CT-EF 121		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0231515
Longitude:	-72.5195308	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	190
Vert measure units:	feet	Vertacc measure val:	005
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Drift, Stratified		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Unconfined single aquifer	Welldepth:	35.23
Construction date:	19880615	Wellholedepth:	35.23
Welldepth units:	ft		
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1988-08-12	5.61	

**C18**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230705**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420123072311203		
Monloc name:	CT-EF 122		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0231515
Longitude:	-72.5195308	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	190
Vert measure units:	feet	Vertacc measure val:	005
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Drift, Stratified		
Aquifer type:	Unconfined single aquifer		
Construction date:	19880615	Welldepth:	15.36
Welldepth units:	ft	Wellholedepth:	15.36
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1988-08-12	5.77	

**D19**  
**SSE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230669**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420108072300501		
Monloc name:	CT-SO 102		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.018985
Longitude:	-72.500919	Sourcemap scale:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	305.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1955	Welldepth:	900
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1955-01-01	77.00	

**20**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000230670**

Org. Identifier:	USGS-CT		
Formal name:	USGS Connecticut Water Science Center		
Monloc Identifier:	USGS-420108072304601		
Monloc name:	CT-EF 70		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	01080205	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	42.0189849
Longitude:	-72.5123083	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Early Mesozoic basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**D21**  
**SSE**  
**1/2 - 1 Mile**  
**Lower**

**CT WELLS      CTC00000000007**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### CT Community Well

Well ID: 7  
Supply System ID: 49003  
Source Status: Active  
Groundwater Aquifer Type: Bedrock  
Depth: 900 Feet  
Well Diameter: 8  
Pump Capacity: 50

Well Name: Somers Well 1  
Supply System Name: CONNECTICUT CORRECTIONAL INSTITUTE  
Type: Drilled  
GIS Date/Method: 1984 Tablet Digitize  
Depth to Bedrock: 0 Feet  
Casing Diameter: 0  
Safe Yield: .054

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CT Radon

### Radon Test Results

City	# Sites	< 4 Pci/L	4 < 10 Pci/L	10 < 20 Pci/L	20 < 50 Pci/L	50 < 100 Pci/L	> 100 Pci/L
Stafford Springs	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Storrs	4	3 (75)	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)
Tolland	15	10 (66.7)	4 (26.7)	1 (6.6)	0 (0)	0 (0)	0 (0)
Vernon	29	24 (82.7)	4 (13.8)	1 (3.5)	0 (0)	0 (0)	0 (0)
West Willington	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Willington	1	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Manchester	34	24 (70.6)	10 (29.4)	0 (0)	0 (0)	0 (0)	0 (0)
Amston	10	5 (50)	4 (40)	1 (10)	0 (0)	0 (0)	0 (0)
Andover	97	74 (76.3)	15 (15.5)	6 (6.2)	1 (1)	0 (0)	0 (0)
Bolton	10	7(70)	2 (20)	1 (10)	0 (0)	0 (0)	0 (0)
Columbia	11	8 (72.7)	3 (27.3)	0 (0)	0 (0)	0 (0)	0 (0)
Coventry	16	13 (81.25)	1 (6.25)	2 (12.5)	0 (0)	0 (0)	0 (0)
Ellington	19	15 (78.9)	2 (10.5)	2 (10.5)	0 (0)	0 (0)	0 (0)
Mansfield	100	87 (87)	13 (13)	0 (0)	0 (0)	0 (0)	0 (0)
Somers	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Federal EPA Radon Zone for TOLLAND County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 06071

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.240 pCi/L	80%	20%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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: Wetland Soils

Source: Department of Environmental Protection

Telephone: 860-871-4047

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Connecticut Leachate and Wastewater Discharge Sites

Source: Department of Environmental Protection

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.

#### EPA-Approved Sole Source Aquifers in Connecticut

Source: EPA

Sole source aquifers are defined as an aquifer designated as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for the area and for which there are no reasonable alternative sources should the aquifer become contaminated.

#### Community and Non-Community Water System Wells

Source: Department of Public Health, Water Supplies Section

Telephone: 860-509-7333

Active, emergency and inactive wells used for potable purposes that are owned and operated by active community and non-community water systems in Connecticut.

## OTHER STATE DATABASE INFORMATION

### RADON

#### State Database: CT Radon

Source: Department of Public Health

Telephone: 860-509-7367

Radon Statistical Summary

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

### STREET AND ADDRESS INFORMATION

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## **Appendix 3**

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*Historical Research Documentation*



**134 Bilton Road**

134 Bilton Road  
Somers, CT 06071

Inquiry Number: 4435145.4

October 12, 2015

## EDR Historical Topographic Map Report



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

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

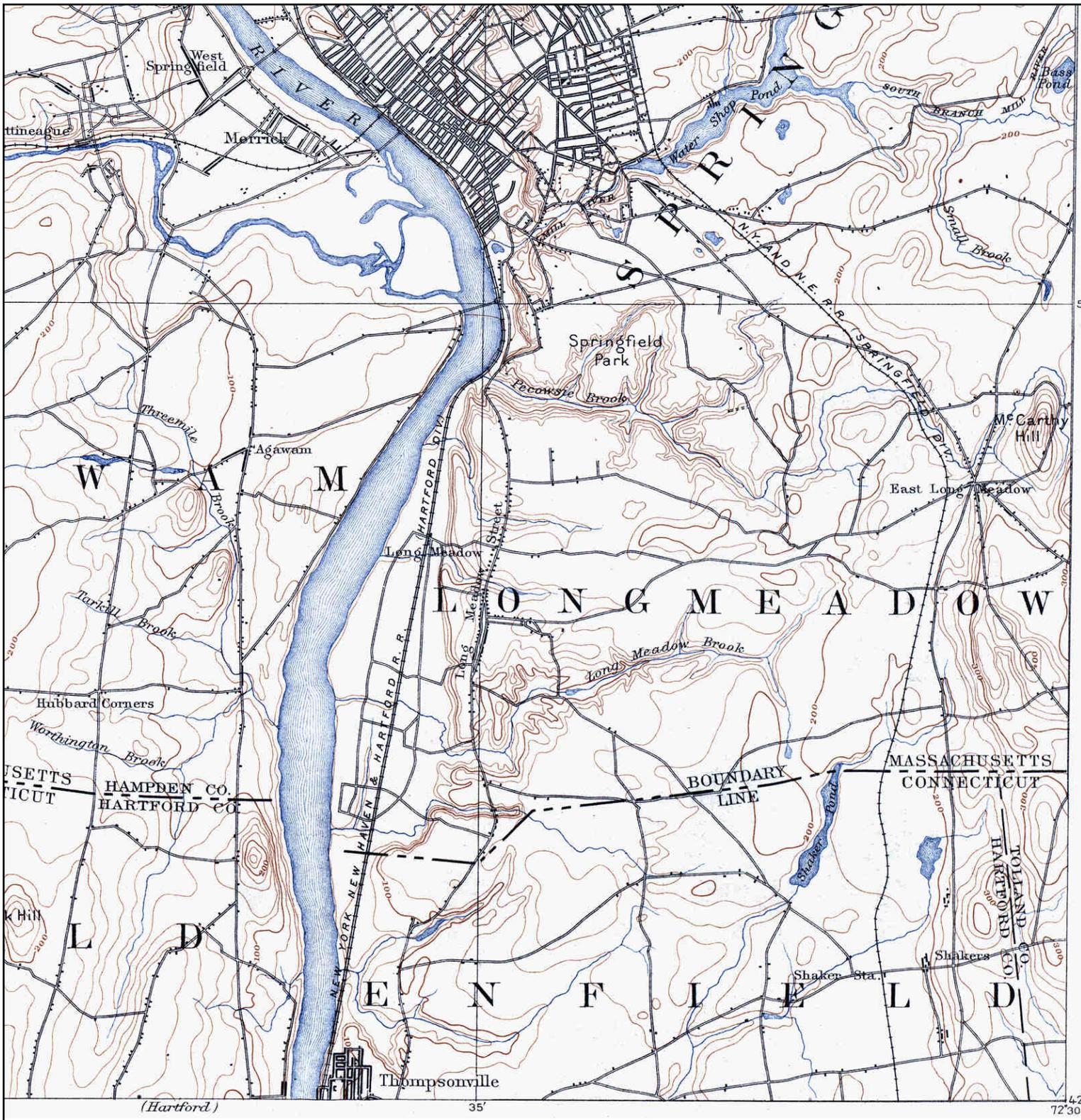
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# Historical Topographic Map



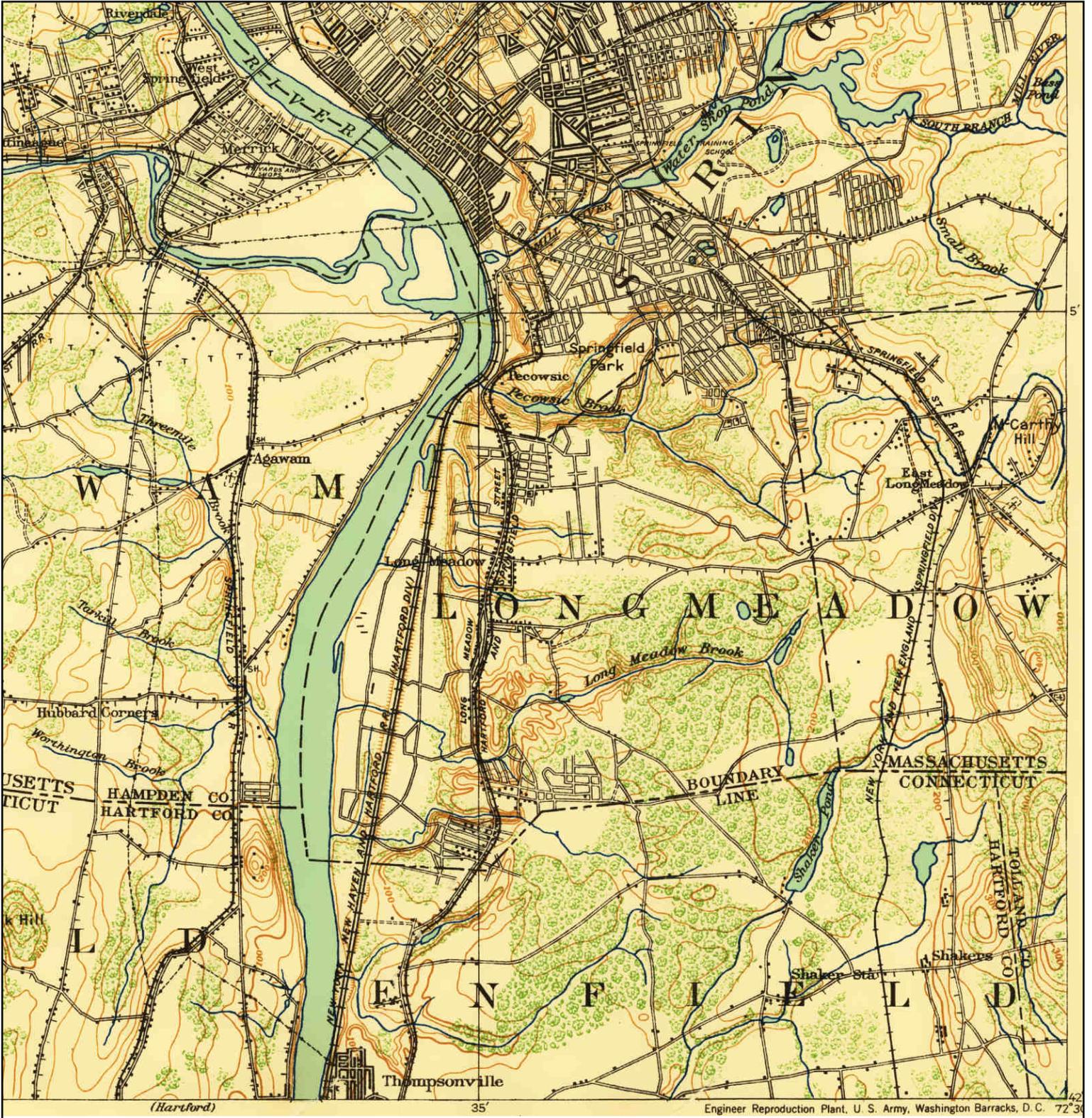
<p>N ↑</p>	<p><b>TARGET QUAD</b>                  NAME: SPRINGFIELD                  MAP YEAR: 1895</p>	<p><b>SITE NAME:</b> 134 Bilton Road  <b>ADDRESS:</b> 134 Bilton Road                  Somers, CT 06071  <b>LAT/LONG:</b> 42.0324 / -72.5057</p>	<p><b>CLIENT:</b> Rincon  <b>CONTACT:</b> Savanna Vrevich  <b>INQUIRY#:</b> 4435145.4  <b>RESEARCH DATE:</b> 10/12/2015</p>
	<p><b>SERIES:</b> 15  <b>SCALE:</b> 1:62500</p>		

# Historical Topographic Map



	<b>TARGET QUAD</b>	<b>SITE NAME:</b> 134 Bilton Road	<b>CLIENT:</b> Rincon
	<b>NAME:</b> HOLYOKE	<b>ADDRESS:</b> 134 Bilton Road	<b>CONTACT:</b> Savanna Vrevich
	<b>MAP YEAR:</b> 1901	Somers, CT 06071	<b>INQUIRY#:</b> 4435145.4
	<b>SERIES:</b> 30	<b>LAT/LONG:</b> 42.0324 / -72.5057	<b>RESEARCH DATE:</b> 10/12/2015
	<b>SCALE:</b> 1:125000		

# Historical Topographic Map



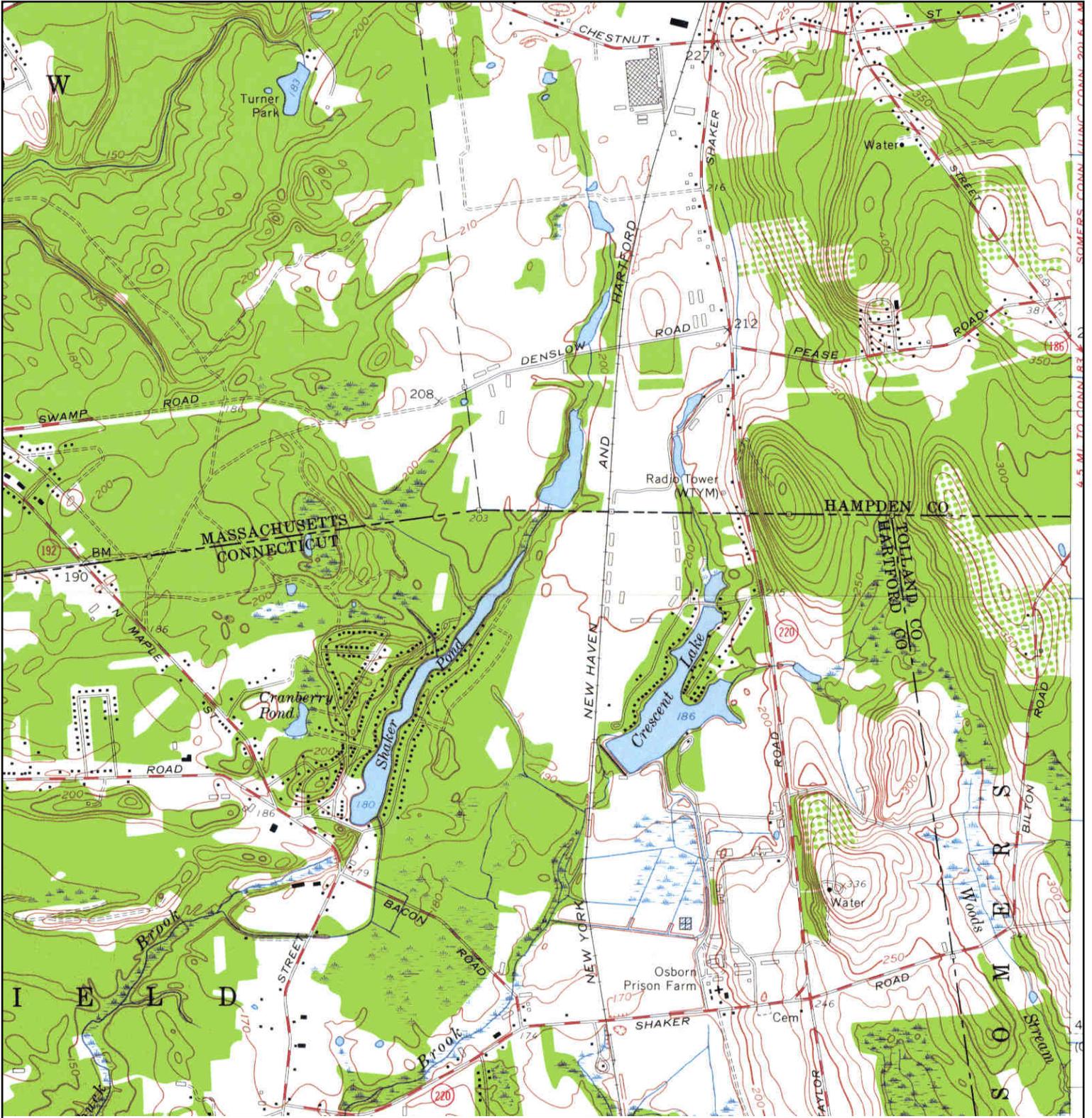
<p>N ↑</p>	<p><b>TARGET QUAD</b>                  NAME: SPRINGFIELD                  MAP YEAR: 1919</p>	<p><b>SITE NAME:</b> 134 Bilton Road  <b>ADDRESS:</b> 134 Bilton Road                  Somers, CT 06071  <b>LAT/LONG:</b> 42.0324 / -72.5057</p>	<p><b>CLIENT:</b> Rincon  <b>CONTACT:</b> Savanna Vrevich  <b>INQUIRY#:</b> 4435145.4  <b>RESEARCH DATE:</b> 10/12/2015</p>
	<p><b>SERIES:</b> 15  <b>SCALE:</b> 1:62500</p>		

# Historical Topographic Map



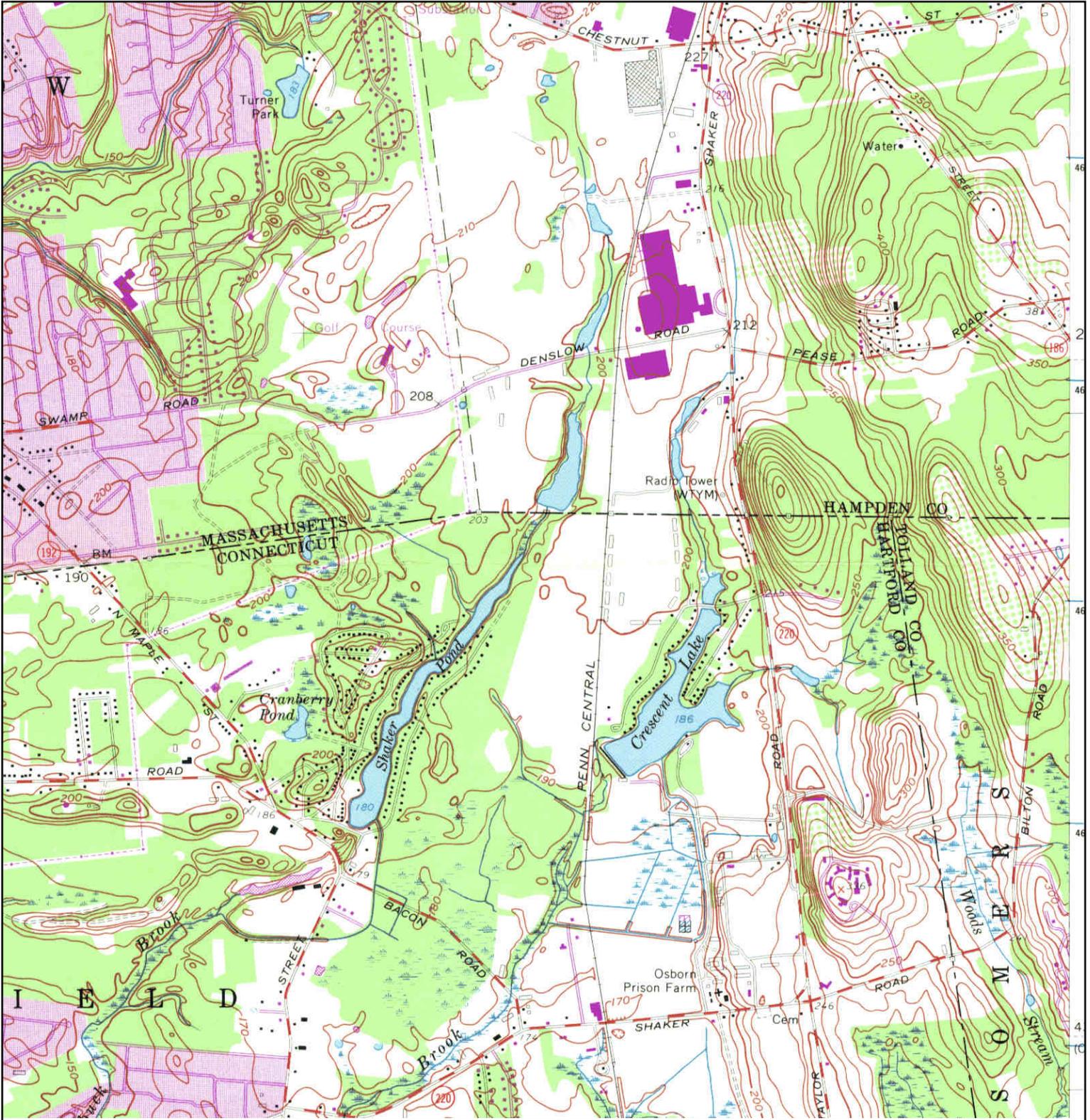
	<b>TARGET QUAD</b>	<b>SITE NAME:</b> 134 Bilton Road	<b>CLIENT:</b> Rincon
	NAME: SPRINGFIELD SOUTH	ADDRESS: 134 Bilton Road	<b>CONTACT:</b> Savanna Vrevich
	MAP YEAR: 1946	Somers, CT 06071	<b>INQUIRY#:</b> 4435145.4
	SERIES: 7.5	<b>LAT/LONG:</b> 42.0324 / -72.5057	<b>RESEARCH DATE:</b> 10/12/2015
	SCALE: 1:31680		

# Historical Topographic Map



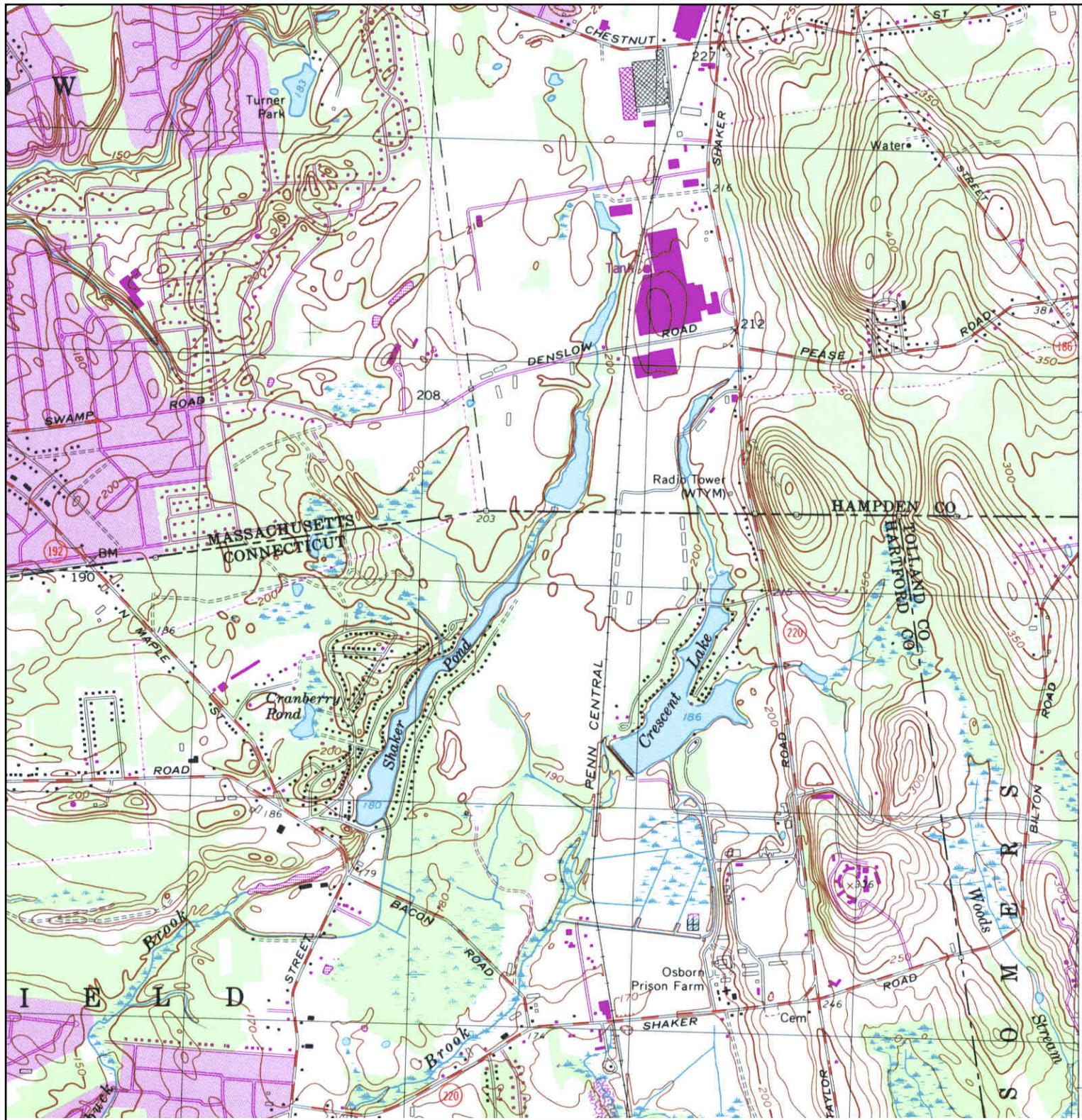
<p>N</p> 	<p><b>TARGET QUAD</b>                  NAME: SPRINGFIELD SOUTH                  MAP YEAR: 1958</p>	<p><b>SITE NAME:</b> 134 Bilton Road  <b>ADDRESS:</b> 134 Bilton Road                  Somers, CT 06071  <b>LAT/LONG:</b> 42.0324 / -72.5057</p>	<p><b>CLIENT:</b> Rincon  <b>CONTACT:</b> Savanna Vrevich  <b>INQUIRY#:</b> 4435145.4  <b>RESEARCH DATE:</b> 10/12/2015</p>
	<p><b>SERIES:</b> 7.5  <b>SCALE:</b> 1:24000</p>		

# Historical Topographic Map



<p>N ↑</p>	<b>TARGET QUAD</b>	<b>SITE NAME:</b> 134 Bilton Road	<b>CLIENT:</b> Rincon
	NAME: SPRINGFIELD SOUTH	ADDRESS: 134 Bilton Road	<b>CONTACT:</b> Savanna Vrevich
	MAP YEAR: 1970	Somers, CT 06071	<b>INQUIRY#:</b> 4435145.4
	PHOTOREVISED FROM :1958	<b>LAT/LONG:</b> 42.0324 / -72.5057	<b>RESEARCH DATE:</b> 10/12/2015
	SERIES: 7.5		
	SCALE: 1:24000		

# Historical Topographic Map



<p>N ↑</p>	<b>TARGET QUAD</b>	<b>SITE NAME:</b> 134 Bilton Road	<b>CLIENT:</b> Rincon
	NAME: SPRINGFIELD SOUTH	<b>ADDRESS:</b> 134 Bilton Road	<b>CONTACT:</b> Savanna Vrevich
	MAP YEAR: 1979	Somers, CT 06071	<b>INQUIRY#:</b> 4435145.4
	PHOTOREVISED FROM :1958	<b>LAT/LONG:</b> 42.0324 / -72.5057	<b>RESEARCH DATE:</b> 10/12/2015
	SERIES: 7.5		
	SCALE: 1:24000		



**134 Bilton Road**

134 Bilton Road  
Somers, CT 06071

Inquiry Number: 4435145.9

October 12, 2015

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
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# EDR Aerial Photo Decade Package

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

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## Date EDR Searched Historical Sources:

Aerial Photography October 12, 2015

### Target Property:

134 Bilton Road  
Somers, CT 06071

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1934	Aerial Photograph. Scale: 1"=500'	Flight Date: April 11, 1934	USGS
1941	Aerial Photograph. Scale: 1"=750'	Flight Date: November 12, 1941	EDR
1951	Aerial Photograph. Scale: 1"=500'	Flight Date: August 03, 1951	USGS
1957	Aerial Photograph. Scale: 1"=500'	Flight Date: August 07, 1957	USGS
1966	Aerial Photograph. Scale: 1"=500'	Flight Date: March 09, 1966	EDR
1970	Aerial Photograph. Scale: 1"=500'	Flight Date: May 30, 1970	EDR
1977	Aerial Photograph. Scale: 1"=500'	Flight Date: May 14, 1977	USDA
1980	Aerial Photograph. Scale: 1"=750'	Flight Date: April 17, 1980	EDR
1986	Aerial Photograph. Scale: 1"=500'	Flight Date: March 18, 1986	USGS
1990	Aerial Photograph. Scale: 1"=500'	DOQQ - acquisition dates: April 23, 1990	USGS/DOQQ
1995	Aerial Photograph. Scale: 1"=500'	Flight Date: April 25, 1995	EDR
2002	Aerial Photograph. Scale: 1"=500'	Flight Date: April 27, 2002	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	USDA/NAIP
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	USDA/NAIP
2008	Aerial Photograph. Scale: 1"=500'	Flight Year: 2008	USDA/NAIP
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	USDA/NAIP
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	USDA/NAIP



**INQUIRY #:** 4435145.9

**YEAR:** 1934

| = 500'





INQUIRY #: 4435145.9

YEAR: 1941

| = 750'





INQUIRY #: 4435145.9

YEAR: 1951

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 1957

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 1966

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 1970

| = 500'





INQUIRY #: 4435145.9

YEAR: 1977

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 1980

 = 750'





INQUIRY #: 4435145.9

YEAR: 1986

| = 500'





INQUIRY #: 4435145.9

YEAR: 1990

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 1995

 = 500'



INQUIRY #: 4435145.9

YEAR: 2002



| = 500'

2436.5





**INQUIRY #:** 4435145.9

**YEAR:** 2005

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 2006

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 2008

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 2010

| = 500'





**INQUIRY #:** 4435145.9

**YEAR:** 2012

| = 500'



**134 Bilton Road**

134 Bilton Road  
Somers, CT 06071

Inquiry Number: 4435145.5  
October 13, 2015

# The EDR-City Directory Image Report

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City Directory Images

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information Services
2008	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information Services
2003	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information Services
1999	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information Services
1995	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information Services
1992	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information Services

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# FINDINGS

## TARGET PROPERTY STREET

134 Bilton Road  
Somers, CT 06071

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

## BILTON RD

2013	pg A1	Cole Information Services
2008	pg A3	Cole Information Services
2003	pg A5	Cole Information Services
1999	pg A7	Cole Information Services
1995	pg A9	Cole Information Services
1992	pg A11	Cole Information Services

## FINDINGS

### CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### HILL PASTURE RD

2013	pg. A2	Cole Information Services
2008	pg. A4	Cole Information Services
2003	pg. A6	Cole Information Services
1999	pg. A8	Cole Information Services
1995	pg. A10	Cole Information Services
1992	pg. A12	Cole Information Services

## **City Directory Images**

**BILTON RD 2013**

5	OCCUPANT UNKNOWN
15	SCOTT LITZ
23	ROBERT NICHOLS
24	GEORGE CHMAEL
28	SHANE DAVIS
31	GEORGE CHMAEL
36	RICHARD ZACHARKOW
39	AUGUST HELBERG
44	GEORGE MCCALLIGETT
50	JOHN SNYDER
53	ANTHONY CARRA
55	JOHN POLEK
58	JAMES BELISLE
61	JEANINE LODGE
64	EDWARD CUNNINGHAM
69	MATTHEW PIEROG
72	PAUL BRIDGE
75	DAVID LABROAD
85	OCCUPANT UNKNOWN
98	TIMOTHY THOROGOOD
100	STATE OF CONNECTICUT
105	KEVIN STJOHN
106	ELEANOR JONES
120	ROL FEROLI
134	RONALD HIRTH
139	OCCUPANT UNKNOWN
145	JUSTIN RICHARDS
151	LIANE PAGANO
156	OCCUPANT UNKNOWN
163	KENNETH YOUNG
174	STEVEN BUSHNELL
175	OCCUPANT UNKNOWN
221	STATE OF CONN DEPARTMENT OF CORRECTI
264	STATE OF CONNECTICUT
287	STATE OF CONNECTICUT

**HILL PASTURE RD 2013**

4	NANCY LORINSER
14	ANTHONY SABIA
22	EDWARD STARKES
30	OCCUPANT UNKNOWN
33	ROBERT SMITH
36	THERESA CHEDKOWSKI
44	KIMBERLY DORAN

**BILTON RD 2008**

5	OCCUPANT UNKNOWN
15	FLORENCE KILLEEN
23	ROBERT NICHOLS
24	GEORGE CHMAEL
28	SHANE DAVIS
31	GEORGE CHMAEL
36	CARMEN ZACHARKOW
39	DEAN DULCHINOS
44	GEORGE MCCALLIGETT
50	JOHN SNYDER
51	LIANE PAGANO
53	ANTHONY CARRA
55	JOHN POLEK
58	JAMES BELISLE
61	JEANINE LODGE
	JEANINE QUIST
64	EDWARD CUNNINGHAM
69	ELOYCE PIEROG
72	PAUL BRIDGE
75	DAVID LABROAD
85	OCCUPANT UNKNOWN
98	ANGELA GELINEAU
100	DEPARTMENT OF CORRECTIONS CONNECTICU
105	NANCY STJOHN
106	MARK JONES
120	ROL FERIOLO
134	D SMITH
	RONALD HIRTH
139	DANIEL A DULCHINOS
	OCCUPANT UNKNOWN
145	ALBERTA SCHNEIDER
151	OCCUPANT UNKNOWN
156	OCCUPANT UNKNOWN
163	KENNETH YOUNG
174	JULIE BUSHNELL
175	OCCUPANT UNKNOWN
287	CORRECTION CONNECTICUT DEPARTMENT OF

**HILL PASTURE RD 2008**

4	NANCY LORINSER
14	ANTHONY SABIA
22	EDWARD STARKES
30	CHEZ PIERRE
	JASON LAFAYETTE
33	ROBERT SMITH
34	JUSTIN MARTI
36	WILLIAM ELGIN
44	JONATHAN DORAN

**BILTON RD 2003**

5	CARLA BLAIR
15	PETER KILLEEN
20	RONALD GIOVANNI
23	ROBERT NICHOLS
28	SHERI DAVIS
31	GEORGE CHMAEL
36	CARMEN ZACHARKOW
39	AUGUST HELBERG
44	GEORGE MCCALLIGETT
50	JOHN SNYDER
53	ANTHONY CARRA
55	JOHN POLEK
58	JAMES BELISLE
	SAPPHIRE MERCHANDISING
61	DONALD QUIST
64	EDWARD CUNNINGHAM
69	ELOYCE PIEROG
72	PAUL BRIDGE
75	DAVID LABCOAD
85	PAUL CORBETT
98	ELEANOR BYCH
100	CHESAPEAKE CAP CO
	CONNECTICUT STATE OF CRCTN
	TODD BROADHURST
	WILLIAM TORRES
105	NANCY STJOHN
106	MARK JONES
120	ROL FEROLI
134	D SMITH
139	OCCUPANT UNKNOWN
145	ALBERTA SCHNEIDER
151	OCCUPANT UNKNOWN
156	JAMES BUSHNELL
163	OCCUPANT UNKNOWN
175	OCCUPANT UNKNOWN
221	OCCUPANT UNKNOWN
251	LIANE REARDON
264	CONNECTICUT STATE OF CRCTN
	EFRAIN CRUZ
287	CONNECTICUT STATE OF CRCTN
	DANIEL BERNSTEIN

**HILL PASTURE RD**

**2003**

- 4 FREDERICK LORINSER
- 14 ANTHONY SABIA
- 22 EDWARD STARKES
- 33 ANN FAMIGLIETTI
- 36 KENNETH YOUNG
- 44 MARCUS DORAN

**BILTON RD 1999**

15	PETER KILLEEN
23	ROBERT NICHOLS
28	ANSEL MILLER
36	THOR PERSSON
39	AUGUST HELBERG
44	GEORGE MCCALLIGETT
50	JOHN SNYDER
53	ANTHONY CARRA
55	ANDY WOOD
61	DONALD QUIST
64	MARITA CUNNINGHAM
69	CARRIE PIEROG
72	PAUL BRIDGE
75	DAVID LABROAD
85	PAUL CORBETT
98	ELEANOR BYCH
100	CONNECTICUT STAT OF CRRCTNL INDUSTRIES CORRECTION
134	BILTONS FRUIT FARM
163	MICHAEL FREEDMAN
264	CONNECTICUT STAT OF CRRCTNL INDUSTRIES CORRECTION
335	CHESAPEAKE CAP COMPANY

**HILL PASTURE RD**

**1999**

- 4 F LORINSER
- 14 ANTHONY SABIA
- 30 PIERRE COURRIEU
- 33 ANTONIO FAMIGLIETTI
- 36 KENNETH YOUNG
- 44 J DORAN

**BILTON RD 1995**

5	VEILLEUX, WAYNE
23	NICHOLS, ROBERT J
28	MILLER, ANSEL B
31	CHMAEL, ARMENE
39	HELBERG, AUGUST R
44	MCCALLIGETT, GEORGE H
50	SNYDER, JOHN
53	CARRA, ANTHONY J
55	POLEK, JOHN JR
58	HEBERT, GERALD
61	LODGE, L A
72	BRIDGE, PAUL D
75	LABROAD, DAVID M
85	CORBETT, PAUL
100	DANIELS, MAURICE T
105	STJOHN, DONALD E
106	JONES, MARK V
134	BILTONS FRUIT FARM
151	REARDON, CRYSTAL K
335	ANCHOR ELECTRICAL ANNULLI & SONS INC CORRECTIONS DEPT

**HILL PASTURE RD**

**1995**

- 14 SABIA, ANTHONY J
- 30 COURRIEU, PIERRE
- 33 LIQUORI, ANN M

**BILTON RD 1992**

5	DEABILL, HAROLD E
15	JAMROZ, WILLIAM W
23	NICHOLS, ROBERT J
28	MILLER, ANSEL B
31	CHMAEL, ARMENE
39	HELBERG, AUGUST R
44	MCCALLIGETT, GEORGE H
50	SNYDER, JOHN
53	CARRA, ANTHONY J
55	POLEK, JOHN JR
58	HEBERT, GERALD
61	LODGE, TIM
69	PIEROG, MATTHEW W JR
72	BRIDGE, PAUL D
75	LABROAD, DAVID M
85	CORBETT, PAUL
100	BYCH, HARRY
105	STJOHN, DONALD E
106	JONES, MARK V
120	FERIOLI, ROLAND A
134	BILTONS FRUIT FRAM
151	REARDON, CRYSTAL K

**HILL PASTURE RD**

**1992**

- 4 LORINSER, F J
- 14 SABIA, ANTHONY J
- 30 COURRIEU, PIERRE
- 33 LIQUORI, ANN M
- 36 WINSTON, GEORGE B



**134 Bilton Road**

134 Bilton Road  
Somers, CT 06071

Inquiry Number: 4435145.3

October 09, 2015

## Certified Sanborn® Map Report



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Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
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# Certified Sanborn® Map Report

10/09/15

**Site Name:**

134 Bilton Road  
134 Bilton Road  
Somers, CT 06071

**Client Name:**

Rincon  
180 North Ashwood Avenue  
Ventura, CA 93003-0000



EDR Inquiry # 4435145.3

Contact: Savanna Vrevich

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## Certified Sanborn Results:

**Site Name:** 134 Bilton Road  
**Address:** 134 Bilton Road  
**City, State, Zip:** Somers, CT 06071  
**Cross Street:**  
**P.O. #** NA  
**Project:** 15-02082  
**Certification #** 4E06-4D2E-9748



Sanborn® Library search results  
Certification # 4E06-4D2E-9748

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- Library of Congress
- University Publications of America
- EDR Private Collection

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**Exhibit F**  
**Wetlands Report**

# PIETRAS ENVIRONMENTAL GROUP, LLC

## WETLAND DELINEATION REPORT

Date: December 12, 2015 PEG JOB#: 2015-174

Prepared for: Martinez Couch & Associates, LLC  
1084 Cromwell Avenue  
Rocky Hill, CT 06067

Project Location: 134 Bilton Road, Somers, CT & East Longmeadow, MA

Report Maps: Town of Somers GIS, State of CT Historic Aerial, USGS & USFWS maps

Inspection Date: November 16 & 18, 2015

Field Conditions: weather: cloudy to mostly sunny, 30's to 60's soil moisture: moist to saturated

### **Legislative Definitions of Wetlands and Watercourses in CT** (General Statutes, Chptr 440, Sec. 22a-28 to 22a-45)

1-Inland Wetlands "means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, inclusive, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture" section 22a-38(15).

2-Watercourses "means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private which area contained within, flow through or border upon this state or any portion thereof, not regulated pursuant to sections 22a-28 to 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation" section 22a-38(16).

### **Legislative Definition and Critical Characteristics of Freshwater Wetlands in MA (310 CMR 10.55)**

a) Bordering Vegetated Wetlands are freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. Types of freshwater wetlands include wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. Ground and surface water regimes & the vegetation communities in each type of freshwater wetland are specified in M.G.L. c. 131, s. 40.

c) The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants shall include but not necessarily be limited to those plant species identified in the Act. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National Plant List of Plant Species that occur in Wetlands: Massachusetts (Fish & Wildlife Service, U.S. Department of Interior, 1988) or plants exhibiting physiological or morphological adaptations to the life in saturated or inundated conditions.

### **Regulated Wetlands and Watercourses Identified:**

CT Inland Wetlands: **yes** Watercourses: **yes** ponds: **yes**

MA Bordering Vegetated Wetlands: **yes**

Wetland boundary flag #'s: **CT Inland Wetlands WF 1 thru WF 47, MA BVW 101 thru 109**

All established wetlands boundary lines are subject to change until officially adopted by local and state agencies.

*Thomas W. Pietras*

Thomas W. Pietras, Professional Wetland and Soil Scientist

15 Briarwood Lane  
Wallingford, CT 06492  
203-314-6636

EMAIL Tom@pietrasenvironmentalgroup.com  
WEB SITE pietrasenvironmentalgroup.com

Thomas W. Pietras, Professional Wetland and Soil Scientist, conducted site inspections to the subject property on November 16 & 18, 2015. The 63+/- acre property is located in the northwestern portion of the Town of Somers and in the southern portion of the Town of East Longmeadow (Refer to USGS project location map & Town of Somers GIS aerial photo map). The majority of the property lies in the Town of Somers (45.5 acres) with the remaining 17.7 acres in East Longmeadow. The property straddles an elongated drumlin ridgetop which is oriented in a north-south direction. Grades on the hilltop range from gently sloping to moderately sloping, while the side slopes vary from steeply sloping to very steeply sloping.

Much of the land was previously used as an orchard (refer to copy of historic 1965 aerial photograph). Two small farm ponds were located on the farm and these ponds can be seen in the aerial photo. The orchard was abandoned over ten years ago and presently most of the former orchard contains a mix of older apple trees surrounded by old field vegetation with briar and vines. The western, northern and northeastern portions of the property support mixed conifer-deciduous forest. Logging operations were conducted in the recent past in the forested portions of the property.

The property was investigated for wetlands. On that land located within the Town of Somers the investigation was made to identify CT Inland Wetlands and watercourses, while that portion of the property in the Town of East Longmeadow was inspected to identify Bordering Vegetated Wetlands. The US Fish & Wildlife Service NWI map identifies several off-site forested wetlands (PFO) in close vicinity to the subject property, but none are shown on the property (refer to NWI map).

A spade and auger were used to dig test holes on that portion of the property situated in the Town of Somers. The classification system of the National Cooperative Soil Survey and the USDA Natural Resources Conservation Service was utilized for identification of soil drainage classes and soil types. The soil types identified on the property were assigned soil map numbers according to the State of Connecticut Soil Legend. Locations of soil types identified are shown on a sketch map that is included with this report. Inland wetlands are regulated by CT General Statutes, Chapter 440, Sections 22a-36 to 22a-45. The State defines wetlands as land consisting of any of the soil types designated as poorly drained, very poorly drained, alluvial and floodplain by the National Cooperative Soil Survey. The boundaries of the wetlands identified on the property were delineated with consecutively numbered, survey tapes. Approximate location of the wetlands are also shown on the soil and wetland sketch map. Brief descriptions of the soil mapping units are included in this report. Additional information about the soils identified on the property can be found in the Soil Survey of the State of Connecticut ([www.nrcs.usda.gov.ct.soilsurvey](http://www.nrcs.usda.gov.ct.soilsurvey)).

Inland Wetlands, identified as poorly drained Wilbraham silt loam (6) and poorly to very poorly drained Aquents (Aq), were identified in the southwestern portion of the property in Somers. Poorly drained Wilbraham silt loam was also identified just off-site of the subject property near the western property line to the north of Hill Pasture Road. These wetlands primarily support forested swamp vegetation. The Aquents Inland Wetlands includes the remnants of the very small farm pond which is located in southwestern portion of the land in the Town of Somers. This pond was created through a combination of excavation and construction of a fill berm. The pond is presently very shallow and held less than two feet of water in November 2015. Limits of the Inland Wetlands were delineated with survey tapes, numbered WF1 thru 14, 15 thru 22, 23 thru 32, 33 thru 40 & 41 thru 47.

A very narrow fringe of State of MA Bordering Vegetated Wetlands are present around the very small farm pond that is located in the western portion of the property in the Town of Longmeadow. The wetlands contain a mix of woody and herbaceous species. Woody species include red maple, gray birch, pussy willow, winterberry, buttonball bush, highbush blueberry and multiflora rose. Herbaceous plants include arrow-leaved tearthumb, sensitive fern, fowl meadow bluegrass and purple-leaved willow herb. The approximately 50 foot diameter pond was created through an excavation which extended down into the dense hardpan till subsoil. In November 2015 the depth of water the pond was up to or slightly greater than two feet. The farm pond and wetlands are isolated from other wetlands and watercourses. There are no streams that feed into or drain from the pond. The

boundaries of the Bordering Vegetated Wetlands surrounding the farm pond were delineated with survey tapes, numbered 101 thru 109. The wetland delineation was performed in accordance with the State of Massachusetts Department of Environmental Protection handbook, "Delineating Bordering Vegetated Wetlands". The approximate locations of the wetlands and watercourses are shown on the wetlands and soils sketch map.

Wetland data plots were established to document the vegetation, soils and hydrologic indicators along the delineated wetland boundaries. One data plot transects with two plots per transect was established near the northeast corner of the farm pond by Wetland Flag 106. Information collected from each data plot was recorded onto Mass DEP BVW Delineation Field Data Forms. The data forms lots are included with this report.

Soils on the property developed in a loamy to coarse-loamy textured, glacial till. Within two to three feet of the surface is very compact lodgement till (hardpan). Non-wetland soil map units were identified as well drained Broadbrook (82) and moderately well drained Rainbow loam (43). Locations of these soil map units are shown on the wetlands and soils sketch map. Brief descriptions of wetland & non-wetlands soils are presented below.

Respectfully submitted,

PIETRAS ENVIRONMENTAL GROUP, LLC



Thomas W. Pietras  
Professional Wetland Scientist and Soil Scientist

#### BRIEF DESCRIPTIONS OF SOIL MAP UNITS IDENTIFIED

##### WETLAND SOILS

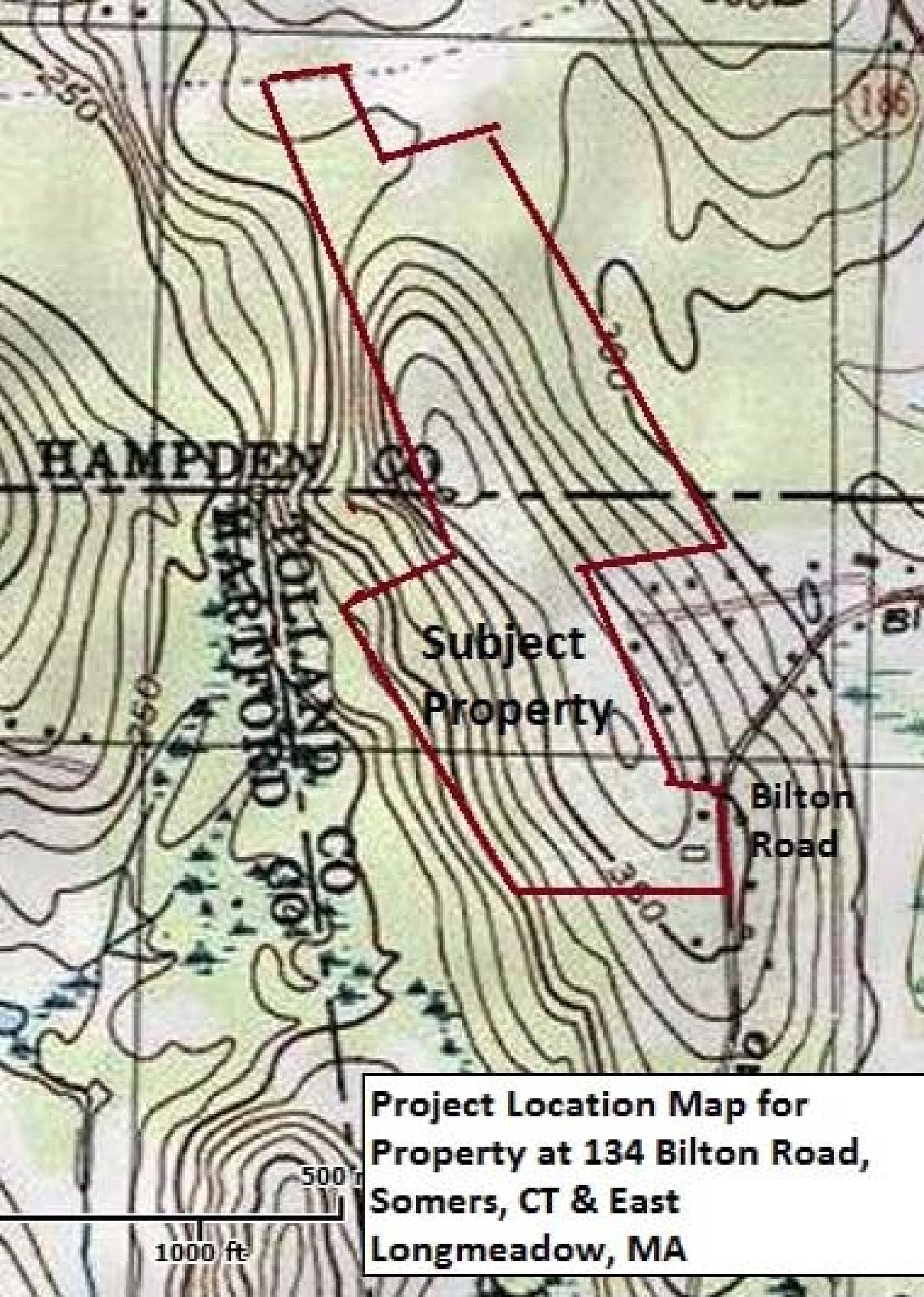
Aq Aquepts - This is a poorly to very poorly drained, disturbed soil where two or more feet of the original soil surface has been altered by filling, excavation and/or grading. Aquepts are characterized by a seasonal to prolonged high groundwater table at or near the ground surface. Aquepts are capable of supporting a prevalence of hydrophytic plants.

5 Wilbraham silt loam (Aquic Dystrudepts) – This is a deep, poorly drained, reddish-colored, loamy glacial till soil that developed in a friable solum overlying dense, basal till (hardpan). The till was derived from sandstone, shale and/or basalt. The hardpan has very slow permeability and it lies within 20 to 30 inches of the soil surface. A seasonal, perched ground water table is typically present within a foot of the surface from late fall through mid-spring. Wilbraham soils commonly occur in drainage ways and nearly level terrain on glaciated plains, hills and ridges.

##### NON-WETLAND SOILS

43 Rainbow loam (Aquic Dystrudepts) - This is a deep, moderately well drained, glacial till soil that developed in a friable, loamy textured, eolian (windblown) mantle overlying dense, coarse-loamy textured, basal till (hardpan). The till was derived from schist, gneiss, sandstone and basalt. Rainbow soils occur on glaciated plains, hills and ridges. The hardpan is within 20 to 40 inches of the soil surface. A perched, seasonal water table is present between 18 and 30 inches of the surface.

82 Broadbrook loam (Oxyaquic Dystrudepts) - This is a deep, well drained, glacial till soil that developed in a friable, loamy, eolian (windblown) solum overlying dense, coarse-loamy basal till (hardpan). The till was derived from sandstone, basalt, schist and gneiss. Typical depth to hardpan is 30-40 inches. Broadbrook soils occur on glaciated plains, hills and ridges.



250

186

HAMPDEN

MARRIOTT  
CO

Subject  
Property

Bilton  
Road

500 ft

1000 ft

**Project Location Map for  
Property at 134 Bilton Road,  
Somers, CT & East  
Longmeadow, MA**

Date Printed: 12/7/2015



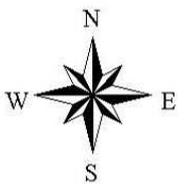
**SUBJECT  
PROPERTY**

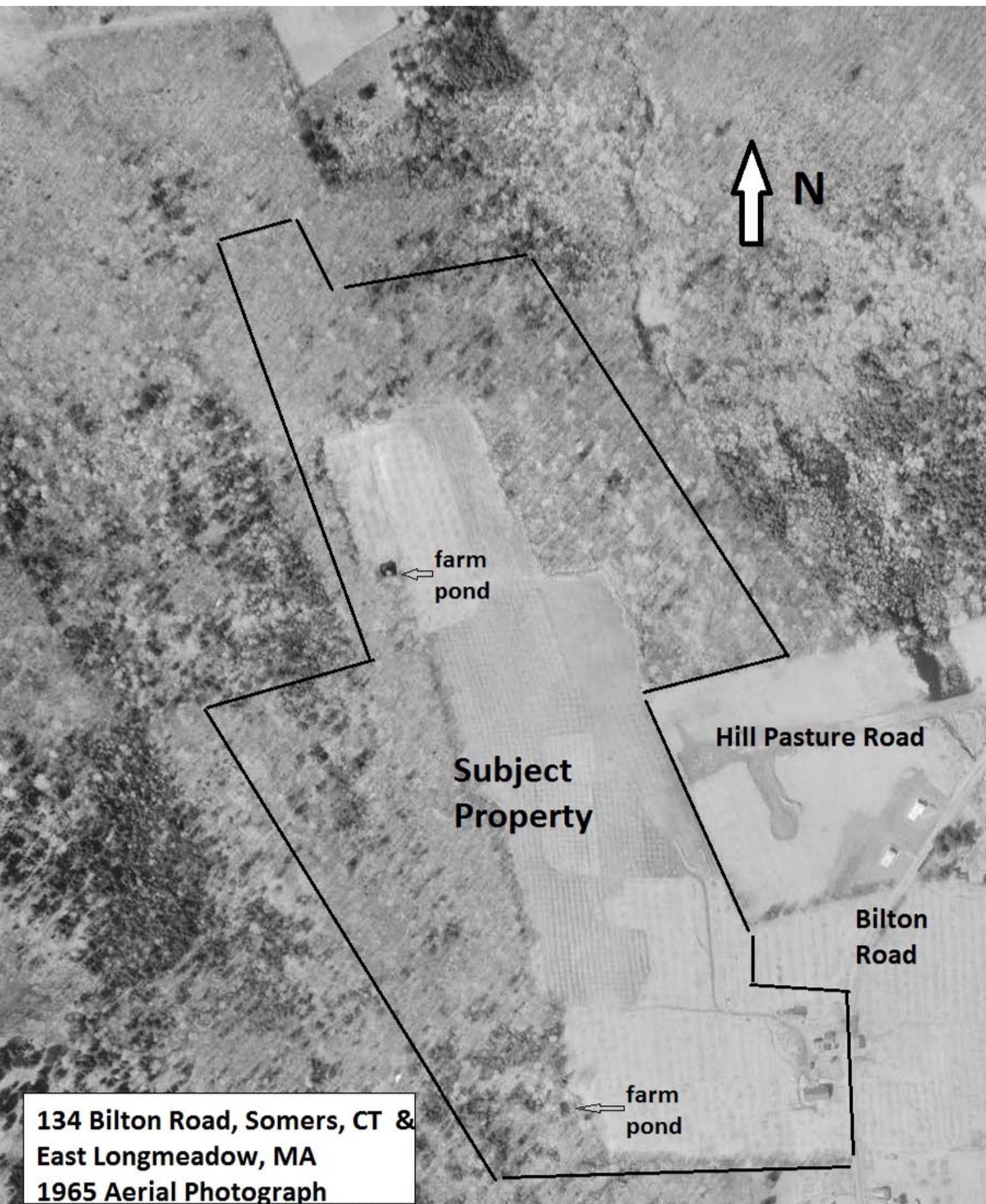
**Property at 134 Bilton Road, Somers, CT**

**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 Town of Somers and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 400 feet





**134 Bilton Road, Somers, CT &  
East Longmeadow, MA  
1965 Aerial Photograph**



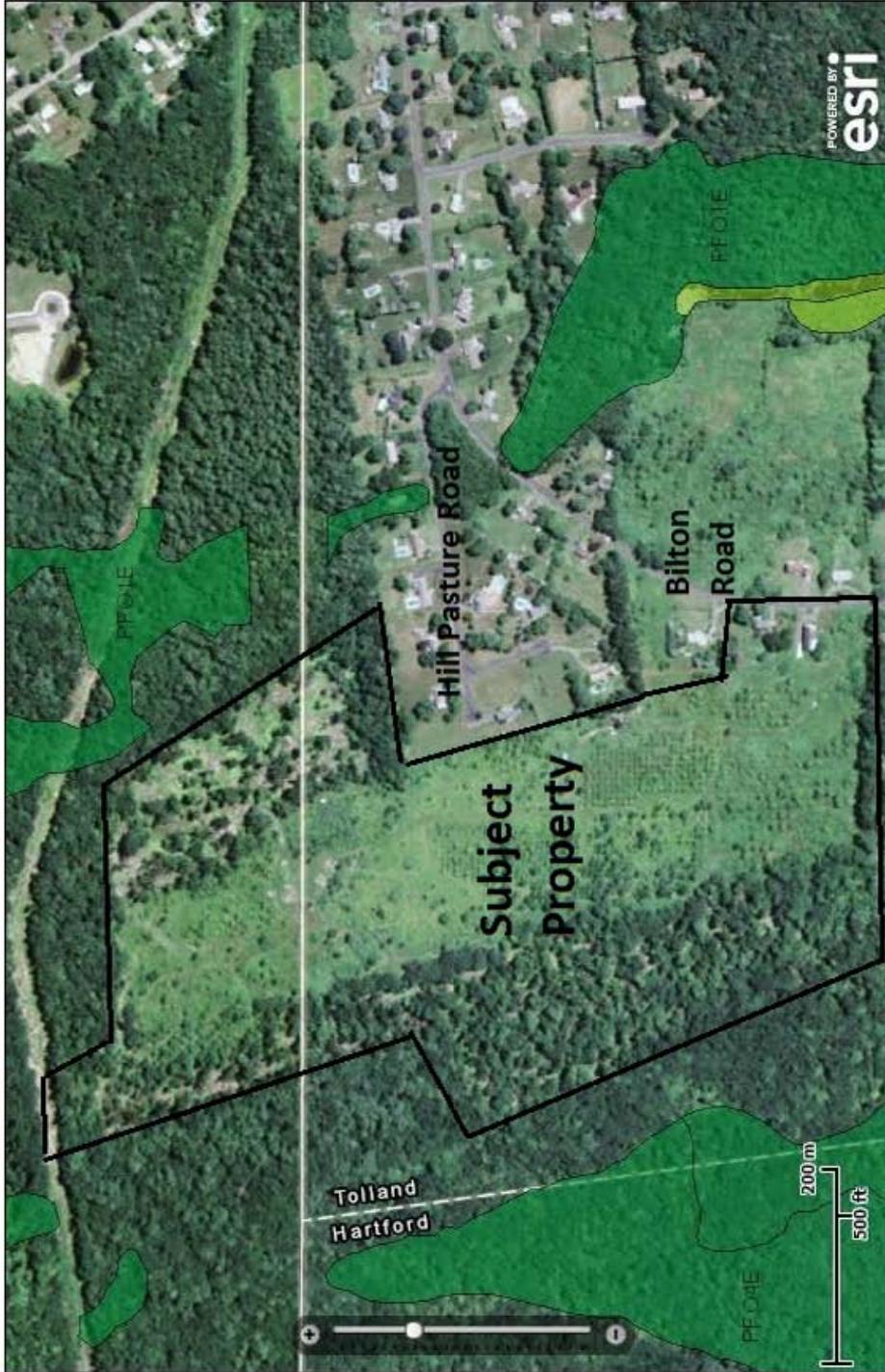
U.S. Fish and Wildlife Service

# National Wetlands Inventory

Dec 9, 2015

## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

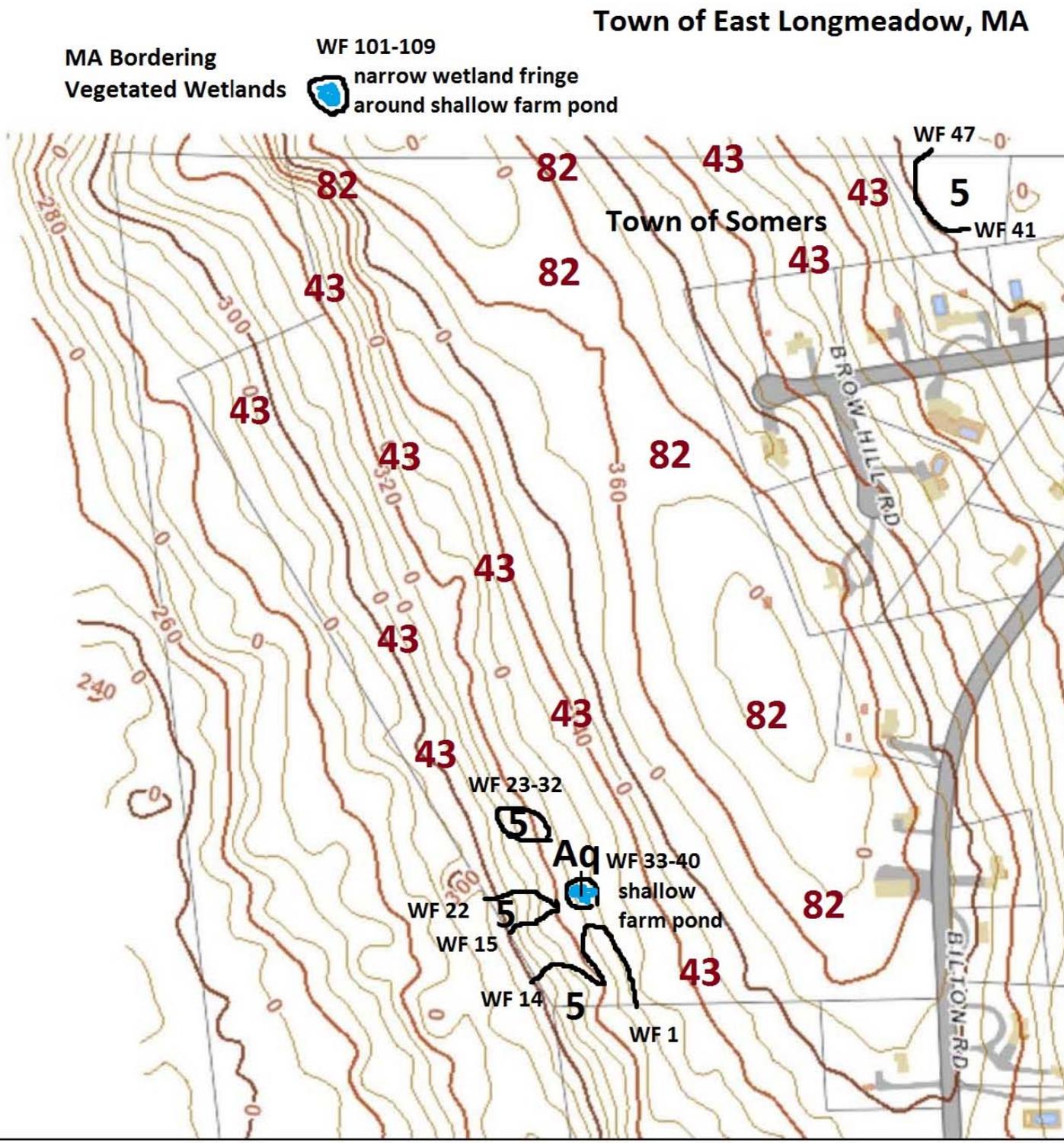


This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the user methods found on the Wetlands Mapper web site.

User Remarks:



Date Printed: 10/7/2015

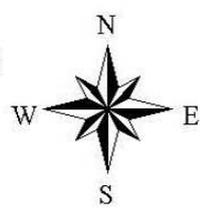


**Property at 134 Bilton Road, Somers, CT & East Longmeadow, MA**  
**Sketch map of CT Inland Wetlands, watercourses, soil types & MA Bordering Vegetated Wetlands**  
 Field identified on November 16 & 18, 2015      Thomas W. Pietras, Wetland & Soil Scientist

**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 Town of Somers and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 400 feet



# MassDEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Martinez Couch + Associates Prepared by: Thomas Pietros, Pietros Environmental Group, LLC Project location: 134 Bilton Road, Somers, CT + East Longmeadow, MA DEP File #: \_\_\_\_\_

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- Method other than dominance test used (attach additional information)

## Section I.

Vegetation	Observation Plot Number: <u>106-W</u>		Transect Number: <u>1</u>	Date of Delineation: <u>11/18/2015</u>
A. Sample Layer & Plant Species (by common/scientific name)	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*

<b>Ground Cover</b>				
Arrow-leaved heartthumb - <i>Persicaria saggitata</i>	OBL	15%	Y	OBL *
Purple-leaved willow herb - <i>Epilobium coloratum</i>	OBL	10	Y	OBL *
Common butterball bush - <i>Cephalanthus occidentalis</i>	OBL	10	Y	OBL *
Four bluegrass - <i>Poa palustris</i>	FACW	5	N	FACW *
		40		
<b>Shrubs</b>				
Common butterball bush - <i>Cephalanthus occidentalis</i>	OBL	5%	Y	OBL *
Winterberry - <i>Ilex verticillata</i>	FACW	5	Y	FACW *
		10		
<b>Saplings</b>				
Red maple - <i>Acer rubrum</i>	FAC	5%	Y	FAC *
<b>Trees</b>				
Red maple - <i>Acer rubrum</i>	FAC	25%	Y	FAC *
Pussy willow - <i>Salix discolor</i>	FACW	20	Y	FACW *
		45		
<b>Climbing woody vines</b> - none				

\* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

### Vegetation conclusion:

Number of dominant wetland indicator plants: 8      Number of dominant non-wetland indicator plants: 8

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

134 Bitter Road, Jones, CT + East Longmeadow, MA

Section II. Indicators of Hydrology **plot 106-W**

**Hydric Soil Interpretation**

**1. Soil Survey**

Is there a published soil survey for this site? **yes** no  
title/date: **USDA Web Soil Survey**  
map number:  
soil type mapped: **wethersfield fs1 (398C)**  
hydric soil inclusions: **no**

Are field observations consistent with soil survey? **yes** (no)  
Remarks: **excavation made for a farm pond**

**2. Soil Description**

Horizon	Depth	Matrix Color	Mottles Color
A	0-8"	10YR 2/1 mucky sil	
BC	8-12	10YR 5/2 sil	4d 5YR 7/6
C	12-18	10YR 6/2 sil	4d 5YR 7/6
Cd	18-22	10YR 6/2 v sil firm	4d 5YR 7/6

**3. Other:**

Conclusion: Is soil hydric? **yes** no

**Other Indicators of Hydrology: (check all that apply & describe)**

- Site Inundated: \_\_\_\_\_
- Depth to free water in observation hole: 44
- Depth to soil saturation in observation hole: 0
- Water marks: \_\_\_\_\_
- Drift lines: \_\_\_\_\_
- Sediment Deposits: \_\_\_\_\_
- Drainage patterns in BVW: \_\_\_\_\_
- Oxidized rhizospheres: \_\_\_\_\_
- Water-stained leaves: \_\_\_\_\_
- Recorded Data (streams, lake, or tidal gauge; aerial photo; other):  
\_\_\_\_\_  
\_\_\_\_\_
- Other: \_\_\_\_\_

Vegetation and Hydrology Conclusion		Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Wetland hydrology present:</b>			
Hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other indicators of hydrology present	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Sample location is in a BVW</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

*Submit this form with the Request for Determination of Applicability or Notice of Intent.*

# MassDEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Martinez Guch + Associates Prepared by: Thomas Pietras Project location: 134 Bilton Road, Somers, CT DEP File #: \_\_\_\_\_  
 Check all that apply: Pietras Environmental Group, LLC Ecj + Longmeadow, MA

- Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- Method other than dominance test used (attach additional information)

## Section I.

Vegetation A. Sample Layer & Plant Species (by common/scientific name)	Observation Plot Number: <u>106-U</u>	Transect Number: <u>1</u>	Date of Delineation: <u>11-18-2015</u>	
	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	
			E. Wetland Indicator Category*	
<b>Ground cover</b>				
rough stem solderrod - <i>Solidago rugosa</i> - FAC	55%		Y	FAC*
multiflora rose - <i>Rosa multiflora</i> - FACU	15		N	FACU
field grasses -	15		N	-
arrow-leaved hoarhound - <i>Persicaria spicata</i> - OBL	$\frac{10}{95}$		N	OBL*
<b>shrubs</b>				
red maple - <i>Acer rubrum</i> - FAC	10%		Y	FAC*
<b>saplings</b>				
red maple - <i>Acer rubrum</i> - FAC	15%		Y	FAC*
<b>trees</b>				
red maple - <i>Acer rubrum</i> - FAC	20%		Y	FAC*
pussy willow - <i>Salix discolor</i> - FACW	15		Y	FACW*
<b>Climbing woody vines - none</b>	<u>35</u>			

\* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

### Vegetation conclusion:

Number of dominant wetland indicator plants: 5

Number of dominant non-wetland indicator plants: 5

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

134 Bilten Road, Somers, CT + East Longmeadow, MA  
plot 106-2

**Section II. Indicators of Hydrology**

**Hydric Soil Interpretation**

**1. Soil Survey**

Is there a published soil survey for this site?  yes  no  
 title/date: USDA web soil survey  
 map number:  
 soil type mapped: wetherfield fl (398c)  
 hydric soil inclusions: no

Are field observations consistent with soil survey?  yes  no

Remarks: soil is a moderately well drained  
rainbow loam till soil

**2. Soil Description**

Horizon	Depth	Matrix Color	Mottles Color
A	0-3"	10YR3/3 vfl	
BL	3-16	7.5YR4/4 vfl	-reworked soil
B	16-23	7.5YR5/3 vfl	
Remarks: BL	23-26	7.5YR5/3 vfl	ff 5YR7/6

**Other Indicators of Hydrology: (check all that apply & describe)**

- Site Inundated: \_\_\_\_\_
- Depth to free water in observation hole: \_\_\_\_\_
- Depth to soil saturation in observation hole: \_\_\_\_\_
- Water marks: \_\_\_\_\_
- Drift lines: \_\_\_\_\_
- Sediment Deposits: \_\_\_\_\_
- Drainage patterns in BVW: \_\_\_\_\_
- Oxidized rhizospheres: \_\_\_\_\_
- Water-stained leaves: \_\_\_\_\_
- Recorded Data (streams, lake, or tidal gauge; aerial photo; other):  
 \_\_\_\_\_  
 \_\_\_\_\_
- Other: \_\_\_\_\_  
 — no saturation

**3. Other:**

Conclusion: Is soil hydric?  yes  no

Vegetation and Hydrology Conclusion		
	Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	✓	—
<b>Wetland hydrology present:</b>		
Hydric soil present	—	✓
Other indicators of hydrology present	—	✓
<b>Sample location is in a BVW</b>	—	✓

*Submit this form with the Request for Determination of Applicability or Notice of Intent.*



Photo 1. View SW at the small farm pond located in the northwestern portion of property in Town of East Longmeadow. The pond is shallow (<2 ft. deep) and approximately 50 feet in diameter.



Photo 2. View NW across small farm pond in East Longmeadow. Duckweed grows in the pond. Several buttonball bushes also grow in the shallow waters of the pond.



Photo 3. View SW at small farm pond located in the southwestern portion of the property in the Town of Somers. The pond is very shallow in depth (<2 ft.) and measures approximately 30' by 40' in size.



Photo 4. View NW across small farm pond in Somers. A very thick accumulation of leaves are present in the pond. Miscellaneous farming operation debris is present near the pond.

**Pictures of two very small, farm ponds located at 134 Bilton Road, Somers, CT & East Longmeadow, MA**  
**Photos taken on 11/18/2015**

# **Exhibit G**

## **SHPO Review**



January 20, 2017

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

Subject: Solar Farm Development  
134 Bilton Road  
Somers, Connecticut

Dear Mr. Little:

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 voltaic facility will entail the construction of ground mounted solar arrays and ancillary facilities (e.g. access road) within an area encompassing approximately 30 acres. The proposed activities are under the jurisdiction of the Connecticut Siting Council and are subject to review by this office pursuant to the Connecticut Environmental Policy Act (CEPA).

Although no properties listed on the National Register of Historic Places have been documented within the project parcels, the project area is situated on well-drained soils above several unnamed wetlands. This type of environmental setting tends to be associated with pre-contact Native American settlement. We are therefore requesting that a professional cultural resources assessment and reconnaissance survey be completed prior to construction. SHPO acknowledges that portions of the property have been subjected to substantial prior ground disturbances related to the orchard and that some areas. Not all areas of the proposed solar field are archeologically sensitive, but it is SHPO's opinion that intact and relatively well-drained soils within portions of the Area of Potential Effect have an elevated potential to contain significant archeological resources. Subsurface testing should assess all areas of anticipated ground disturbance that are considered to have a moderate/high sensitivity for containing significant archeological deposits, unless sufficient research or fieldwork documents that this level of effort is unwarranted. All work should be in compliance with our *Environmental Review Primer for Connecticut's Archaeological Resources* and no construction or other project-related ground disturbance should be initiated until SHPO has had an opportunity to review and comment upon the requested survey. A list of qualified consultants is attached for your convenience.

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 me at (860) 256-2764 or [catherine.labadia@ct.gov](mailto:catherine.labadia@ct.gov).

Sincerely,

Catherine Labadia  
Deputy State Historic Preservation Officer



TO WHOM IT MAY CONCERN

The following archaeologists, as known to us, meet the professional qualification guidelines of the National Park Service (36 CFR 61):

**ACS [Archaeological Consulting Services]**

Attn: Dr. Gregory Walwer  
10 Stonewall Lane  
Guilford, CT 06437-2949  
Phone: 203-458-0550  
Fax: 203-672-2442  
[acsinfo@yahoo.com](mailto:acsinfo@yahoo.com)

**American Cultural Specialists LLC**

Attn: Lucianne Lavin, Ph.D.  
755 Riverside Avenue  
Torrington, CT 06790  
Phone: 860-626-8210  
Fax: 877-903-0269  
[Luci.ACS@pobox.com](mailto:Luci.ACS@pobox.com)

**Archaeological & Historical Services**

Attn: Ms. Mary Harper  
PO Box 543  
Storrs, CT 06268  
Phone: 860-429-2142  
Fax: 860-429-1724  
[mharper@ahs-inc.biz](mailto:mharper@ahs-inc.biz)

**Aspetuck Landways**

Attn: Dr. Stuart A. Reeve  
PO Box 11024  
Greenwich, CT 06831  
Phone: 203-470-7874  
[Sareeve2000@yahoo.com](mailto:Sareeve2000@yahoo.com)

**Marc L. Banks, Ph.D., LLC**

11 Lincoln Lane  
Weatogue, CT 06089  
Phone: 860-658-7482  
Fax: 860-658-7482  
[banksmarc@sbcglobal.net](mailto:banksmarc@sbcglobal.net)

**BL Companies**

Attn: Mr. Jonathan Libbon  
355 Research Parkway  
Meriden, CT 06450  
Phone: 717-943-1672  
[jlibbon@blcompanies.com](mailto:jlibbon@blcompanies.com)

**Gray & Pape Inc.**

Attn: Mr. Patrick O'Bannon  
60 Valley Street, Suite 103  
Providence, RI 02909  
Phone: 401-273-9900  
Fax: 401-273-9944  
[pobannon@graypape.com](mailto:pobannon@graypape.com)

**Hartgen Archaeological Associates Inc.**

Attn: Mr. Matthew Kirk  
1744 Washington Avenue Ext.  
Rensselaer, New York 12144  
Phone: 518-283-0534  
Fax: 518-283-6276  
[mkkirk@hartgen.com](mailto:mkkirk@hartgen.com)

**Heritage Consultants LLC**

Attn: Nicholas Griffis, M.A.  
P.O. Box 310249  
Newington, CT 06131  
Phone: 860-667-3001  
Fax: 860-667-3008  
[info@heritage-consultants.com](mailto:info@heritage-consultants.com)

**Historical Perspectives Inc.**

Attn: Ms. Cece Saunders  
Historical Perspectives, Inc.  
P. O. Box 529  
Westport, CT 06881  
Phone: 203-226-7654  
[cece@historicalperspectives.org](mailto:cece@historicalperspectives.org)



**Sarah L Holmes, PhD**

31 Mistuxet Ave  
Mystic, CT 06355  
Phone: 860-501-1446  
[slh@att.net](mailto:slh@att.net)

**Louis Berger Group Inc.**

Attn: Dr. Hope Luhman, Cultural  
Resources  
20 Corporate Woods Boulevard  
Albany, NY 12211  
Phone: 518-514-9303  
Fax: 518-514-0731  
[hluhman@louisberger.com](mailto:hluhman@louisberger.com)

**JMA, a CCRG Company**

Attn: Mr. Martin Dudek  
410 Great Pond Road, Suite B-14  
Littleton, MA 01460  
Phone: 978-793-2579  
[mdudek@johnmilnerassociates.com](mailto:mdudek@johnmilnerassociates.com)

**Public Archaeology Laboratory Inc.**

Attn: Ms. Deborah Cox  
26 Main Street  
Pawtucket, RI 02860  
Phone: 401-728-8780  
Fax: 401-728-8784  
[dcox@palinc.com](mailto:dcox@palinc.com)

**Public Archaeology Survey Team Inc.**

Attn: Ms. Mary Harper  
PO Box 209  
Storrs, CT 06268  
Phone: 860-429-1723  
Fax: 860-429-9454  
[mharper@past-inc.org](mailto:mharper@past-inc.org)

**R. Christopher Goodwin & Associates, Inc.**

Attn: Jeffrey H. Maymon  
241 East 4<sup>th</sup> Street, Suite 100  
Frederick, Maryland 21701  
Phone: 301-694-0428  
Fax: 301-695-5237  
[jmaymon@rcgoodwin.com](mailto:jmaymon@rcgoodwin.com)

**Raber Associates**

Attn: Dr. Michael S. Raber  
81 Dayton Road, PO Box 46  
South Glastonbury, CT 06073  
Phone: 860-633-9026  
Fax: 860-633-9026  
[msraber@aol.com](mailto:msraber@aol.com)

**Cosimo Sgarlata, Ph.D.**

1 Roscoe Street  
Norwalk, CT 06851  
Phone: 203-847-5882  
[Sgarlata@wcsu.edu](mailto:Sgarlata@wcsu.edu)

This information updates and supersedes all previous material provided by the State Historic Preservation Office with respect to the identification of archaeological consultants. Further, this list has been arranged alphabetically; no preferential rating or evaluation should be inferred. The State Historic Preservation Office does not recommend, endorse, or assume responsibility for the quality of work for any individual or firm on this list, nor is there any guarantee, implicit or implied, that any work product produced by those on this list will necessarily meet federal and state requirements.

At its discretion, the State Historic Preservation Office may remove consultants from its informational list if no work has been undertaken in Connecticut over a three year period.

For further information please contact Catherine Labadia, Staff Archaeologist, at  
[catherine.labadia@ct.gov](mailto:catherine.labadia@ct.gov)

*Revised 4/15*

# **Exhibit H**

## **DEEP NDDDB Species Review**



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

Bureau of Natural Resources  
Wildlife Division  
Natural History Survey – Natural Diversity Data Base

February 22, 2016

Mr. Blake Nicholson  
Windham Solar LLC  
222 South 9<sup>th</sup> Street, Suite 1600  
Minneapolis, MN 55402

Regarding: Bilton Road, Somers, CT – solar energy facility - Natural Diversity Data Base  
201600197

Dear Mr. Nicholson:

In response to your request for a Natural Diversity Data Base (NDDB) Review of State-Listed Endangered, Threatened, and Special Concern Species for the Bilton Road solar energy facility in Somers, CT, our records for this site indicate the following extant populations of species on or within the vicinity of the site:

**Bobolink (*Dolichonyx oryzivorus*) Protection Status: Species of Special Concern**

Bobolinks require open grassy areas to forage, breed and nest. Unlike other grassland birds that require large tracts of grassland habitat, the bobolink can successfully breed in grasslands as small as five acres. Its breeding season is approximately May through August and it is during this period that this species is most susceptible to disturbances in its habitat.

**Northern Harrier (*Circus cyaneus*) Protection Status: Endangered Species**

Northern harriers are found in Connecticut during the winter, and observations have been reported up until March or April. Approximately a dozen or so pairs have been observed in Connecticut during the breeding season (February through July) in recent years, but only one successful nesting pair has been confirmed by the DEEP Wildlife Division. Northern harriers usually return to the same area to nest. They nest on the ground in well-concealed locations, often near low shrubs or in tall clumps of vegetation. Nesting locations are usually in abandoned fields, wet meadows, and coastal and inland marshes.

**Recommendations:** The birds noted above are most susceptible to human disturbance during their breeding seasons. The Wildlife Division recommends the following guidelines:

- Work should be conducted outside of the designated nesting seasons.
- Minimizing impact to open fields, meadows, marshes, and other grassy areas during this time period will likewise minimize impact to this species.

- If work cannot be conducted outside of the nesting season, then a walk through should be conducted each day to look for birds, and if found a buffer zone of a minimum of 600' shall be delineated around nesting sites to minimize disturbance.

Please be advised, the Wildlife Division has not made a field inspection of the proposed project nor have we seen detailed timetables for work to be done. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments.

The Natural Diversity Data Base 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 Data Base should not be substituted 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 Data Base as it becomes available. If the project is not implemented within 12 months, then another Natural Diversity Data Base review should be requested for up-to-date information.

Thank you for consulting the Natural Diversity Data Base. If you have any additional questions, I can be contacted by email at [Elaine.Hinsch@ct.gov](mailto:Elaine.Hinsch@ct.gov).

Sincerely,

/s/

Elaine Hinsch  
Program Specialist II  
Wildlife Division

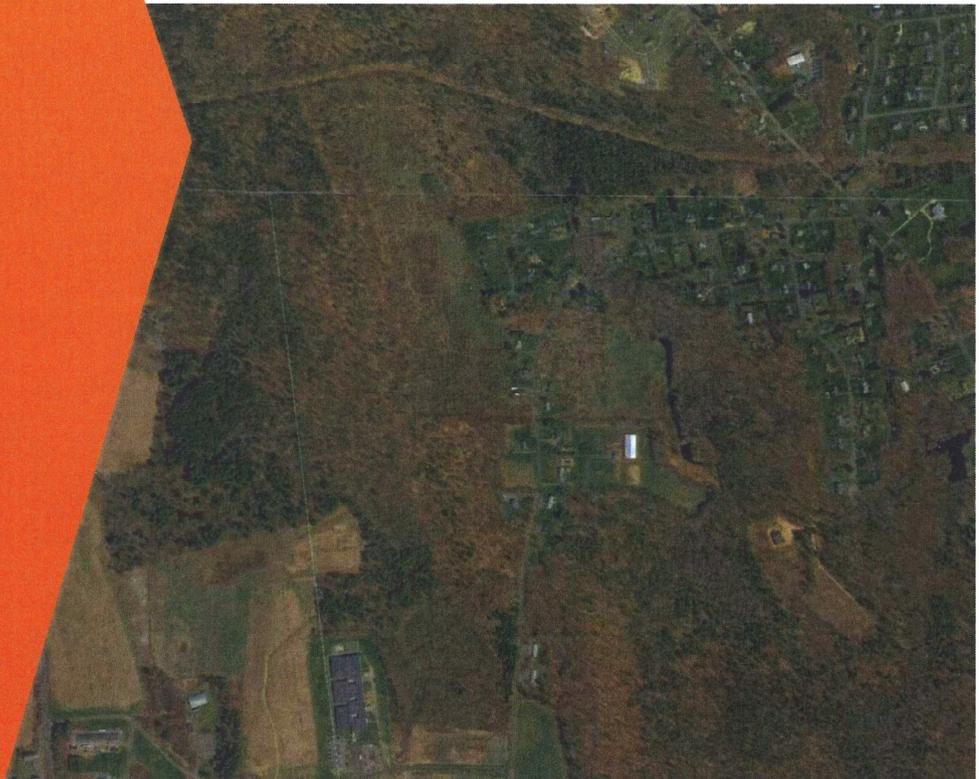
# **Exhibit I**

## **Stormwater Management Report**

**Westwood**

HYDROLOGY REPORT  
**BILTON SOLAR PROJECT**

Somers, CT  
August, 2017



Prepared For:



## HYDROLOGY REPORT

Date: August 22, 2017

**Re: Bilton Solar Project – Hydrology Report**  
File 0013150

To: Steve Broyer, Ecos Energy

From: Joe Fox, PE, Water Resources Engineer

The memo summarizes stormwater modeling completed for the Bilton Solar Project. The site is located just south of the Massachusetts state line in Somers, Connecticut on Bilton Road. HydroCAD modeling software was used to establish existing and proposed discharge rates from the site. Attachment 1 shows a drainage area map. Topographic data was furnished by the client.

### **Existing Conditions**

The site is not within a FEMA flood zone. The site is a mixture of forest and grass. Site soils are predominantly classified as B and C. Attachment 2 shows soils data. The analysis uses Atlas 14 precipitation data (Attachment 3).

### **Proposed Conditions**

The proposed design has solar panels installed in five contiguous sections for a total of 13.2 acres of panels. Gravel access roads (1.02 acres) are proposed to service the arrays. Inverters and other associated electrical components are proposed for each solar array (electrical components total = 0.055 acres). The proposed ground cover beneath and around the panels is native grass. Stormwater generally runs off to the west and east from all three array sections. Twelve basins are proposed. The basins will act as sedimentation basins during construction and as permanent water quality treatment basins after construction.

Drainage area C2 drains to east. Otherwise all other drainage areas drain to west.

### **Modeling Results**

The site was modeled in HydroCAD, using the proposed basin drainage areas as the watershed boundaries. Site conditions are shown in Table 1. Curve Numbers were calculated based on land cover and soil type.

Table 1. Site Conditions

Project Area [ac]	35.01	Area within fence
Solar Array [ac]	13.2	
Proposed Impervious Improvements [ac]	1.075	Gravel access roads and equipment pads

Without installation of any basins, the discharge rates to the west in proposed conditions are higher than existing conditions rates in the 2-year, 10-year, and 100-year storm storms (Table 2). This is due to the ground cover change from forest to meadow as well as the creation of impervious, i.e. the access roads and inverter pads.

Table 2. Comparison of Discharge Rates **without** Pond

<b>Event</b>	<b>Rainfall depth [in]</b>	<b>Existing to West [cfs]</b>	<b>Proposed to West [cfs]</b>	<b>Existing to East [cfs]</b>	<b>Proposed to East [cfs]</b>
2-year	3.16	24.6	33.6	2.6	2.2
10-year	5.04	63.4	86.8	6.7	5.9
100-year	8.03	131.7	179.7	13.8	12.3

The planting of meadow grasses under and around the solar array helps mitigate discharge rates but not to the extent required. Therefore twelve stormwater basins are proposed.

According to the HydroCAD model (Attachment 4), constructing these twelve ponds reduces the peak discharge rates (Table 3). In the 2-year, 10-year and 100-year events the proposed conditions discharge rate is lower than in existing conditions.

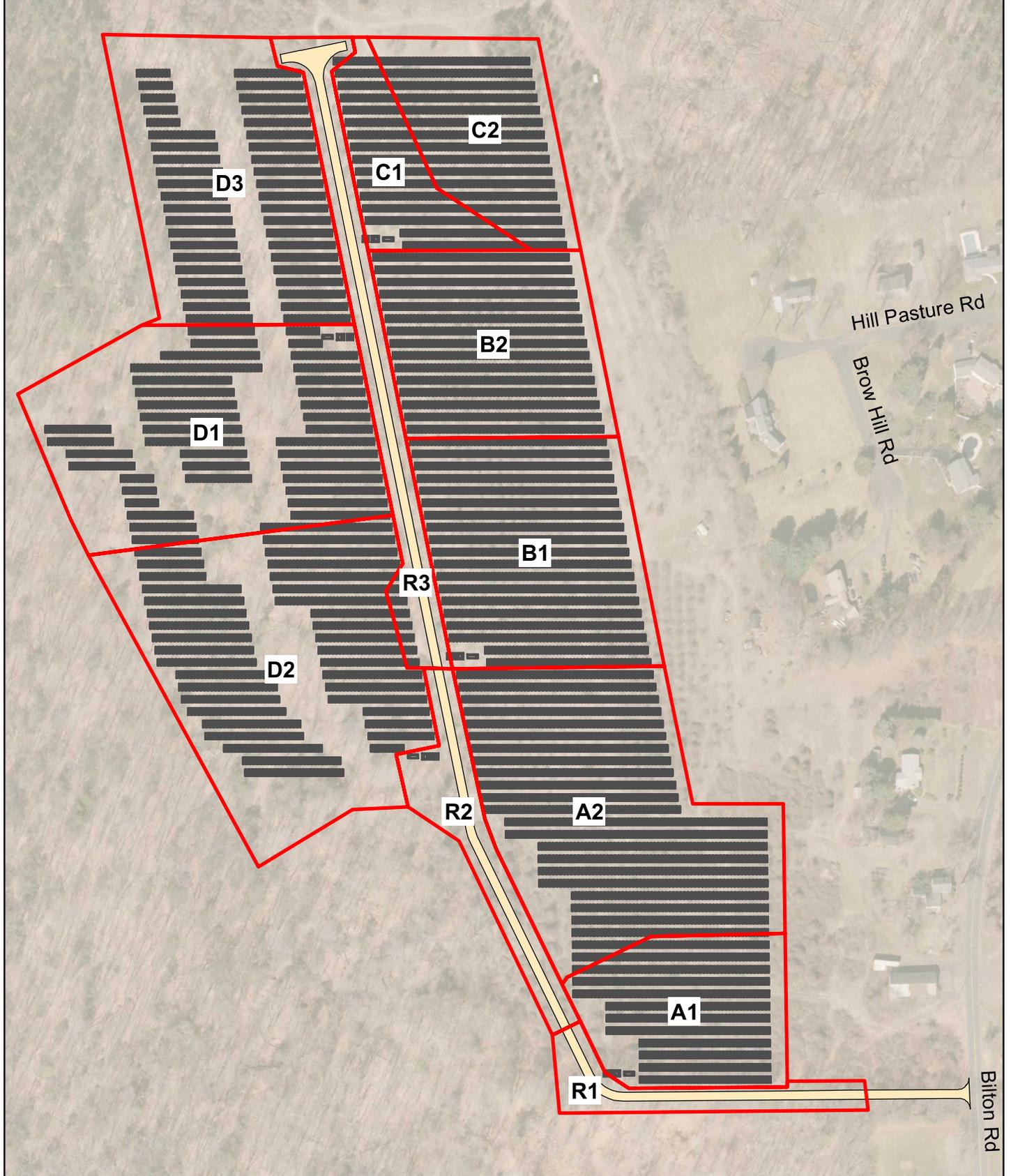
Table 3. Comparison of Discharge Rates **with** Ponds

<b>Event</b>	<b>Rainfall depth [in]</b>	<b>Existing to West [cfs]</b>	<b>Proposed to West [cfs]</b>	<b>Existing to East [cfs]</b>	<b>Proposed to East [cfs]</b>
2-year	3.16	24.6	0.4	2.6	2.2
10-year	5.04	63.4	11.4	6.7	5.9
100-year	8.03	131.7	76.1	13.8	12.3

The ponds provide water quality treatment as well as reduce peak discharge rates. A spreadsheet with pond sizing calculations is in Attachment 5.

**Attachments**

1. Drainage Map
2. Soil Information
3. Atlas 14 Precipitation Report
4. HydroCAD Report
5. Pond Sizing Spreadsheet



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

# Bilton Solar - ECOS Energy

Somers, Connecticut

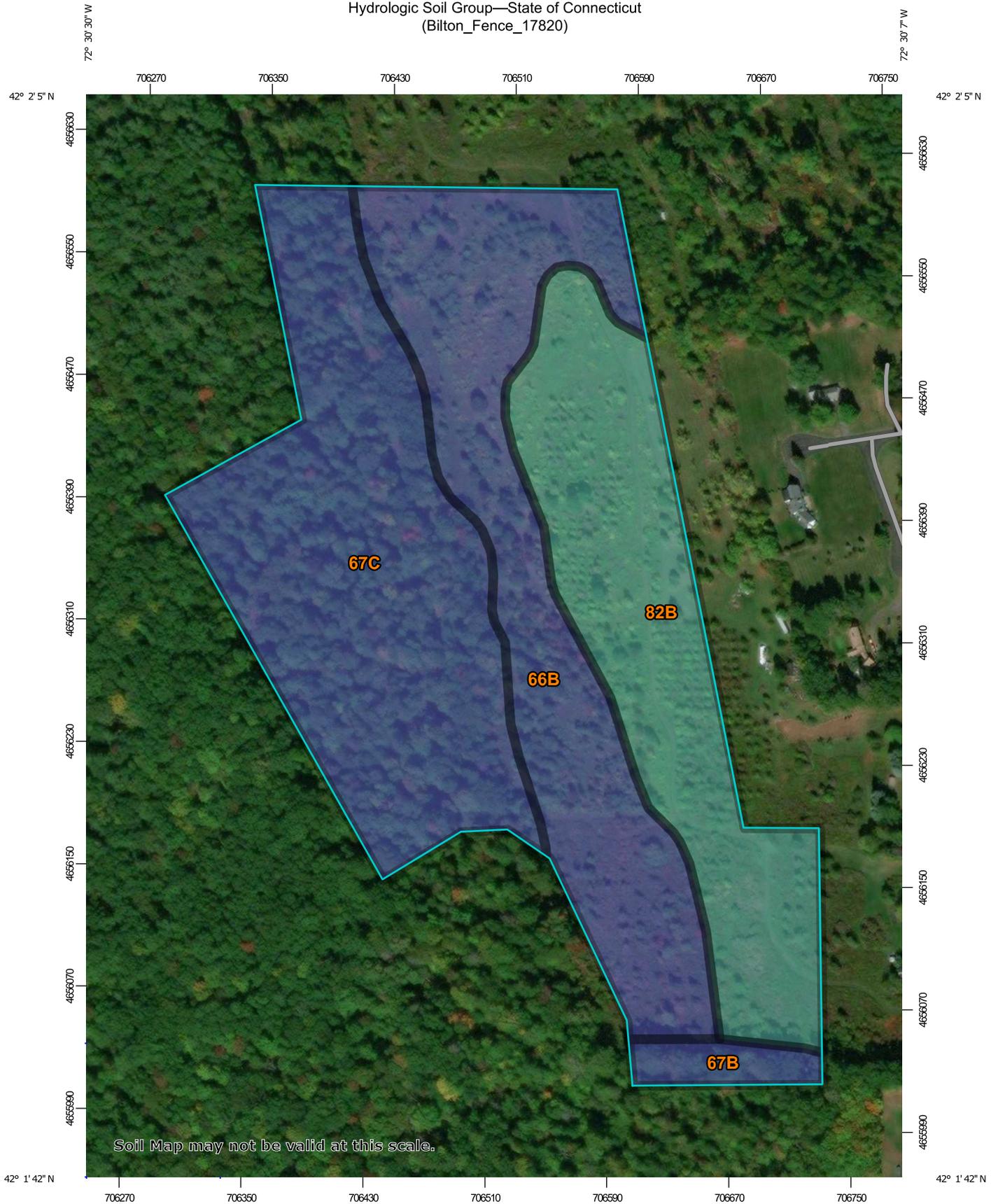
- Drainage Areas
- Solar Array
- Access Road

**Westwood**

Toll Free (888) 937-5150 [westwoodps.com](http://westwoodps.com)  
Westwood Professional Services, Inc.



Hydrologic Soil Group—State of Connecticut  
(Bilton\_Fence\_17820)



Map Scale: 1:3,450 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

8/20/2017  
Page 1 of 4

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Lines

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Points

 A  
 A/D  
 B  
 B/D

 C  
 C/D  
 D  
 Not rated or not available

### 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 15, Sep 28, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 29, 2013—Oct 16, 2016

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.

## Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — State of Connecticut (CT600)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
66B	Narragansett silt loam, 2 to 8 percent slopes	B	10.9	31.1%
67B	Narragansett silt loam, 3 to 8 percent slopes, very stony	B	0.9	2.5%
67C	Narragansett silt loam, 8 to 15 percent slopes, very stony	B	13.3	38.0%
82B	Broadbrook silt loam, 3 to 8 percent slopes	C	9.9	28.4%
<b>Totals for Area of Interest</b>			<b>35.0</b>	<b>100.0%</b>

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



**NOAA Atlas 14, Volume 10, Version 2**  
**Location name: Enfield, Connecticut, US\***  
**Latitude: 42.0331°, Longitude: -72.5110°**  
**Elevation: 245 ft\***  
 \* source: Google Maps



**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orfan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF\\_tabular](#) | [PF\\_graphical](#) | [Maps & aerials](#)

**PF tabular**

<b>PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)<sup>1</sup></b>										
<b>Duration</b>	<b>Average recurrence interval (years)</b>									
	<b>1</b>	<b>2</b>	<b>5</b>	<b>10</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	<b>1000</b>
<b>5-min</b>	<b>0.335</b> (0.259-0.433)	<b>0.403</b> (0.312-0.521)	<b>0.515</b> (0.396-0.667)	<b>0.607</b> (0.465-0.792)	<b>0.734</b> (0.545-1.00)	<b>0.832</b> (0.605-1.16)	<b>0.930</b> (0.658-1.35)	<b>1.05</b> (0.705-1.56)	<b>1.21</b> (0.780-1.86)	<b>1.32</b> (0.837-2.09)
<b>10-min</b>	<b>0.475</b> (0.367-0.613)	<b>0.571</b> (0.442-0.738)	<b>0.729</b> (0.562-0.945)	<b>0.860</b> (0.659-1.12)	<b>1.04</b> (0.772-1.42)	<b>1.18</b> (0.858-1.65)	<b>1.32</b> (0.932-1.91)	<b>1.49</b> (0.999-2.21)	<b>1.71</b> (1.10-2.64)	<b>1.87</b> (1.19-2.96)
<b>15-min</b>	<b>0.559</b> (0.432-0.721)	<b>0.672</b> (0.520-0.868)	<b>0.858</b> (0.661-1.11)	<b>1.01</b> (0.775-1.32)	<b>1.22</b> (0.908-1.67)	<b>1.39</b> (1.01-1.94)	<b>1.55</b> (1.10-2.25)	<b>1.75</b> (1.18-2.60)	<b>2.01</b> (1.30-3.10)	<b>2.21</b> (1.40-3.48)
<b>30-min</b>	<b>0.755</b> (0.584-0.974)	<b>0.909</b> (0.703-1.17)	<b>1.16</b> (0.895-1.51)	<b>1.37</b> (1.05-1.79)	<b>1.66</b> (1.23-2.27)	<b>1.88</b> (1.37-2.63)	<b>2.10</b> (1.49-3.05)	<b>2.37</b> (1.59-3.53)	<b>2.73</b> (1.76-4.21)	<b>2.99</b> (1.90-4.73)
<b>60-min</b>	<b>0.951</b> (0.736-1.23)	<b>1.15</b> (0.886-1.48)	<b>1.47</b> (1.13-1.90)	<b>1.73</b> (1.32-2.26)	<b>2.09</b> (1.55-2.86)	<b>2.37</b> (1.73-3.31)	<b>2.65</b> (1.88-3.85)	<b>2.99</b> (2.01-4.46)	<b>3.44</b> (2.23-5.32)	<b>3.78</b> (2.39-5.97)
<b>2-hr</b>	<b>1.21</b> (0.944-1.55)	<b>1.45</b> (1.13-1.87)	<b>1.85</b> (1.43-2.38)	<b>2.18</b> (1.68-2.82)	<b>2.63</b> (1.97-3.58)	<b>2.97</b> (2.18-4.15)	<b>3.32</b> (2.38-4.83)	<b>3.79</b> (2.56-5.62)	<b>4.42</b> (2.87-6.80)	<b>4.89</b> (3.10-7.68)
<b>3-hr</b>	<b>1.39</b> (1.09-1.78)	<b>1.67</b> (1.30-2.14)	<b>2.13</b> (1.65-2.73)	<b>2.50</b> (1.93-3.23)	<b>3.02</b> (2.27-4.11)	<b>3.42</b> (2.52-4.77)	<b>3.82</b> (2.75-5.57)	<b>4.40</b> (2.97-6.51)	<b>5.17</b> (3.36-7.93)	<b>5.75</b> (3.65-9.00)
<b>6-hr</b>	<b>1.74</b> (1.37-2.21)	<b>2.11</b> (1.66-2.69)	<b>2.71</b> (2.12-3.46)	<b>3.21</b> (2.50-4.13)	<b>3.90</b> (2.95-5.29)	<b>4.43</b> (3.30-6.17)	<b>4.96</b> (3.61-7.24)	<b>5.79</b> (3.92-8.52)	<b>6.88</b> (4.49-10.5)	<b>7.70</b> (4.91-12.0)
<b>12-hr</b>	<b>2.15</b> (1.70-2.71)	<b>2.65</b> (2.09-3.34)	<b>3.46</b> (2.72-4.38)	<b>4.13</b> (3.23-5.27)	<b>5.05</b> (3.85-6.83)	<b>5.77</b> (4.32-8.01)	<b>6.48</b> (4.75-9.44)	<b>7.63</b> (5.19-11.2)	<b>9.16</b> (5.99-13.9)	<b>10.3</b> (6.60-16.0)
<b>24-hr</b>	<b>2.53</b> (2.01-3.18)	<b>3.16</b> (2.51-3.97)	<b>4.19</b> (3.32-5.28)	<b>5.04</b> (3.97-6.40)	<b>6.22</b> (4.77-8.37)	<b>7.13</b> (5.37-9.86)	<b>8.03</b> (5.93-11.7)	<b>9.54</b> (6.51-13.9)	<b>11.5</b> (7.57-17.4)	<b>13.0</b> (8.37-20.1)
<b>2-day</b>	<b>2.87</b> (2.30-3.58)	<b>3.61</b> (2.89-4.51)	<b>4.82</b> (3.84-6.04)	<b>5.83</b> (4.62-7.35)	<b>7.22</b> (5.57-9.66)	<b>8.28</b> (6.28-11.4)	<b>9.35</b> (6.96-13.6)	<b>11.2</b> (7.66-16.2)	<b>13.6</b> (8.96-20.5)	<b>15.5</b> (9.95-23.7)
<b>3-day</b>	<b>3.13</b> (2.51-3.89)	<b>3.94</b> (3.16-4.89)	<b>5.26</b> (4.20-6.56)	<b>6.35</b> (5.04-7.98)	<b>7.86</b> (6.08-10.5)	<b>9.02</b> (6.87-12.4)	<b>10.2</b> (7.60-14.7)	<b>12.2</b> (8.37-17.6)	<b>14.9</b> (9.80-22.3)	<b>16.9</b> (10.9-25.8)
<b>4-day</b>	<b>3.37</b> (2.71-4.17)	<b>4.22</b> (3.40-5.24)	<b>5.63</b> (4.51-7.00)	<b>6.79</b> (5.41-8.50)	<b>8.39</b> (6.51-11.2)	<b>9.63</b> (7.34-13.2)	<b>10.9</b> (8.12-15.7)	<b>13.0</b> (8.93-18.7)	<b>15.8</b> (10.4-23.6)	<b>18.0</b> (11.6-27.4)
<b>7-day</b>	<b>4.02</b> (3.25-4.95)	<b>4.98</b> (4.03-6.14)	<b>6.56</b> (5.28-8.12)	<b>7.87</b> (6.30-9.80)	<b>9.67</b> (7.53-12.8)	<b>11.1</b> (8.46-15.0)	<b>12.4</b> (9.31-17.8)	<b>14.8</b> (10.2-21.2)	<b>17.9</b> (11.8-26.6)	<b>20.2</b> (13.1-30.6)
<b>10-day</b>	<b>4.67</b> (3.79-5.73)	<b>5.69</b> (4.61-7.00)	<b>7.36</b> (5.95-9.09)	<b>8.75</b> (7.03-10.9)	<b>10.7</b> (8.31-14.0)	<b>12.1</b> (9.29-16.4)	<b>13.6</b> (10.2-19.3)	<b>16.0</b> (11.1-22.8)	<b>19.1</b> (12.7-28.3)	<b>21.5</b> (13.9-32.5)
<b>20-day</b>	<b>6.70</b> (5.47-8.18)	<b>7.80</b> (6.36-9.53)	<b>9.58</b> (7.79-11.8)	<b>11.1</b> (8.94-13.7)	<b>13.1</b> (10.2-17.0)	<b>14.7</b> (11.2-19.5)	<b>16.3</b> (12.1-22.5)	<b>18.4</b> (12.8-26.1)	<b>21.3</b> (14.2-31.3)	<b>23.5</b> (15.3-35.3)
<b>30-day</b>	<b>8.42</b> (6.90-10.2)	<b>9.54</b> (7.81-11.6)	<b>11.4</b> (9.28-13.9)	<b>12.9</b> (10.5-15.9)	<b>15.0</b> (11.7-19.3)	<b>16.6</b> (12.7-21.9)	<b>18.2</b> (13.5-24.9)	<b>20.2</b> (14.1-28.4)	<b>22.7</b> (15.2-33.3)	<b>24.7</b> (16.1-37.0)
<b>45-day</b>	<b>10.6</b> (8.69-12.8)	<b>11.7</b> (9.63-14.2)	<b>13.6</b> (11.1-16.6)	<b>15.2</b> (12.4-18.6)	<b>17.4</b> (13.6-22.1)	<b>19.0</b> (14.5-24.8)	<b>20.7</b> (15.2-27.9)	<b>22.4</b> (15.7-31.4)	<b>24.6</b> (16.5-35.9)	<b>26.3</b> (17.2-39.3)
<b>60-day</b>	<b>12.3</b> (10.2-14.9)	<b>13.5</b> (11.2-16.4)	<b>15.5</b> (12.7-18.8)	<b>17.1</b> (14.0-20.9)	<b>19.4</b> (15.2-24.6)	<b>21.1</b> (16.1-27.3)	<b>22.8</b> (16.7-30.5)	<b>24.3</b> (17.1-34.0)	<b>26.3</b> (17.7-38.3)	<b>27.8</b> (18.2-41.5)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

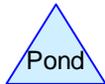
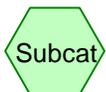
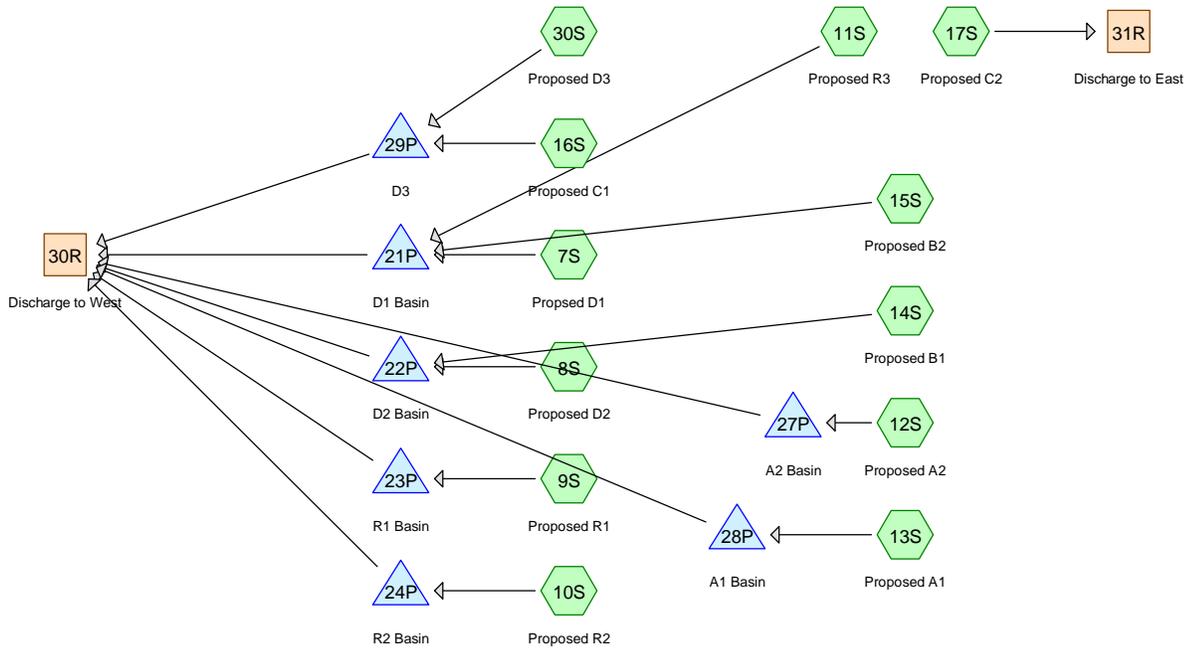
[Back to Top](#)



Existing to West



Existing to East



**Routing Diagram for 0013150\_Bilton\_170821**  
 Prepared by Westwood Professional Services, Inc., Printed 8/22/2017  
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**Summary for Subcatchment 3S: Existing to West**

Runoff = 24.58 cfs @ 12.17 hrs, Volume= 2.466 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
32.705	72	Woods/grass comb., Good, HSG C
32.705		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	1,070	0.0800	1.19		Lag/CN Method,

**Summary for Subcatchment 4S: Existing to East**

Runoff = 2.59 cfs @ 12.04 hrs, Volume= 0.169 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.246	72	Woods/grass comb., Good, HSG C
2.246		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	275	0.0620	0.80		Lag/CN Method,

**Summary for Subcatchment 7S: Propsed D1**

Runoff = 4.34 cfs @ 12.08 hrs, Volume= 0.351 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
4.926	71	Meadow, non-grazed, HSG C
4.926		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	660	0.1050	1.20		Lag/CN Method,

**Summary for Subcatchment 8S: Proposed D2**

Runoff = 5.26 cfs @ 12.06 hrs, Volume= 0.387 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
5.437	71	Meadow, non-grazed, HSG C
5.437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	540	0.1130	1.20		Lag/CN Method,

**Summary for Subcatchment 9S: Proposed R1**

Runoff = 1.61 cfs @ 12.04 hrs, Volume= 0.097 af, Depth= 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.557	71	Meadow, non-grazed, HSG C
* 0.295	98	Gravel Access Road
0.852	80	Weighted Average
0.557		65.38% Pervious Area
0.295		34.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 10S: Proposed R2**

Runoff = 1.73 cfs @ 12.04 hrs, Volume= 0.107 af, Depth= 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.834	71	Meadow, non-grazed, HSG C
* 0.253	98	Gravel Access Road
1.087	77	Weighted Average
0.834		76.72% Pervious Area
0.253		23.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 11S: Proposed R3**

Runoff = 2.96 cfs @ 12.04 hrs, Volume= 0.179 af, Depth= 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
1.038	71	Meadow, non-grazed, HSG C
* 0.531	98	Gravel Access Road
1.569	80	Weighted Average
1.038		66.16% Pervious Area
0.531		33.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 12S: Proposed A2**

Runoff = 4.72 cfs @ 12.07 hrs, Volume= 0.356 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
5.001	71	Meadow, non-grazed, HSG C
5.001		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.8	475	0.0842	1.01		Lag/CN Method,

**Summary for Subcatchment 13S: Proposed A1**

Runoff = 2.15 cfs @ 12.06 hrs, Volume= 0.155 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.172	71	Meadow, non-grazed, HSG C
2.172		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	400	0.0800	0.95		Lag/CN Method,

**Summary for Subcatchment 14S: Proposed B1**

Runoff = 3.39 cfs @ 12.07 hrs, Volume= 0.257 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
3.606	71	Meadow, non-grazed, HSG C
3.606		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	400	0.0625	0.84		Lag/CN Method,

**Summary for Subcatchment 15S: Proposed B2**

Runoff = 2.72 cfs @ 12.07 hrs, Volume= 0.209 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.939	71	Meadow, non-grazed, HSG C
2.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	345	0.0464	0.70		Lag/CN Method,

**Summary for Subcatchment 16S: Proposed C1**

Runoff = 1.27 cfs @ 12.04 hrs, Volume= 0.086 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
1.207	71	Meadow, non-grazed, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 17S: Proposed C2**

Runoff = 2.20 cfs @ 12.04 hrs, Volume= 0.148 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.086	71	Meadow, non-grazed, HSG C
2.086		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 30S: Proposed D3**

Runoff = 4.49 cfs @ 12.04 hrs, Volume= 0.289 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
4.065	71	Meadow, non-grazed, HSG C
4.065		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	390	0.1400	1.25		Lag/CN Method,

**Summary for Subcatchment 32S: Proposed R3**

Runoff = 2.96 cfs @ 12.04 hrs, Volume= 0.179 af, Depth= 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
1.038	71	Meadow, non-grazed, HSG C
* 0.531	98	Gravel Access Road
1.569	80	Weighted Average
1.038		66.16% Pervious Area
0.531		33.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 33S: Proposed A2**

Runoff = 4.72 cfs @ 12.07 hrs, Volume= 0.356 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
5.001	71	Meadow, non-grazed, HSG C
5.001		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.8	475	0.0842	1.01		Lag/CN Method,

**Summary for Subcatchment 34S: Proposed A1**

Runoff = 2.15 cfs @ 12.06 hrs, Volume= 0.155 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.172	71	Meadow, non-grazed, HSG C
2.172		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	400	0.0800	0.95		Lag/CN Method,

**Summary for Subcatchment 35S: Proposed B1**

Runoff = 3.39 cfs @ 12.07 hrs, Volume= 0.257 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
3.606	71	Meadow, non-grazed, HSG C
3.606		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	400	0.0625	0.84		Lag/CN Method,

**Summary for Subcatchment 36S: Proposed B2**

Runoff = 2.72 cfs @ 12.07 hrs, Volume= 0.209 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.939	71	Meadow, non-grazed, HSG C
2.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	345	0.0464	0.70		Lag/CN Method,

**Summary for Subcatchment 37S: Proposed D3**

Runoff = 4.46 cfs @ 12.04 hrs, Volume= 0.289 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
4.065	71	Meadow, non-grazed, HSG C
4.065		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	400	0.1350	1.24		Lag/CN Method,

**Summary for Subcatchment 38S: Proposed D1**

Runoff = 4.34 cfs @ 12.08 hrs, Volume= 0.351 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
4.926	71	Meadow, non-grazed, HSG C
4.926		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	660	0.1050	1.20		Lag/CN Method,

**Summary for Subcatchment 39S: Proposed D2**

Runoff = 5.26 cfs @ 12.06 hrs, Volume= 0.387 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
5.437	71	Meadow, non-grazed, HSG C
5.437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	540	0.1130	1.20		Lag/CN Method,

**Summary for Subcatchment 40S: Proposed R1**

Runoff = 1.61 cfs @ 12.04 hrs, Volume= 0.097 af, Depth= 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.557	71	Meadow, non-grazed, HSG C
* 0.295	98	Gravel Access Road
0.852	80	Weighted Average
0.557		65.38% Pervious Area
0.295		34.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 41S: Proposed R2**

Runoff = 1.73 cfs @ 12.04 hrs, Volume= 0.107 af, Depth= 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.834	71	Meadow, non-grazed, HSG C
* 0.253	98	Gravel Access Road
1.087	77	Weighted Average
0.834		76.72% Pervious Area
0.253		23.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 42S: Proposed C1**

Runoff = 1.27 cfs @ 12.04 hrs, Volume= 0.086 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
1.207	71	Meadow, non-grazed, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 44S: Proposed C2**

Runoff = 2.20 cfs @ 12.04 hrs, Volume= 0.148 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 2-yr Rainfall=3.16"

Area (ac)	CN	Description
2.086	71	Meadow, non-grazed, HSG C
2.086		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Reach 30R: Discharge to West**

Inflow Area = 32.861 ac, 3.28% Impervious, Inflow Depth = 0.09" for 2-yr event  
 Inflow = 0.40 cfs @ 20.15 hrs, Volume= 0.255 af  
 Outflow = 0.40 cfs @ 20.15 hrs, Volume= 0.255 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 31R: Discharge to East**

Inflow Area = 2.086 ac, 0.00% Impervious, Inflow Depth = 0.85" for 2-yr event  
 Inflow = 2.20 cfs @ 12.04 hrs, Volume= 0.148 af  
 Outflow = 2.20 cfs @ 12.04 hrs, Volume= 0.148 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 43R: Discharge to West without Ponds**

Inflow Area = 32.861 ac, 3.28% Impervious, Inflow Depth = 0.90" for 2-yr event  
 Inflow = 33.56 cfs @ 12.06 hrs, Volume= 2.473 af  
 Outflow = 33.56 cfs @ 12.06 hrs, Volume= 2.473 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 45R: Discharge to East without Ponds**

Inflow Area = 2.086 ac, 0.00% Impervious, Inflow Depth = 0.85" for 2-yr event  
 Inflow = 2.20 cfs @ 12.04 hrs, Volume= 0.148 af  
 Outflow = 2.20 cfs @ 12.04 hrs, Volume= 0.148 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Pond 21P: D1 Basin**

Inflow Area = 9.434 ac, 5.63% Impervious, Inflow Depth = 0.94" for 2-yr event  
 Inflow = 9.61 cfs @ 12.07 hrs, Volume= 0.739 af  
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 273.01' @ 24.52 hrs Surf.Area= 0.347 ac Storage= 0.739 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)  
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	270.50'	2.243 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) x 2

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
270.50	0.121	0.000	0.000
275.50	0.226	0.868	0.868
276.50	0.282	0.254	1.121

Device	Routing	Invert	Outlet Devices
#1	Primary	275.50'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=270.50' (Free Discharge)

↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Summary for Pond 22P: D2 Basin**

Inflow Area = 9.043 ac, 0.00% Impervious, Inflow Depth = 0.85" for 2-yr event  
 Inflow = 8.64 cfs @ 12.06 hrs, Volume= 0.644 af  
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 281.01' @ 24.46 hrs Surf.Area= 0.272 ac Storage= 0.644 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)  
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	278.00'	1.652 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) x 2
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
278.00	0.078	0.000	0.000
283.00	0.174	0.630	0.630
284.00	0.218	0.196	0.826

Device	Routing	Invert	Outlet Devices
#1	Primary	283.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=278.00' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Summary for Pond 23P: R1 Basin**

Inflow Area = 0.852 ac, 34.62% Impervious, Inflow Depth = 1.37" for 2-yr event  
 Inflow = 1.61 cfs @ 12.04 hrs, Volume= 0.097 af  
 Outflow = 0.07 cfs @ 14.98 hrs, Volume= 0.031 af, Atten= 96%, Lag= 176.6 min  
 Primary = 0.07 cfs @ 14.98 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 328.01' @ 14.98 hrs Surf.Area= 0.043 ac Storage= 0.066 af

Plug-Flow detention time= 421.2 min calculated for 0.031 af (32% of inflow)  
 Center-of-Mass det. time= 260.9 min ( 1,126.3 - 865.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	325.00'	0.114 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
325.00	0.001	0.000	0.000
328.00	0.043	0.066	0.066
329.00	0.054	0.048	0.114

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.03 cfs @ 14.98 hrs HW=328.01' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 0.03 cfs @ 0.20 fps)

**Summary for Pond 24P: R2 Basin**

Inflow Area = 1.087 ac, 23.28% Impervious, Inflow Depth = 1.18" for 2-yr event  
 Inflow = 1.73 cfs @ 12.04 hrs, Volume= 0.107 af  
 Outflow = 0.08 cfs @ 14.99 hrs, Volume= 0.037 af, Atten= 96%, Lag= 177.0 min  
 Primary = 0.08 cfs @ 14.99 hrs, Volume= 0.037 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 324.01' @ 14.99 hrs Surf.Area= 0.045 ac Storage= 0.071 af

Plug-Flow detention time= 414.2 min calculated for 0.037 af (34% of inflow)  
 Center-of-Mass det. time= 250.6 min ( 1,127.7 - 877.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	321.00'	0.121 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
321.00	0.002	0.000	0.000
324.00	0.045	0.070	0.070
325.00	0.056	0.051	0.121

Device	Routing	Invert	Outlet Devices
#1	Primary	324.00'	<b>20.0' long x 2.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

**Primary OutFlow** Max=0.03 cfs @ 14.99 hrs HW=324.01' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 0.03 cfs @ 0.22 fps)

**Summary for Pond 27P: A2 Basin**

Inflow Area = 5.001 ac, 0.00% Impervious, Inflow Depth = 0.85" for 2-yr event  
 Inflow = 4.72 cfs @ 12.07 hrs, Volume= 0.356 af  
 Outflow = 0.16 cfs @ 20.32 hrs, Volume= 0.054 af, Atten= 97%, Lag= 495.3 min  
 Primary = 0.16 cfs @ 20.32 hrs, Volume= 0.054 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 331.02' @ 20.32 hrs Surf.Area= 0.141 ac Storage= 0.304 af

Plug-Flow detention time= 597.7 min calculated for 0.054 af (15% of inflow)  
 Center-of-Mass det. time= 411.0 min ( 1,313.9 - 902.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	0.459 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
328.00	0.061	0.000	0.000
331.00	0.140	0.301	0.301
332.00	0.175	0.157	0.459

Device	Routing	Invert	Outlet Devices
#1	Primary	331.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.10 cfs @ 20.32 hrs HW=331.02' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 0.10 cfs @ 0.30 fps)

**Summary for Pond 28P: A1 Basin**

Inflow Area = 2.172 ac, 0.00% Impervious, Inflow Depth = 0.85" for 2-yr event  
 Inflow = 2.15 cfs @ 12.06 hrs, Volume= 0.155 af  
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 334.18' @ 24.40 hrs Surf.Area= 0.085 ac Storage= 0.155 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)  
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	331.50'	0.285 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
331.50	0.031	0.000	0.000
334.50	0.091	0.183	0.183
335.50	0.114	0.102	0.285

Device	Routing	Invert	Outlet Devices
#1	Primary	334.50'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=331.50' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Summary for Pond 29P: D3**

Inflow Area = 5.272 ac, 0.00% Impervious, Inflow Depth = 0.85" for 2-yr event  
 Inflow = 5.75 cfs @ 12.04 hrs, Volume= 0.375 af  
 Outflow = 0.26 cfs @ 15.86 hrs, Volume= 0.132 af, Atten= 96%, Lag= 229.4 min  
 Primary = 0.26 cfs @ 15.86 hrs, Volume= 0.132 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 273.03' @ 15.86 hrs Surf.Area= 0.110 ac Storage= 0.246 af

Plug-Flow detention time= 434.0 min calculated for 0.132 af (35% of inflow)  
 Center-of-Mass det. time= 257.6 min ( 1,158.2 - 900.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	270.00'	0.366 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
270.00	0.053	0.000	0.000
273.00	0.109	0.243	0.243
274.00	0.137	0.123	0.366

Device	Routing	Invert	Outlet Devices
#1	Primary	273.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.21 cfs @ 15.86 hrs HW=273.03' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 0.21 cfs @ 0.39 fps)

**Summary for Subcatchment 3S: Existing to West**

Runoff = 63.44 cfs @ 12.16 hrs, Volume= 6.074 af, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
32.705	72	Woods/grass comb., Good, HSG C
32.705		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	1,070	0.0800	1.19		Lag/CN Method,

**Summary for Subcatchment 4S: Existing to East**

Runoff = 6.67 cfs @ 12.04 hrs, Volume= 0.417 af, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.246	72	Woods/grass comb., Good, HSG C
2.246		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	275	0.0620	0.80		Lag/CN Method,

**Summary for Subcatchment 7S: Propsed D1**

Runoff = 11.63 cfs @ 12.08 hrs, Volume= 0.881 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
4.926	71	Meadow, non-grazed, HSG C
4.926		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	660	0.1050	1.20		Lag/CN Method,

**Summary for Subcatchment 8S: Proposed D2**

Runoff = 14.09 cfs @ 12.06 hrs, Volume= 0.973 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
5.437	71	Meadow, non-grazed, HSG C
5.437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	540	0.1130	1.20		Lag/CN Method,

**Summary for Subcatchment 9S: Proposed R1**

Runoff = 3.34 cfs @ 12.04 hrs, Volume= 0.208 af, Depth= 2.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
0.557	71	Meadow, non-grazed, HSG C
* 0.295	98	Gravel Access Road
0.852	80	Weighted Average
0.557		65.38% Pervious Area
0.295		34.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 10S: Proposed R2**

Runoff = 3.86 cfs @ 12.04 hrs, Volume= 0.241 af, Depth= 2.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
0.834	71	Meadow, non-grazed, HSG C
* 0.253	98	Gravel Access Road
1.087	77	Weighted Average
0.834		76.72% Pervious Area
0.253		23.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment 11S: Proposed R3**

Runoff = 6.15 cfs @ 12.04 hrs, Volume= 0.383 af, Depth= 2.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
1.038	71	Meadow, non-grazed, HSG C
* 0.531	98	Gravel Access Road
1.569	80	Weighted Average
1.038		66.16% Pervious Area
0.531		33.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment 12S: Proposed A2**

Runoff = 12.65 cfs @ 12.06 hrs, Volume= 0.895 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
5.001	71	Meadow, non-grazed, HSG C
5.001		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.8	475	0.0842	1.01		<b>Lag/CN Method,</b>

**Summary for Subcatchment 13S: Proposed A1**

Runoff = 5.75 cfs @ 12.05 hrs, Volume= 0.389 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.172	71	Meadow, non-grazed, HSG C
2.172		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	400	0.0800	0.95		Lag/CN Method,

**Summary for Subcatchment 14S: Proposed B1**

Runoff = 9.08 cfs @ 12.06 hrs, Volume= 0.645 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
3.606	71	Meadow, non-grazed, HSG C
3.606		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	400	0.0625	0.84		Lag/CN Method,

**Summary for Subcatchment 15S: Proposed B2**

Runoff = 7.29 cfs @ 12.07 hrs, Volume= 0.526 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.939	71	Meadow, non-grazed, HSG C
2.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	345	0.0464	0.70		Lag/CN Method,

**Summary for Subcatchment 16S: Proposed C1**

Runoff = 3.40 cfs @ 12.04 hrs, Volume= 0.216 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
1.207	71	Meadow, non-grazed, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 17S: Proposed C2**

Runoff = 5.87 cfs @ 12.04 hrs, Volume= 0.373 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.086	71	Meadow, non-grazed, HSG C
2.086		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 30S: Proposed D3**

Runoff = 11.92 cfs @ 12.03 hrs, Volume= 0.727 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
4.065	71	Meadow, non-grazed, HSG C
4.065		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	390	0.1400	1.25		Lag/CN Method,

**Summary for Subcatchment 32S: Proposed R3**

Runoff = 6.15 cfs @ 12.04 hrs, Volume= 0.383 af, Depth= 2.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
1.038	71	Meadow, non-grazed, HSG C
* 0.531	98	Gravel Access Road
1.569	80	Weighted Average
1.038		66.16% Pervious Area
0.531		33.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 33S: Proposed A2**

Runoff = 12.65 cfs @ 12.06 hrs, Volume= 0.895 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
5.001	71	Meadow, non-grazed, HSG C
5.001		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.8	475	0.0842	1.01		Lag/CN Method,

**Summary for Subcatchment 34S: Proposed A1**

Runoff = 5.75 cfs @ 12.05 hrs, Volume= 0.389 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.172	71	Meadow, non-grazed, HSG C
2.172		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	400	0.0800	0.95		Lag/CN Method,

**Summary for Subcatchment 35S: Proposed B1**

Runoff = 9.08 cfs @ 12.06 hrs, Volume= 0.645 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
3.606	71	Meadow, non-grazed, HSG C
3.606		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	400	0.0625	0.84		Lag/CN Method,

**Summary for Subcatchment 36S: Proposed B2**

Runoff = 7.29 cfs @ 12.07 hrs, Volume= 0.526 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.939	71	Meadow, non-grazed, HSG C
2.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	345	0.0464	0.70		Lag/CN Method,

**Summary for Subcatchment 37S: Proposed D3**

Runoff = 11.84 cfs @ 12.03 hrs, Volume= 0.727 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
4.065	71	Meadow, non-grazed, HSG C
4.065		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	400	0.1350	1.24		Lag/CN Method,

**Summary for Subcatchment 38S: Propsed D1**

Runoff = 11.63 cfs @ 12.08 hrs, Volume= 0.881 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
4.926	71	Meadow, non-grazed, HSG C
4.926		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	660	0.1050	1.20		Lag/CN Method,

**Summary for Subcatchment 39S: Proposed D2**

Runoff = 14.09 cfs @ 12.06 hrs, Volume= 0.973 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
5.437	71	Meadow, non-grazed, HSG C
5.437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	540	0.1130	1.20		Lag/CN Method,

**Summary for Subcatchment 40S: Proposed R1**

Runoff = 3.34 cfs @ 12.04 hrs, Volume= 0.208 af, Depth= 2.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
0.557	71	Meadow, non-grazed, HSG C
* 0.295	98	Gravel Access Road
0.852	80	Weighted Average
0.557		65.38% Pervious Area
0.295		34.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 41S: Proposed R2**

Runoff = 3.86 cfs @ 12.04 hrs, Volume= 0.241 af, Depth= 2.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
0.834	71	Meadow, non-grazed, HSG C
* 0.253	98	Gravel Access Road
1.087	77	Weighted Average
0.834		76.72% Pervious Area
0.253		23.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 42S: Proposed C1**

Runoff = 3.40 cfs @ 12.04 hrs, Volume= 0.216 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
1.207	71	Meadow, non-grazed, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 44S: Proposed C2**

Runoff = 5.87 cfs @ 12.04 hrs, Volume= 0.373 af, Depth= 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 10-yr Rainfall=5.04"

Area (ac)	CN	Description
2.086	71	Meadow, non-grazed, HSG C
2.086		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Reach 30R: Discharge to West**

Inflow Area = 32.861 ac, 3.28% Impervious, Inflow Depth = 0.81" for 10-yr event  
 Inflow = 11.42 cfs @ 12.13 hrs, Volume= 2.224 af  
 Outflow = 11.42 cfs @ 12.13 hrs, Volume= 2.224 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 31R: Discharge to East**

Inflow Area = 2.086 ac, 0.00% Impervious, Inflow Depth = 2.15" for 10-yr event  
 Inflow = 5.87 cfs @ 12.04 hrs, Volume= 0.373 af  
 Outflow = 5.87 cfs @ 12.04 hrs, Volume= 0.373 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 43R: Discharge to West without Ponds**

Inflow Area = 32.861 ac, 3.28% Impervious, Inflow Depth = 2.22" for 10-yr event  
 Inflow = 86.84 cfs @ 12.05 hrs, Volume= 6.083 af  
 Outflow = 86.84 cfs @ 12.05 hrs, Volume= 6.083 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 45R: Discharge to East without Ponds**

Inflow Area = 2.086 ac, 0.00% Impervious, Inflow Depth = 2.15" for 10-yr event  
 Inflow = 5.87 cfs @ 12.04 hrs, Volume= 0.373 af  
 Outflow = 5.87 cfs @ 12.04 hrs, Volume= 0.373 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Pond 21P: D1 Basin**

Inflow Area = 9.434 ac, 5.63% Impervious, Inflow Depth = 2.28" for 10-yr event  
 Inflow = 24.30 cfs @ 12.06 hrs, Volume= 1.790 af  
 Outflow = 0.50 cfs @ 24.05 hrs, Volume= 0.055 af, Atten= 98%, Lag= 719.2 min  
 Primary = 0.50 cfs @ 24.05 hrs, Volume= 0.055 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 275.55' @ 24.05 hrs Surf.Area= 0.457 ac Storage= 1.756 af

Plug-Flow detention time= 863.5 min calculated for 0.055 af (3% of inflow)  
 Center-of-Mass det. time= 576.6 min ( 1,444.4 - 867.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	270.50'	2.243 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) x 2

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
270.50	0.121	0.000	0.000
275.50	0.226	0.868	0.868
276.50	0.282	0.254	1.121

Device	Routing	Invert	Outlet Devices
#1	Primary	275.50'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.47 cfs @ 24.05 hrs HW=275.55' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Weir Controls 0.47 cfs @ 0.50 fps)

**Summary for Pond 22P: D2 Basin**

Inflow Area = 9.043 ac, 0.00% Impervious, Inflow Depth = 2.15" for 10-yr event  
 Inflow = 23.15 cfs @ 12.06 hrs, Volume= 1.618 af  
 Outflow = 0.74 cfs @ 18.13 hrs, Volume= 0.358 af, Atten= 97%, Lag= 364.2 min  
 Primary = 0.74 cfs @ 18.13 hrs, Volume= 0.358 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 283.06' @ 18.13 hrs Surf.Area= 0.353 ac Storage= 1.281 af

Plug-Flow detention time= 545.3 min calculated for 0.358 af (22% of inflow)  
 Center-of-Mass det. time= 367.3 min ( 1,241.0 - 873.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	278.00'	1.652 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) x 2
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
278.00	0.078	0.000	0.000
283.00	0.174	0.630	0.630
284.00	0.218	0.196	0.826

Device	Routing	Invert	Outlet Devices
#1	Primary	283.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.68 cfs @ 18.13 hrs HW=283.06' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 0.68 cfs @ 0.57 fps)

**Summary for Pond 23P: R1 Basin**

Inflow Area = 0.852 ac, 34.62% Impervious, Inflow Depth = 2.93" for 10-yr event  
 Inflow = 3.34 cfs @ 12.04 hrs, Volume= 0.208 af  
 Outflow = 2.02 cfs @ 12.11 hrs, Volume= 0.142 af, Atten= 40%, Lag= 4.5 min  
 Primary = 2.02 cfs @ 12.11 hrs, Volume= 0.142 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 328.12' @ 12.11 hrs Surf.Area= 0.044 ac Storage= 0.071 af

Plug-Flow detention time= 201.6 min calculated for 0.142 af (68% of inflow)  
 Center-of-Mass det. time= 80.8 min ( 922.9 - 842.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	325.00'	0.114 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
325.00	0.001	0.000	0.000
328.00	0.043	0.066	0.066
329.00	0.054	0.048	0.114

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=2.00 cfs @ 12.11 hrs HW=328.12' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 2.00 cfs @ 0.82 fps)

**Summary for Pond 24P: R2 Basin**

Inflow Area = 1.087 ac, 23.28% Impervious, Inflow Depth = 2.66" for 10-yr event  
 Inflow = 3.86 cfs @ 12.04 hrs, Volume= 0.241 af  
 Outflow = 2.39 cfs @ 12.11 hrs, Volume= 0.170 af, Atten= 38%, Lag= 4.3 min  
 Primary = 2.39 cfs @ 12.11 hrs, Volume= 0.170 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 324.13' @ 12.11 hrs Surf.Area= 0.046 ac Storage= 0.076 af

Plug-Flow detention time= 189.6 min calculated for 0.170 af (71% of inflow)  
 Center-of-Mass det. time= 73.1 min ( 925.5 - 852.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	321.00'	0.121 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
321.00	0.002	0.000	0.000
324.00	0.045	0.070	0.070
325.00	0.056	0.051	0.121

Device	Routing	Invert	Outlet Devices
#1	Primary	324.00'	<b>20.0' long x 2.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

**Primary OutFlow** Max=2.38 cfs @ 12.11 hrs HW=324.13' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 2.38 cfs @ 0.92 fps)

**Summary for Pond 27P: A2 Basin**

Inflow Area = 5.001 ac, 0.00% Impervious, Inflow Depth = 2.15" for 10-yr event  
 Inflow = 12.65 cfs @ 12.06 hrs, Volume= 0.895 af  
 Outflow = 3.46 cfs @ 12.35 hrs, Volume= 0.593 af, Atten= 73%, Lag= 17.0 min  
 Primary = 3.46 cfs @ 12.35 hrs, Volume= 0.593 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 331.18' @ 12.35 hrs Surf.Area= 0.146 ac Storage= 0.327 af

Plug-Flow detention time= 222.5 min calculated for 0.593 af (66% of inflow)  
 Center-of-Mass det. time= 93.7 min ( 967.6 - 873.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	0.459 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
328.00	0.061	0.000	0.000
331.00	0.140	0.301	0.301
332.00	0.175	0.157	0.459

Device	Routing	Invert	Outlet Devices
#1	Primary	331.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=3.44 cfs @ 12.35 hrs HW=331.18' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 3.44 cfs @ 0.98 fps)

**Summary for Pond 28P: A1 Basin**

Inflow Area = 2.172 ac, 0.00% Impervious, Inflow Depth = 2.15" for 10-yr event  
 Inflow = 5.75 cfs @ 12.05 hrs, Volume= 0.389 af  
 Outflow = 0.60 cfs @ 12.88 hrs, Volume= 0.206 af, Atten= 90%, Lag= 49.9 min  
 Primary = 0.60 cfs @ 12.88 hrs, Volume= 0.206 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 334.55' @ 12.88 hrs Surf.Area= 0.092 ac Storage= 0.188 af

Plug-Flow detention time= 297.1 min calculated for 0.206 af (53% of inflow)  
 Center-of-Mass det. time= 146.5 min ( 1,019.6 - 873.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	331.50'	0.285 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
331.50	0.031	0.000	0.000
334.50	0.091	0.183	0.183
335.50	0.114	0.102	0.285

Device	Routing	Invert	Outlet Devices
#1	Primary	334.50'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=0.57 cfs @ 12.88 hrs HW=334.55' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 0.57 cfs @ 0.54 fps)

**Summary for Pond 29P: D3**

Inflow Area = 5.272 ac, 0.00% Impervious, Inflow Depth = 2.15" for 10-yr event  
 Inflow = 15.28 cfs @ 12.03 hrs, Volume= 0.943 af  
 Outflow = 7.31 cfs @ 12.14 hrs, Volume= 0.700 af, Atten= 52%, Lag= 6.5 min  
 Primary = 7.31 cfs @ 12.14 hrs, Volume= 0.700 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 273.28' @ 12.14 hrs Surf.Area= 0.117 ac Storage= 0.275 af

Plug-Flow detention time= 175.6 min calculated for 0.700 af (74% of inflow)  
 Center-of-Mass det. time= 66.6 min ( 938.2 - 871.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	270.00'	0.366 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
270.00	0.053	0.000	0.000
273.00	0.109	0.243	0.243
274.00	0.137	0.123	0.366

Device	Routing	Invert	Outlet Devices
#1	Primary	273.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=7.30 cfs @ 12.14 hrs HW=273.28' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 7.30 cfs @ 1.28 fps)

**Summary for Subcatchment 3S: Existing to West**

Runoff = 110.40 cfs @ 12.15 hrs, Volume= 10.738 af, Depth= 3.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
32.705	72	Woods/grass comb., Good, HSG C
32.705		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	1,070	0.0800	1.19		Lag/CN Method,

**Summary for Subcatchment 4S: Existing to East**

Runoff = 11.54 cfs @ 12.04 hrs, Volume= 0.737 af, Depth= 3.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.246	72	Woods/grass comb., Good, HSG C
2.246		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	275	0.0620	0.80		Lag/CN Method,

**Summary for Subcatchment 7S: Propsed D1**

Runoff = 20.47 cfs @ 12.08 hrs, Volume= 1.573 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
4.926	71	Meadow, non-grazed, HSG C
4.926		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	660	0.1050	1.20		Lag/CN Method,

**Summary for Subcatchment 8S: Proposed D2**

Runoff = 24.77 cfs @ 12.06 hrs, Volume= 1.737 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
5.437	71	Meadow, non-grazed, HSG C
5.437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	540	0.1130	1.20		Lag/CN Method,

**Summary for Subcatchment 9S: Proposed R1**

Runoff = 5.25 cfs @ 12.04 hrs, Volume= 0.342 af, Depth= 4.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
0.557	71	Meadow, non-grazed, HSG C
* 0.295	98	Gravel Access Road
0.852	80	Weighted Average
0.557		65.38% Pervious Area
0.295		34.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 10S: Proposed R2**

Runoff = 6.27 cfs @ 12.04 hrs, Volume= 0.406 af, Depth= 4.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
0.834	71	Meadow, non-grazed, HSG C
* 0.253	98	Gravel Access Road
1.087	77	Weighted Average
0.834		76.72% Pervious Area
0.253		23.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 11S: Proposed R3**

Runoff = 9.67 cfs @ 12.04 hrs, Volume= 0.630 af, Depth= 4.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
1.038	71	Meadow, non-grazed, HSG C
* 0.531	98	Gravel Access Road
1.569	80	Weighted Average
1.038		66.16% Pervious Area
0.531		33.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 12S: Proposed A2**

Runoff = 22.25 cfs @ 12.06 hrs, Volume= 1.597 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
5.001	71	Meadow, non-grazed, HSG C
5.001		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.8	475	0.0842	1.01		Lag/CN Method,

**Summary for Subcatchment 13S: Proposed A1**

Runoff = 10.11 cfs @ 12.05 hrs, Volume= 0.694 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.172	71	Meadow, non-grazed, HSG C
2.172		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	400	0.0800	0.95		Lag/CN Method,

**Summary for Subcatchment 14S: Proposed B1**

Runoff = 15.96 cfs @ 12.06 hrs, Volume= 1.152 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
3.606	71	Meadow, non-grazed, HSG C
3.606		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	400	0.0625	0.84		Lag/CN Method,

**Summary for Subcatchment 15S: Proposed B2**

Runoff = 12.82 cfs @ 12.06 hrs, Volume= 0.939 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.939	71	Meadow, non-grazed, HSG C
2.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	345	0.0464	0.70		Lag/CN Method,

**Summary for Subcatchment 16S: Proposed C1**

Runoff = 5.96 cfs @ 12.04 hrs, Volume= 0.386 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
1.207	71	Meadow, non-grazed, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 17S: Proposed C2**

Runoff = 10.29 cfs @ 12.04 hrs, Volume= 0.666 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.086	71	Meadow, non-grazed, HSG C
2.086		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 30S: Proposed D3**

Runoff = 20.88 cfs @ 12.03 hrs, Volume= 1.298 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
4.065	71	Meadow, non-grazed, HSG C
4.065		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	390	0.1400	1.25		Lag/CN Method,

**Summary for Subcatchment 32S: Proposed R3**

Runoff = 9.67 cfs @ 12.04 hrs, Volume= 0.630 af, Depth= 4.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
1.038	71	Meadow, non-grazed, HSG C
* 0.531	98	Gravel Access Road
1.569	80	Weighted Average
1.038		66.16% Pervious Area
0.531		33.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 33S: Proposed A2**

Runoff = 22.25 cfs @ 12.06 hrs, Volume= 1.597 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
5.001	71	Meadow, non-grazed, HSG C
5.001		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.8	475	0.0842	1.01		Lag/CN Method,

**Summary for Subcatchment 34S: Proposed A1**

Runoff = 10.11 cfs @ 12.05 hrs, Volume= 0.694 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.172	71	Meadow, non-grazed, HSG C
2.172		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	400	0.0800	0.95		Lag/CN Method,

**Summary for Subcatchment 35S: Proposed B1**

Runoff = 15.96 cfs @ 12.06 hrs, Volume= 1.152 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
3.606	71	Meadow, non-grazed, HSG C
3.606		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	400	0.0625	0.84		Lag/CN Method,

**Summary for Subcatchment 36S: Proposed B2**

Runoff = 12.82 cfs @ 12.06 hrs, Volume= 0.939 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.939	71	Meadow, non-grazed, HSG C
2.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	345	0.0464	0.70		Lag/CN Method,

**Summary for Subcatchment 37S: Proposed D3**

Runoff = 20.73 cfs @ 12.03 hrs, Volume= 1.298 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
4.065	71	Meadow, non-grazed, HSG C
4.065		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	400	0.1350	1.24		Lag/CN Method,

**Summary for Subcatchment 38S: Proposed D1**

Runoff = 20.47 cfs @ 12.08 hrs, Volume= 1.573 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
4.926	71	Meadow, non-grazed, HSG C
4.926		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	660	0.1050	1.20		Lag/CN Method,

**Summary for Subcatchment 39S: Proposed D2**

Runoff = 24.77 cfs @ 12.06 hrs, Volume= 1.737 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
5.437	71	Meadow, non-grazed, HSG C
5.437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	540	0.1130	1.20		Lag/CN Method,

**Summary for Subcatchment 40S: Proposed R1**

Runoff = 5.25 cfs @ 12.04 hrs, Volume= 0.342 af, Depth= 4.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
0.557	71	Meadow, non-grazed, HSG C
* 0.295	98	Gravel Access Road
0.852	80	Weighted Average
0.557		65.38% Pervious Area
0.295		34.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 41S: Proposed R2**

Runoff = 6.27 cfs @ 12.04 hrs, Volume= 0.406 af, Depth= 4.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
0.834	71	Meadow, non-grazed, HSG C
* 0.253	98	Gravel Access Road
1.087	77	Weighted Average
0.834		76.72% Pervious Area
0.253		23.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 42S: Proposed C1**

Runoff = 5.96 cfs @ 12.04 hrs, Volume= 0.386 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
1.207	71	Meadow, non-grazed, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Subcatchment 44S: Proposed C2**

Runoff = 10.29 cfs @ 12.04 hrs, Volume= 0.666 af, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 CT-Bilton 24-hr S1 50-yr Rainfall=7.13"

Area (ac)	CN	Description
2.086	71	Meadow, non-grazed, HSG C
2.086		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

**Summary for Reach 30R: Discharge to West**

Inflow Area = 32.861 ac, 3.28% Impervious, Inflow Depth = 2.52" for 50-yr event  
 Inflow = 57.25 cfs @ 12.08 hrs, Volume= 6.895 af  
 Outflow = 57.25 cfs @ 12.08 hrs, Volume= 6.895 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 31R: Discharge to East**

Inflow Area = 2.086 ac, 0.00% Impervious, Inflow Depth = 3.83" for 50-yr event  
 Inflow = 10.29 cfs @ 12.04 hrs, Volume= 0.666 af  
 Outflow = 10.29 cfs @ 12.04 hrs, Volume= 0.666 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 43R: Discharge to West without Ponds**

Inflow Area = 32.861 ac, 3.28% Impervious, Inflow Depth = 3.93" for 50-yr event  
 Inflow = 150.61 cfs @ 12.05 hrs, Volume= 10.754 af  
 Outflow = 150.61 cfs @ 12.05 hrs, Volume= 10.754 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Reach 45R: Discharge to East without Ponds**

Inflow Area = 2.086 ac, 0.00% Impervious, Inflow Depth = 3.83" for 50-yr event  
 Inflow = 10.29 cfs @ 12.04 hrs, Volume= 0.666 af  
 Outflow = 10.29 cfs @ 12.04 hrs, Volume= 0.666 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

**Summary for Pond 21P: D1 Basin**

Inflow Area = 9.434 ac, 5.63% Impervious, Inflow Depth = 4.00" for 50-yr event  
 Inflow = 41.79 cfs @ 12.06 hrs, Volume= 3.142 af  
 Outflow = 3.17 cfs @ 13.49 hrs, Volume= 1.407 af, Atten= 92%, Lag= 85.7 min  
 Primary = 3.17 cfs @ 13.49 hrs, Volume= 1.407 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 275.67' @ 13.49 hrs Surf.Area= 0.471 ac Storage= 1.811 af

Plug-Flow detention time= 356.8 min calculated for 1.406 af (45% of inflow)

Center-of-Mass det. time= 200.6 min ( 1,049.8 - 849.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	270.50'	2.243 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) x 2

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
270.50	0.121	0.000	0.000
275.50	0.226	0.868	0.868
276.50	0.282	0.254	1.121

Device	Routing	Invert	Outlet Devices
#1	Primary	275.50'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=3.15 cfs @ 13.49 hrs HW=275.67' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Weir Controls 3.15 cfs @ 0.95 fps)

**Summary for Pond 22P: D2 Basin**

Inflow Area = 9.043 ac, 0.00% Impervious, Inflow Depth = 3.83" for 50-yr event  
 Inflow = 40.70 cfs @ 12.06 hrs, Volume= 2.889 af  
 Outflow = 6.41 cfs @ 12.59 hrs, Volume= 1.629 af, Atten= 84%, Lag= 32.0 min  
 Primary = 6.41 cfs @ 12.59 hrs, Volume= 1.629 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 283.26' @ 12.59 hrs Surf.Area= 0.371 ac Storage= 1.354 af

Plug-Flow detention time= 281.6 min calculated for 1.628 af (56% of inflow)  
 Center-of-Mass det. time= 137.9 min ( 992.2 - 854.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	278.00'	1.652 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) x 2
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
278.00	0.078	0.000	0.000
283.00	0.174	0.630	0.630
284.00	0.218	0.196	0.826

Device	Routing	Invert	Outlet Devices
#1	Primary	283.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=6.38 cfs @ 12.59 hrs HW=283.26' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 6.38 cfs @ 1.22 fps)

**Summary for Pond 23P: R1 Basin**

Inflow Area = 0.852 ac, 34.62% Impervious, Inflow Depth = 4.81" for 50-yr event  
 Inflow = 5.25 cfs @ 12.04 hrs, Volume= 0.342 af  
 Outflow = 5.08 cfs @ 12.05 hrs, Volume= 0.276 af, Atten= 3%, Lag= 0.9 min  
 Primary = 5.08 cfs @ 12.05 hrs, Volume= 0.276 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 328.23' @ 12.05 hrs Surf.Area= 0.045 ac Storage= 0.076 af

Plug-Flow detention time= 145.3 min calculated for 0.276 af (81% of inflow)  
 Center-of-Mass det. time= 55.8 min ( 881.0 - 825.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	325.00'	0.114 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
325.00	0.001	0.000	0.000
328.00	0.043	0.066	0.066
329.00	0.054	0.048	0.114

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=5.05 cfs @ 12.05 hrs HW=328.23' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 5.05 cfs @ 1.12 fps)

**Summary for Pond 24P: R2 Basin**

Inflow Area = 1.087 ac, 23.28% Impervious, Inflow Depth = 4.48" for 50-yr event  
 Inflow = 6.27 cfs @ 12.04 hrs, Volume= 0.406 af  
 Outflow = 6.08 cfs @ 12.05 hrs, Volume= 0.336 af, Atten= 3%, Lag= 0.9 min  
 Primary = 6.08 cfs @ 12.05 hrs, Volume= 0.336 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 324.24' @ 12.05 hrs Surf.Area= 0.048 ac Storage= 0.082 af

Plug-Flow detention time= 131.6 min calculated for 0.336 af (83% of inflow)  
 Center-of-Mass det. time= 48.9 min ( 883.6 - 834.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	321.00'	0.121 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
321.00	0.002	0.000	0.000
324.00	0.045	0.070	0.070
325.00	0.056	0.051	0.121

Device	Routing	Invert	Outlet Devices
#1	Primary	324.00'	<b>20.0' long x 2.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

**Primary OutFlow** Max=6.06 cfs @ 12.05 hrs HW=324.24' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 6.06 cfs @ 1.25 fps)

**Summary for Pond 27P: A2 Basin**

Inflow Area = 5.001 ac, 0.00% Impervious, Inflow Depth = 3.83" for 50-yr event  
 Inflow = 22.25 cfs @ 12.06 hrs, Volume= 1.597 af  
 Outflow = 19.83 cfs @ 12.10 hrs, Volume= 1.296 af, Atten= 11%, Lag= 2.1 min  
 Primary = 19.83 cfs @ 12.10 hrs, Volume= 1.296 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 331.52' @ 12.10 hrs Surf.Area= 0.158 ac Storage= 0.379 af

Plug-Flow detention time= 140.0 min calculated for 1.296 af (81% of inflow)  
 Center-of-Mass det. time= 52.3 min ( 906.7 - 854.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	0.459 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
328.00	0.061	0.000	0.000
331.00	0.140	0.301	0.301
332.00	0.175	0.157	0.459

Device	Routing	Invert	Outlet Devices
#1	Primary	331.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=19.79 cfs @ 12.10 hrs HW=331.52' (Free Discharge)  
 ↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 19.79 cfs @ 1.89 fps)

**Summary for Pond 28P: A1 Basin**

Inflow Area = 2.172 ac, 0.00% Impervious, Inflow Depth = 3.83" for 50-yr event  
 Inflow = 10.11 cfs @ 12.05 hrs, Volume= 0.694 af  
 Outflow = 7.02 cfs @ 12.12 hrs, Volume= 0.511 af, Atten= 31%, Lag= 4.1 min  
 Primary = 7.02 cfs @ 12.12 hrs, Volume= 0.511 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 334.78' @ 12.12 hrs Surf.Area= 0.097 ac Storage= 0.209 af

Plug-Flow detention time= 180.2 min calculated for 0.511 af (74% of inflow)  
 Center-of-Mass det. time= 69.6 min ( 923.3 - 853.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	331.50'	0.285 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
331.50	0.031	0.000	0.000
334.50	0.091	0.183	0.183
335.50	0.114	0.102	0.285

Device	Routing	Invert	Outlet Devices
#1	Primary	334.50'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=7.00 cfs @ 12.12 hrs HW=334.78' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 7.00 cfs @ 1.26 fps)

**Summary for Pond 29P: D3**

Inflow Area = 5.272 ac, 0.00% Impervious, Inflow Depth = 3.83" for 50-yr event  
 Inflow = 26.78 cfs @ 12.03 hrs, Volume= 1.684 af  
 Outflow = 25.15 cfs @ 12.05 hrs, Volume= 1.441 af, Atten= 6%, Lag= 1.2 min  
 Primary = 25.15 cfs @ 12.05 hrs, Volume= 1.441 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs  
 Peak Elev= 273.60' @ 12.05 hrs Surf.Area= 0.126 ac Storage= 0.314 af

Plug-Flow detention time= 112.1 min calculated for 1.441 af (86% of inflow)  
 Center-of-Mass det. time= 41.0 min ( 893.1 - 852.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	270.00'	0.366 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
270.00	0.053	0.000	0.000
273.00	0.109	0.243	0.243
274.00	0.137	0.123	0.366

Device	Routing	Invert	Outlet Devices
#1	Primary	273.00'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Primary OutFlow** Max=25.11 cfs @ 12.05 hrs HW=273.60' (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 25.11 cfs @ 2.09 fps)

BMP (ID#)	DRAINAGE AREA AC	REQUIRED TRAP CAPACITY CU.YD.	BOTTOM AREA SF	BOTTOM ELEVATION FT	TOTAL DEPTH FT	OVERFLOW AREA SF	OVERFLOW ELEVATION FT	WET STORAGE CU.YD.	WIER LENGTH FT	TOP AREA SF	TOP BASIN FT	DRY STORAGE CU.YD.	TOTAL TRAP STORAGE CU.YD.	EXCESS TRAP STORAGE CU.YD.
R1	0.8	105	54	325	4	1888	328	108	20	2360	329	79	187	82
R2	1.1	146	105	321	4	1952	324	114	20	2440	325	81	196	50
A1	2.2	291	1360	331.5	4	3960	334.5	296	20	4950	335.5	165	461	170
A2	5.0	668	2655	328	4	6100	331	486	20	7625	332	254	741	73
D1	4.9	658	5290	270.5	6	9835.2	275.5	1400	20	12294	276.5	410	1810	1152
D2	5.4	726	3400	278	6	7580	283	1017	20	9475	284	316	1333	607
D3	4.1	549	2320	270	4	4760	273	393	20	5950	274	198	592	42
4666													5318	652

# **Exhibit J**

## **Decommissioning Memo**

# Bilton Road Solar Project - Decommissioning Memo

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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 and 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.

# **Exhibit K**

## **Equipment Specification Sheets**

$\frac{1}{a} \quad y > 0 \quad \sin^2 a + \cos^2 a = 1$   
 $y = \pm \frac{b}{a}x \quad 2+3=5 \quad (a+b)c$   
 $R = \frac{a \cdot b \cdot c}{4S}$   
 $\text{tg} x = \left( \frac{\sin x}{\cos x} \right)$   
 $\pm a] = \pm (\text{of } a)$   
 $(n \pm v) = n' \pm v'$   
 $5-2=3$   
 $ax^2 + bx + c = 0$   
 $\pi \text{im } f(x+a)$   
 $\log_a x >$   
 $(x)' = (\cos$



  
**POWER ELECTRONICS**®

**HEC-US**  
UTILITY SCALE SOLAR INVERTER

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# HEC-US

UTILITY SCALE SOLAR INVERTER



A MODULAR AND  
REDUNDANT SYSTEM  
MAXIMIZES UP-TIME AND  
PERFORMANCE



## HEC-US

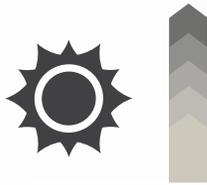
The HEC-US central inverter is an industry leading modular system designed for outdoor use with a NEMA 3R Stainless Steel enclosure, pre-engineered DC Recombiner, AC output circuit breaker and built-in ARM²S² revolutionary filter-less cooling system.

The HEC-US inverter is certified to UL-1741 and IEEE-1547 and designed for utility scale PV plants located in the most demanding environments. Power-Electronics inverters include proven dynamic grid support features that enhance grid quality and PV plant management.

The HEC-US is available in a turnkey MW platform called the HEK Series. Delivered with factory tested Inverters, MV Pad-mounted transformer and auxiliary equipment, skid mounted solutions reduce installation and commissioning time and cost.

The HEC-US family of inverters are supported worldwide by 4 state of the art fully integrated manufacturing facilities. Three in Valencia, Spain and one in Phoenix, Arizona.

Power Electronics supports the North American market with offices in Arizona, California, Massachusetts, Texas and Florida with service teams on the East and West coast.



· 3GW Solar Inverter Installed  
· 3GW/year capacity



+40 countries | International Presence



· 10GW Industrial Drives Installed  
· 10GW / year capacity

**+25**  
years  
of product diversification  
and longevity



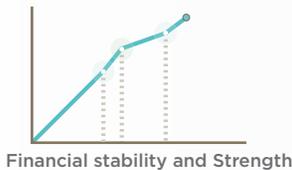
**+10**  
years

proven electronics with  
outstanding results

## BANKABILITY



Product and Factory independent  
Reports and Certifications



+1000 Employees  
all over the world



## VERTICAL INTEGRATION

Power Electronics is one of the world's leading vertically integrated manufacturers in Industrial and Solar power conversion. In-house design and manufacturing of product PCB and stainless steel enclosures ensures quality while our world class load test and climatic chamber facilities enable robust design verification testing.

ELECTRICAL  
COMPONENTS

POWER  
METAL WORKS

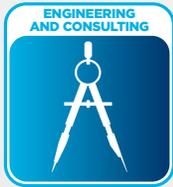
ELECTRONICS

ASSEMBLY

TESTING



## POWER ON SUPPORT 24/7



**ENGINEERING SUPPORT** Pre-sales support to EPCs, developers, operators and investors, because our success is based on your satisfaction. Power Electronics customizes our products to comply with your stringent requirements, thanks to the vertical integration of our production line and our dedicated engineering department. Power Electronics supports you during the document submittal and factory acceptance test protocols. Power Electronics provides support in order to meet all milestones through to completion date of the project.



**COMPREHENSIVE 5 YEAR FACTORY WARRANTY** Power Electronics offers a 60 month factory warranty with response timeframe of 24-48 hours for repair or replacement of defective parts following notification from customer. The factory warranty covers Power Electronics costs for labor and materials to reestablish trouble free operation.



**24/7 REMOTE MONITORING & CUSTOMER SUPPORT** Power Electronics offers real time remote monitoring and customer support. Engineers from our HQ analyze data to alert you of inverter underperformance or possible premature failure during your warranty period to assist you in obtaining the maximum yield of your asset.



**24/48 HOURS ON-SITE TECHNICAL SERVICE** Power Electronics offers on-site technical service within 24/48 hours of customer notification. These services are provided by qualified Power Electronics trained technicians to reestablish trouble free operation during warranty periods.



**MAINTENANCE CONTRACT** To extend the end of life of the inverter, Power Electronics offers a maintenance plan that includes component replacement, cleaning, firmware updates and complete inverter inspection. Maintenance agreements are customized to customer and site condition requirements.



**SPARE PARTS WARRANTY** Power Electronics offers floating and updated spare parts stock. The scope of spare parts warranty includes a full package of equipment, ex works conditions and a shipping time depending on location. Labor cost are not included if the warranty of the equipment is expired.



**99% INVERTER AVAILABILITY** Power Electronics offers 99% inverter availability. Our unique inverter topology, manufacturing quality controls and outstanding on-site repair service make it possible. HEC-US topology is constructed with independent modules, each module is self-contained with its own control board, an independent power platform and its own cooling system coupled together to common DC and AC buses. All units work in parallel commanded by the master, therefore a fault that affects one module does not shut down the entire system. Further, individual modules have additional power capacity that continue to provide power with losing kilowatt-hours.

# HEC-US topology

## • STAINLESS STEEL ENCLOSURE

Inox construction with 2mm thickness for maximum enclosure longevity.

## • SPECIAL PAINT

Anti-corrosive polymeric paint (C3) ISO-9223 is used on all HEC-US inverters.

## • INSULATION

50mm of insulation material protects internal components from external solar heat gains.

## • NO CONDENSATION

The Active cabinet heating regulates temperature and prevents internal water condensation.

## • DOUBLE GASKETED DOORS

NEMA4 rated electronic area, protected from dust and moisture.



## NEC2011 Recombiner

- Up to 32 fuse protected input pairs.
- Zone monitoring. CT's in each input.
- Up to 4 load break disconnect.

## NEC2014 Recombiner

- Up to 40 fused inputs.
- Zone monitoring. CT's in each input.
- Up to 40 contactors with lockout/tagout safety features.

## • MIRROR UNITS

Shift AC and DC modules to improve skid integration.

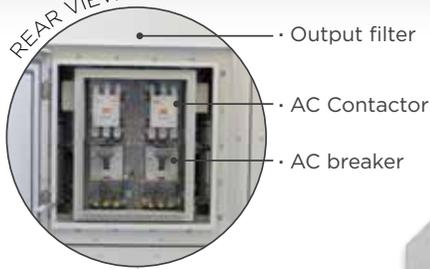


REAR VIEW

**REVOLUTIONARY COOLING CONCEPT**

**DC FUSE AND CONTACTOR**

REAR VIEW



**• REVERSING AIR VENTS**

Roof cover design dissipates solar radiation, reduces heat build-up and prevents water intrusion. It is available with front or back exhaust air vents for flexibility in skid integration.



AUX. POWER TRANSFORMER

MAIN AC CIRCUIT BREAKER

POWER BLOCK

AC CONNECTIONS

REAR VIEW



**• TESTS**

Random units are batch tested at the Factory for NEMA3R compliance.

**• CONFORMAL COATING**

Conformal coating on electronic board shields PCBs from harsh environments.

**User control area**

- NEMA4 protection
- 1kVA for aux. power
- NEC2011 and NEC2014 compliance ground fault protection

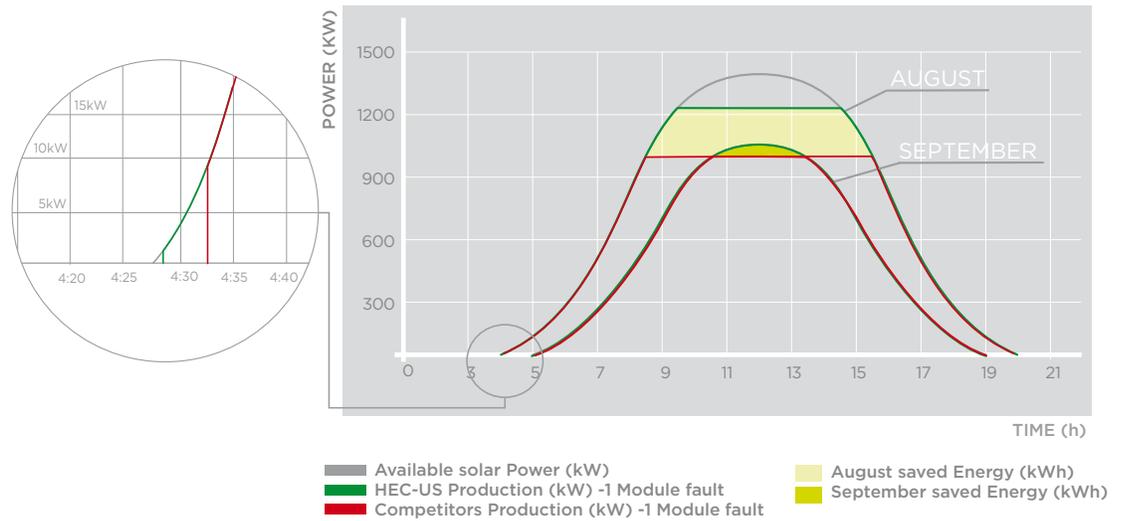


# AUTOMATIC REDUNDANT MODULAR MASTER SLAVE SYSTEM

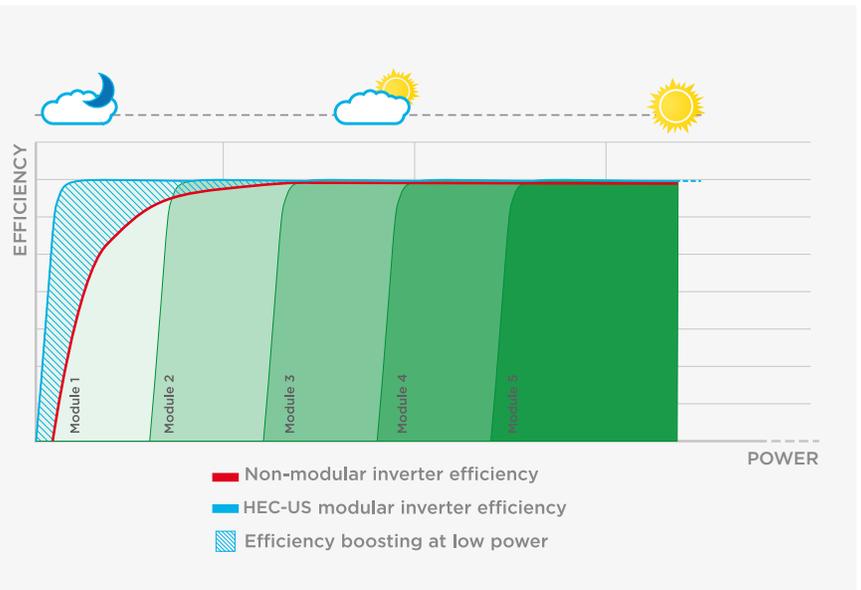
HEC-US topology combines the advantages of a central inverter with the availability of string inverters. HEC-US inverters are designed using 80 to 160 KVA independent modules. Each module is self-contained with its own control board, an independent power platform and its own cooling system, coupled together to common DC and AC buses. Each day, the HEC-US inverter wakes up with a single module power on-line. As the available PV power increases more modules are added to maintain peak inverter efficiency.

If there is a fault in one module, the faulted module is taken off-line and the output power is distributed evenly among the remaining system modules.

All power modules work in parallel controlled by the master module. This master is the main governor of the system and is responsible for the MPPT tracking, synchronization sequence and overall protection. The automatic mode shifts the master module every night by comparing the register of energy production of all the modules in the system. The module with the least energy produced (kWh) will act as the master on the following day.



A modular inverter is more efficient than a central inverter. During low radiation conditions, a modular architecture uses the correct number of power modules to provide power while the central inverter must consume power internally to support the entire system. With lower losses, a modular inverter can begin to provide power earlier in the morning and stop later at the end of the day. As a result, throughout the entire service life of the PV plant, the HEC-US inverter generates higher yields than a central inverter with a higher reliability than string inverters.

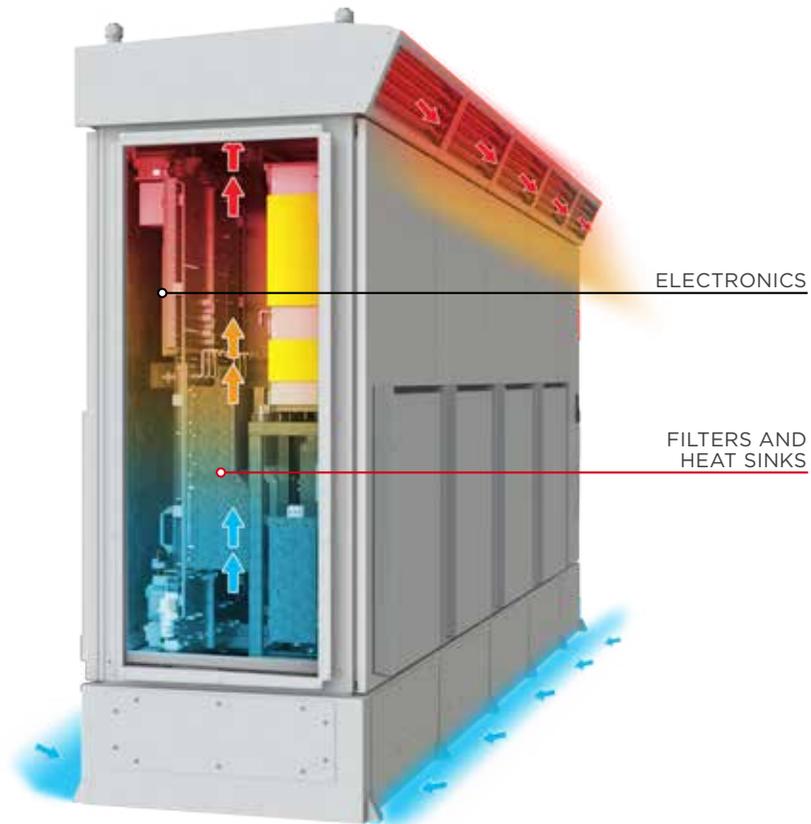




## REVOLUTIONARY COOLING SYSTEM

The design philosophy for the HEC-US inverters is to oversize sensitive components (like IGBTs & DC bus capacitors) and provide sufficient margin so the HEC-US can operate at 122F (50°C) with no power derating. Power-Electronics equipment is installed in mines, water treatment plants and concentrated solar power facilities in the most demanding locations in the world. Our expertise in harsh environments is the foundation for the perfect technical solution for our outdoor solar inverters.

The cooling systems on the HEC-US modules are divided into two main areas: the clean area (electronics) and the hot area (LC filters and heat sinks). The electronics are sealed in a NEMA 4 area and use a temperature control low flow cooling system that reduces filter maintenance. The hot area integrates independent speed controlled fans per each module that reduce stand-by consumption at low capacity, minimize audible noise and increase cooling capacity for PV installations located in hot environments or high altitudes.



AVAILABLE WITH  
FRONT OR BACK  
EXHAUST AIR VENTS  
FOR FLEXIBILITY IN  
SKID INTEGRATION



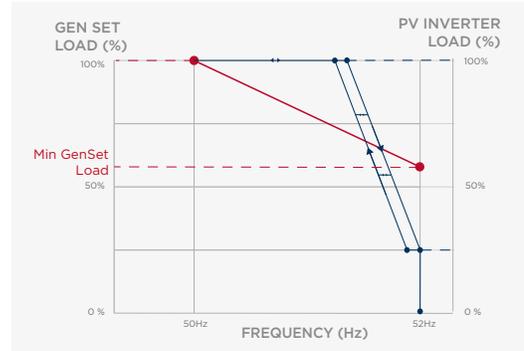
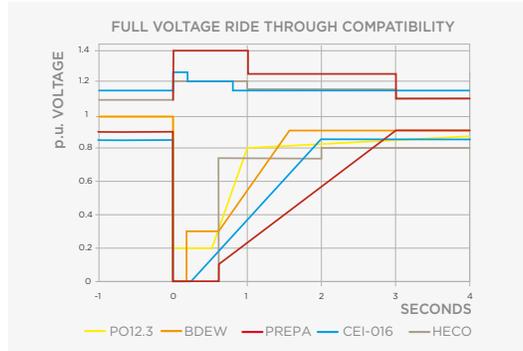
## VAR AT NIGHT

At night, the HEC-US inverter can shift to reactive power compensation mode. The inverter can respond to an external dynamic signal, a Power Plant Controller command or pre-set reactive power level (kVar).



## DYNAMIC GRID SUPPORT

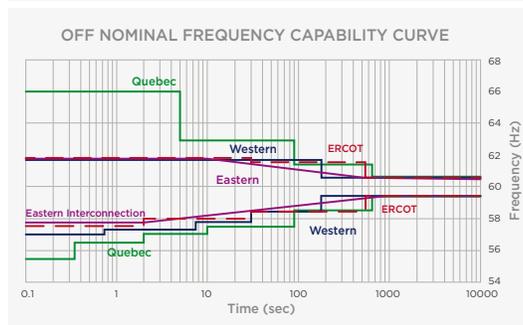
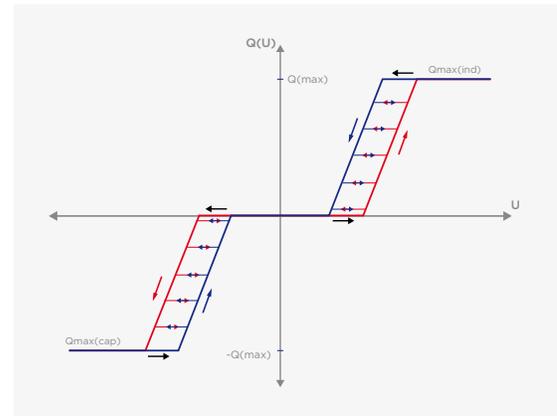
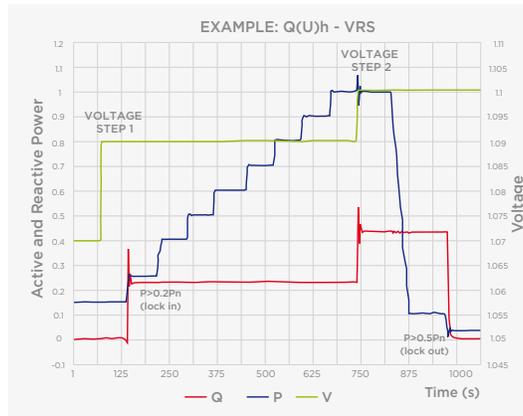
HEC-US firmware includes the latest utility interactive features (LVRT, OVRT, FRS, FRT, Anti-islanding, active and reactive power curtailment...), and is compatible with all the specific requirements of the utilities.



▲ **LVRT or ZVRT (Low Voltage Ride Through).** Inverters can withstand any voltage dip or profile required by the local utility. The inverter can immediately feed the fault with full reactive power, as long as the protection limits are not exceeded.

▲ **FRS: Frequency Regulation System.** Frequency droop algorithm curtails the active power along a preset characteristic curve supporting grid stabilization.

The advanced control allows the inverter to support the grid through reactive power injection or phase shift control by programming a wide range of fixed or dynamic power functions based on voltage and frequency inputs.



◀ **Frequency Ride Through:** Power Electronics inverters have flexible frequency protection settings and can be easily adjusted to comply with future requirements.

The HEC-US inverter has a unique anti-islanding protection that combines passive and active methods that eliminate nuisance tripping and reduce grid distortion. The inverter is certified to IEC 62116 and IEEE1547.



Power Electronics offers a **POWER PLANT CONTROLLER** that will allow both the PV plant operator and the utility to perform active and reactive power curtailment, voltage regulation and frequency regulation based on feedback from a power meter at the point of interconnection.

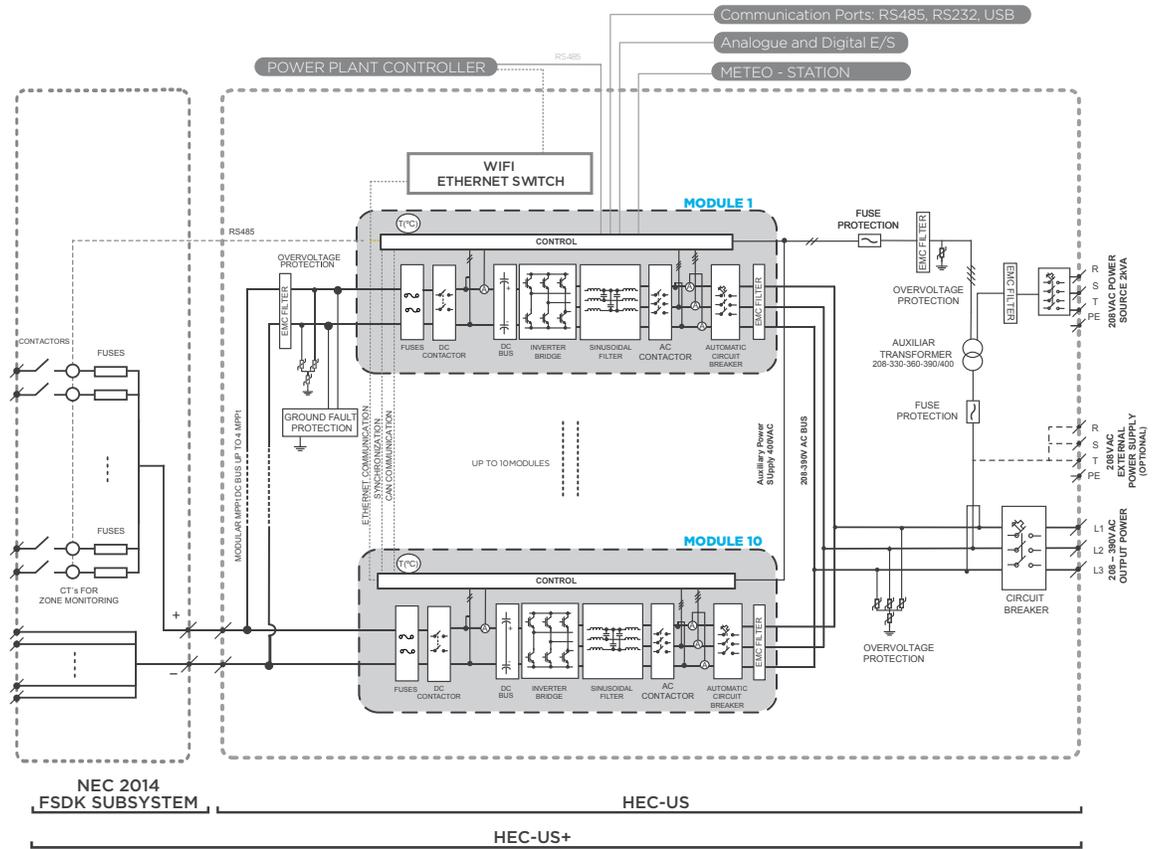
		390VAC						
		FRAME 1	FRAME 2	FRAME 3	FRAME 4	FRAME 4	FRAME 4	
<b>NUMBER OF MODULES</b>		4	5	6	7	8	9	10
<b>MODEL NUMBER</b>		FS0600CU	FS0751CU	FS0900CU	FS1050CU	FS1250CU	FS1350CU <sup>[4]</sup>	FS1500CU <sup>[5]</sup>
<b>OUTPUT</b>	Maximum Power (kW/kVA) @PF=1; 50°C	680	850	1020	1190	1360	1530	1700
	Maximum Power (kW) @PF=0.9; 50°C	600	750	900	1050	1250	1350	1500
	Max. Output Current(A)	1007	1259	1510	1762	2014	2268	2520
	Operating Grid Voltage(VAC)	390Vac ±10%						
	Operating Range, Grid Frequency	60Hz (59.3Hz - 60.5Hz)						
<b>INPUT</b>	Power Factor <sup>[1]</sup>	0.9 leading... 0.9 lagging						
	Current Harmonic Distortion (THDi)	< 3% at nominal power						
	MPPt Window	552V - 900V						
	Maximum DC voltage	1000V						
	Rated DC current	1200A	1500A	1800A	2100A	2400A	2700A	3000A
<b>EFFICIENCY &amp; AUX. SUPPLY</b>	Maximum short circuit DC current	1560A	1950A	2340	2730A	3120A	3510A	3900A
	Max. Efficiency / CEC (η)	98.6% / 98.0%						
	Max. Standby Consumption (Pnight)	< approx. 40W/per module						
	Aux. Power Supply (208VAC)	1000VA						
	Maximum Power Consumption (W)	1840W	2300W	2760W	3220W	3680W	4140W	4600W
<b>ENVIRONMENT</b>	Degree of protection	NEMA 3R						
	Cooling system	Forced air intake through bottom and exhausted through upper exhaust hood						
	Permissible Ambient Temperature <sup>[2]</sup>	-22°F to +122°F / -30°C ...+50°C ; >50°C/ 122°F power derating						
	Relative Humidity	4% to 100%, Active heating and humidity control						
	Max. Altitude (above sea level) <sup>[2]</sup>	4000m; >1000m power derating 1% Sn (kVA) per 100m						
<b>CONTROL INTERFACE</b>	Interface	Alphanumeric display, ON-OFF Selector, ON/OFF pushbutton (Optional)						
	Communication	RS232 / RS485 / USB / Ethernet, (Modbus RTU Protocol, Modbus TCP/IP)						
	Analogue Inputs	1 programmable and differential inputs; (0-20mA or ± 10mV to ± 10V) and PT100						
	Digital Outputs	1 electrically-isolated programmable switched relays (250VAC, 8A or 30 VDC, 8A)						
<b>PROTECTIONS</b>	Ground Fault Protection	Floating PV array: Isolation Monitoring per MPP NEC2011 Grounded PV array: GFDI protection NEC2014 Grounded PV array: GFDI protection and isolation monitoring (requires 1 Digital Output)						
	NEC2011 Recombiner <sup>[3]</sup>	Max. 4x700A switches. Max. 32 inputs (70-200A fuse). Max. 28 (400A fuse)						
	NEC2014 Recombiner <sup>[3]</sup>	Max. 3x1250A switches. Max. 24 inputs (70-200A fuse). Max. 21 inputs (400A fuse)						
	Overvoltage Protection	Max. 40 inputs (70-400A fuse)						
		DC and AC Inverter sides (Type 4) and Auxiliary Supply type 2 - Internal Standard						
<b>CERTIFICATIONS</b>	Safety	UL 1741; CSA 22.2 No.1071-01						
	Utility Interconnect	IEEE 1547						

		360VAC						
		FRAME 2	FRAME 3	FRAME 3	FRAME 4	FRAME 4	FRAME 4	
<b>NUMBER OF MODULES</b>		5	6	6	7	8	9	10
<b>MODEL NUMBER</b>		FS0701CU	FS0752CU	FS0830CU	FS1003CU	FS1110CU	FS1251CU <sup>[4]</sup>	FS1400CU <sup>[5]</sup>
<b>OUTPUT</b>	Maximum Power (kW/kVA) @PF=1; 50°C	780	930	930	1100	1250	1400	1550
	Maximum Power (kW) @PF=0.9; 50°C	700	750	830	1000	1110	1250	1400
	Max. Output Current(A)	1251	1492	1492	1765	1989	2246	2486
	Operating Grid Voltage(VAC)	360Vac ±10%						
	Operating Range, Grid Frequency	60Hz (59.3Hz - 60.5Hz)						
<b>INPUT</b>	Power Factor <sup>[1]</sup>	0.9 leading... 0.9 lagging						
	Current Harmonic Distortion (THDi)	< 3% at nominal power						
	MPPt Window	510V - 900V						
	Maximum permissible DC voltage	1000V						
	Rated DC current	1500A	1800A	1800A	2100A	2400A	2700A	3000A
<b>EFFICIENCY &amp; AUX. SUPPLY</b>	Maximum short circuit DC current	1950A	2340	2340	2730A	3120A	3510A	3900A
	Max. Efficiency / CEC (η)	98.6% / 98.0%						
	Max. Standby Consumption (Pnight)	< approx. 40W/per module						
	Aux. Power Supply (208VAC)	1000VA						
	Maximum Power Consumption (W)	2300W	2760W	2760W	3220W	3680W	4140W	4600W

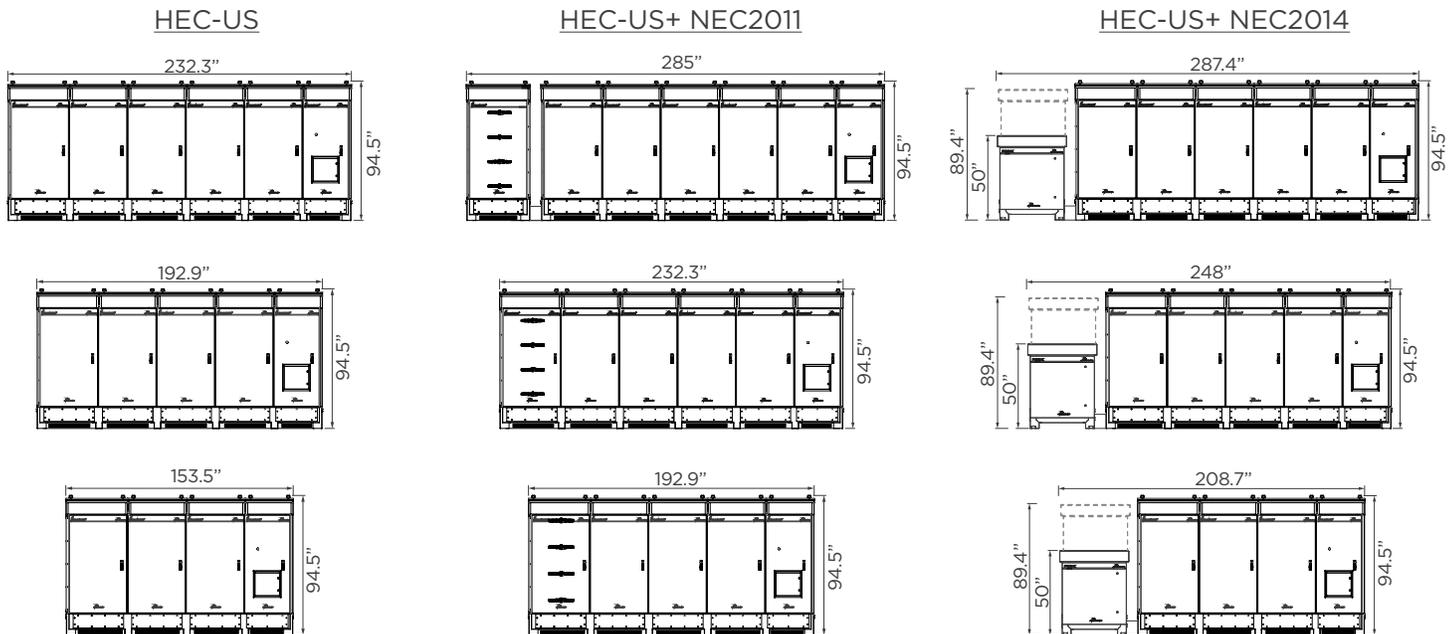
NOTES [1] Power factor adjustable from pure leading to pure lagging.  
[2] Below -20°C equipped with extended Active Heating + Heating Resistor.  
Other characteristics consult with Power Electronics.

[3] Check maximum shortcircuit DC current of the inverter to assure full recombinder compatibility.  
[4] FS1251CU is listed as FS1401CU on CEC site.  
[5] FS1400CU is listed as FS1550CU on CEC site.

# OPERATIONAL DIAGRAM



# DIMENSIONS

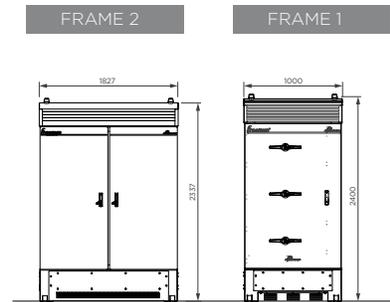


NOTE: Depth of all units is 40.12". Please consult hardware and installation manual for additional information on dimensions and weights.

## FSDU NEC2011 CONFIGURATION TABLE

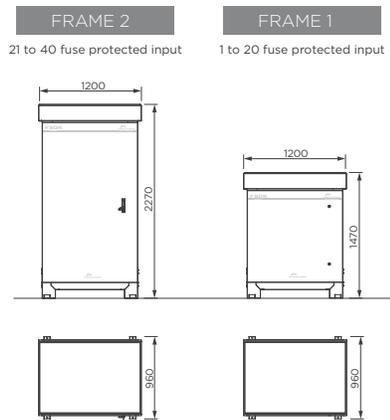
FSDU	1		31		5		L1		N		-		1		I				
PRODUCT FAMILY	# DC DISCONNECTS <sup>[1]</sup>		DISCONNECTS SIZE		# FUSES PER DISCONNECTOR <sup>[2]</sup>		FUSE FRAME SIZE		STRING CONFIGURATION		STRING MONITORING		# MPPT <sup>[3]</sup>		TYPE <sup>[4]</sup>				
	1	1 Disc.	25	250A	1	1 Fuse	L1	70A, 80A, 90A, 100A	US	F	Floating Array Positive Pole protected	-	No Monitoring	1	1 MPPT	E	External		
	2	2 Disc.	40	400A	2	2 Fuses	L2	125A, 160A, 200A		D	Floating Array Positive and Negative Poles protected	M	Zone current Monitoring	2	2 MPPT	I	Internal		
	3	3 Disc.	70	700A	...	...	L3	250A, 300A, 350A, 400A		P	Positive Pole grounded			3	3 MPPT				
	4	4 Disc.	12	1250A	9	9 Fuses	B1 <sup>[3]</sup>	32A, 40A, 50A, 63A, 80A, 100A, 125A, 160A, 200A		N	Negative Pole grounded			4	4 MPPT				
					0	10 Fuses	B2 <sup>[3]</sup>	250A	IEC										
							B3 <sup>[3]</sup>	315A, 350A, 355A, 400A											
							E1	32A, 40A, 50A, 63A, 80A, 100A, 125A, 160A											
							E2	200A, 250A, 315A, 350A, 400A											
							D1	25A, 32A, 40A, 50A, 63A, 80A, 100A, 125A, 160A											
							D3	200A, 250A, 315A											

NOTES  
 [1] Maximum 3 units for 1250A disconnects.  
 [2] Maximum 5 fuses per pole for floating array PV plant configurations.  
 [3] Consult availability.  
 [4] External in HEC-US or internal in HEC-US+.



## FSDK NEC2014 CONFIGURATION TABLE

FSDK	20		L3		-		N		-		1		E			
PRODUCT FAMILY	# INPUTS PER POLE <sup>[1]</sup>		FUSE FRAME SIZE		INDEPENDENT STRING LOCKOUT AND TAGOUT		STRING CONFIGURATION		ZONE MONITORING		# MPPT <sup>[2]</sup>		TYPE			
	01	1 Inputs	L1	70A, 80A, 90A, 100A	-	NO	F	Floating Array Positive Pole protected	-	No Monitoring	1	1 MPPT	E	External UL		
	02	2 Inputs	L2	125A, 160A, 200A	1	1 ON/OFF selector per input	D	Floating Array Positive and Negative Poles protected	M	Zone current Monitoring	2	2 MPPT	X	External IEC		
	...	...	L3	250A, 300A, 350A, 400A	..	...	P	Positive Pole grounded			3	3 MPPT				
	32	32 Inputs (Max IEC)	B1 <sup>[2]</sup>	63A, 80A, 100A, 125A, 160A	40	1 ON/OFF selector per 40 inputs	N	Negative Pole grounded			4	4 MPPT				
	...	...	B2 <sup>[2]</sup>	160A, 200A, 250A, 315A, 355A							5	5 MPPT				
	40	40 Inputs (Max UL)	B3 <sup>[2]</sup>	350A, 400A												
			E1	32A, 40A, 50A, 63A, 80A, 100A, 125A, 160A	US											
			E2	200A, 250A, 315A, 350A, 400A		IEC										
			D1	25A, 32A, 40A, 50A, 63A, 80A, 100A, 125A, 160A												
			D3	200A, 250A, 315A												



NOTES  
 [1] Not all combinations available, consult Power Electronics.  
 [2] Consult availability.

# HEC-US1500V

UTILITY SCALE SOLAR INVERTER



HEC 1500V PLATFORM  
PROVIDES CUTTING  
EDGE TECHNOLOGY AND  
EIGHT YEARS OF PROVEN  
HARDWARE



## HEC-US 1500V

HEC 1500V by Power Electronics is the most flexible and reliable 1500V utility scale solar inverter. Ranging from 1MW to 3MW, the industry leading outdoor, modular and redundant inverter generates higher yields and provides outstanding up time.

For over eight years, the Power Electronics Industrial Division has manufactured and installed 1,700 Vdc power converters in the most demanding conditions. Customers include market leaders in the mining, oil & gas and water industries. To build a 1,500 Vdc PV inverter, the same proven 1,700 Vdc technology is incorporated into the HEC solar inverter platform. The result is a 1,500 Vdc inverter to meet the next generation solar designs with the proven outdoor durability of stainless steel construction and best-in-class cooling at 50°C without derating.

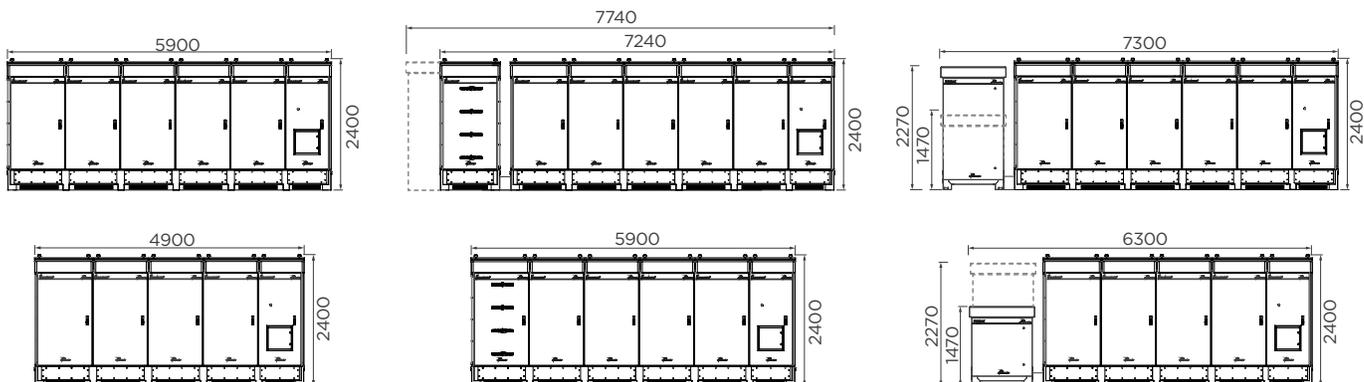
The HEC 1500V is offered with the optional PV array transfer kit and the Smart FSDK DC recombinder. The FSDK is a NEC2014 compliant recombinder featuring up to 40 fused inputs, individual contactors and current monitoring to detect and isolate damaged strings.

# TECHNICAL CHARACTERISTICS

		565VAC		600VAC		645VAC		690VAC	
		FR4	FR2	FR3	FR4	FR3	FR4	FR3	FR4
<b>NUMBER OF MODULES</b>		10	5	8	10	7	10	7	10
<b>REFERENCE</b>		FSI880CH15	FSI000CH15	FSI600CH15	FS2000CH15	FSI500CH15	FS2150CH15	FSI600CH15	FS2300CH15
<b>OUTPUT</b>	AC Output Power(kW) @50°C; PF=0.9	1880	1000	1600	2000	1500	2150	1600	2300
	AC Output Power(kVA/kW) @50°C; PF=1	2090	1110	1780	2220	1670	2380	1790	2550
	AC Output Power(kVA/kW) @25°C; PF=1	2510	1330	2130	2660	2000	2860	2140	3060
	Max. AC Output Current (A) @25°C	2560	1280	2050	2560	1790	2560	1790	2560
	Operating Grid Voltage(VAC) (±10%)	565Vac	600Vac			645Vac		690Vac	
	Operating Range, Grid Frequency	50Hz / 60Hz							
	Current Harmonic Distortion (THDi)	< 3% per IEEE519							
Power Factor (cosine phi) <sup>[1]</sup>	0.9 leading ... 0.1 lagging / Reactive Power injection at night								
Power Curtailment (kVA)	0...100% / 0.1% Steps								
<b>INPUT</b>	Minimum MPPT voltage <sup>[2]</sup>	800V	849V			913V		976V	
	MPPT @full power 50°C (VDC) <sup>[2]</sup>	821V-1250V	872V - 1250V			935V - 1250V		1001V - 1250V	
	Maximum DC Continuous voltage	1500V							
	Max. DC Current (A) @50°C	2600	1300	2080	2600	1820	2600	1820	2600
	Max. DC shortcircuit current (A)	3380	1690	2704	3380	2366	3380	2366	3380
<b>EFFICIENCY &amp; AUX. SUPPLY</b>	Efficiency (η)	98.4% (Maximum) / 98.1% (Euroeta) / 98.2% (CEC)							
	Max. Standby Consumption (Pnight)	< approx. 40W/per module							
	Control Power Supply	1kVA Standard - Optional 5kVA							
<b>ENVIRONMENT</b>	Degree of protection	IP54, NEMA 3R							
	Permissible Ambient Temperature	-30°C <sup>[3]</sup> to +50°C, >50°C Active Power derating							
	Relative Humidity	4% to 100% Condensing							
	Max. Altitude (above sea level)	4000m; >1000m power derating 1% Sn (kVA) per 100m							
	Noise level <sup>[4]</sup>	< 70 dBA							
<b>CONTROL INTERFACE</b>	Interface	Alphanumeric Display / Optional Freesun App display or Web display							
	Communication	RS232 / RS485 / USB / Ethernet, (Modbus RTU Protocol, Modbus TCP/IP)							
	Analogue Inputs	1 programmable and differential inputs; (0-20mA or ± 10mV to ± 10V) and PT100							
	Plant Controller Communication	Ethernet / Modbus TCP/IP							
	Digital Outputs	1 electrically-isolated programmable switched relays (250VAC, 8A or 30VDC, 8A)							
<b>PROTECTIONS</b>	Ground Fault Protection	Floating PV array: Isolation Monitoring per MPP Grounded PV array (Positive pole or negative pole): GFDI protection PV Array Transfer kit: GFDI and Isolation monitoring Device (requires 1 Digital output)							
	Humidity control	Active Heating							
	ON / OFF Pushbutton	Standard							
	General AC Protection & Disconn.	Circuit Breaker							
	General DC Protection & Disconn.	Optional External Disconnecting Unit Cabinet (FSDU or FSDK)							
	Overvoltage Protection	AC, DC Inverter and auxiliary supply type 2 - Internal Standard							

NOTES [1] Consult P-Q charts available:  $Q(kVar)=\sqrt{(S(kVA))^2-P(kW)^2}$   
 [2] Values at 1.00\*Vac nom and cos Φ= 1. Consult Power Electronics for derating curves.  
 [3] Below -20°C equipped with extended Active Heating + Heating Resistor.  
 [4] Sound pressure level at a distance of 1m from the rear part.

## DIMENSIONS



NOTES \*Depth of all units is 1020mm. Please consult hardware and installation manual for additional information on dimensions and weights.



### USA HEADQUARTERS

#### ARIZONA

**Power Electronics USA Inc. • 4777 N 44<sup>th</sup> Ave, Phoenix Arizona, 85031 • USA**  
**Tel. 602-354-4890 • Email: sales@power-electronics.us**

### LOCAL CONTACT USA

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### GLOBAL HEADQUARTERS

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# ASM-7-HV-AAA (AAA=335-350)

## Lower LCOE, Higher IRR

Mono CRYSTALLINE SILICON SOLAR PV MODULES | 72 CELLS | 335-350 WATT



### Best Module for large Utility scale installations

- Designed with PERC cell structure
- 25 Wp higher than standard polycrystalline modules.
- Lesser area per MW scale compared to standard polycrystalline modules. More Power/m<sup>2</sup>
- Designed for IEC & UL DC **1500 V** applications.
- **30 % Increased String Length**, saving BOS by 6 % leading to lower LCOE\*.
- Saves Installation cost by 5 %, Transport cost by 6 %



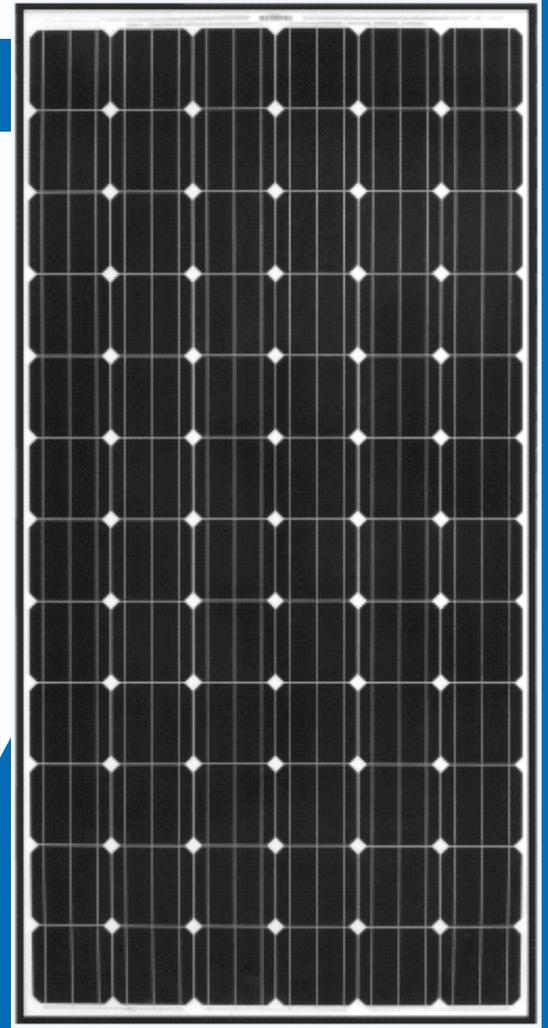
### Higher Energy generating module (kWh/kWp)

- One of Industry **Lowest Temperature Coefficient PV Modules**.
- Superior performance at **NOCT** enabling superior specific energy Yield (kWh/kWp) in the industry.
- Excellent Low Light Intensity performance.
- Performance at longer wavelength (> 1100 nm)
- Positive power tolerance makes it for a guaranteed output for 25 years.

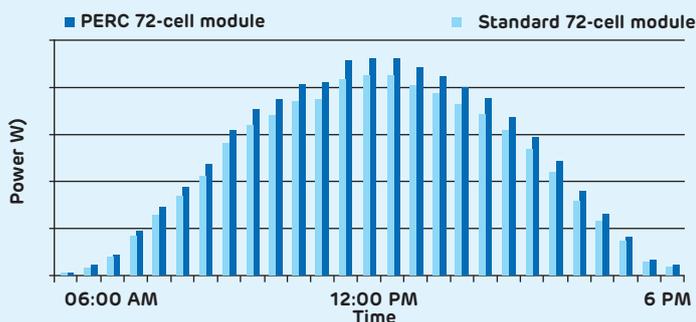


### Highly Reliable module with Superior quality control

- **Triple EL** Inspection stages.
- **PID Resistant**.
- Resistance to Salt Mist , Ammonia, Sand & Dust Abrasion.



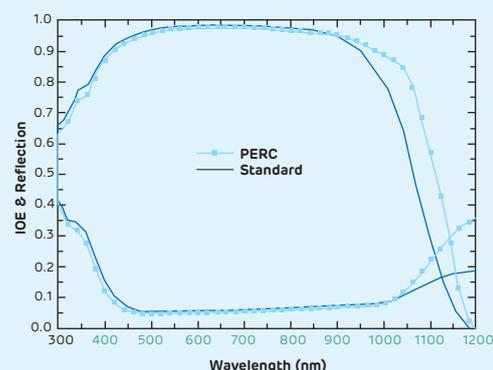
## Higher Generation due to PERC Technology



## Rigorous Quality Controls

- Rigorous quality control meeting the highest international standards: ISO 9001: 2015, ISO 14001: 2015 and ISO17025: 2005

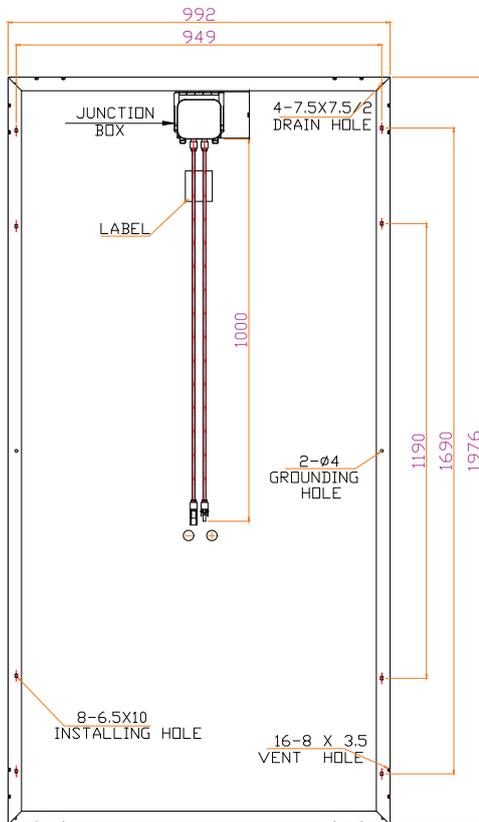
PERC Technology enables better light capturing abilities at longer wavelength, weak & diffused light and at cloudy conditions.



\*In comparison with the Standard Poly Crystalline 72 cell PV module.

# TECHNICAL DATA

## Dimensions in mm



## Electrical Data – All data refers to STC (AM 1.5, 1000 W/m<sup>2</sup>, 25°C)

Peak Power, (0 ~+ 4.99 Wp) P <sub>max</sub> (Wp)	335	340	345	350
Maximum Voltage, V <sub>mpp</sub> (V)	37.96	38.19	38.40	38.59
Maximum Current, I <sub>mpp</sub> (A)	8.84	8.92	9.00	9.08
Open Circuit Voltage, V <sub>oc</sub> (V)	46.69	46.88	47.08	47.26
Short Circuit Current, I <sub>sc</sub> (A)	9.39	9.48	9.56	9.68
Module Efficiency (%)	17.09	17.34	17.60	17.85

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5% at 200 W/m<sup>2</sup> according to EN 60904-1.

## Electrical Parameters at NOCT

Power(Wp) at NOCT	244.94	248.6	253.22	256.1
V@P <sub>max</sub> (V) at NOCT	34.79	35.08	35.33	35.61
I@P <sub>max</sub> (A) at NOCT	7.04	7.09	7.17	7.19
V <sub>oc</sub> (V) at NOCT	42.98	43.19	43.4	43.64
I <sub>sc</sub> (A) at NOCT	7.64	7.71	7.76	7.84

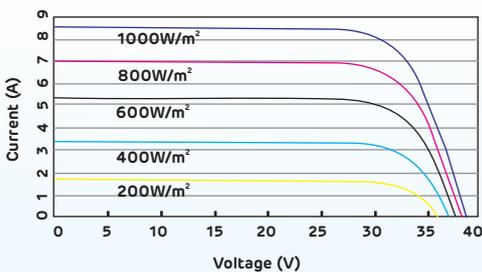
\*NOCT irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/sec

## Temperature Coefficients (T<sub>c</sub>) and permissible operating conditions

T <sub>c</sub> of Open Circuit Voltage (β)	- 0.31 % /°C
T <sub>c</sub> of Short Circuit Current (α)	0.069 % /°C
T <sub>c</sub> of Power (γ)	- 0.40 % /°C
Maximum System Voltage	1500 V (IEC & UL)
NOCT	44°C ± 2°C
Temperature Range	- 40°C to + 85°C

## IV Curves

Current-Voltage Curve



## Mechanical Data

Length	1976 mm
Width	992 mm
Height	35 mm & 40 mm
Weight	22 Kg (35 mm) & 27 Kg (40mm)
Junction Box	IP67
Cable & Connectors	1000 mm length cable, MC4 & Amphenol Connectors
Application Class	CLASS A (Safety Class II)
Superstrate	HIGH Transmittance ARC Glass
Cells	72 Monocrystalline solar cells ; 4 bus bars, 156.75 mm x 156.75 mm
Encapsulation	Low Shrinkage PID Resistant EVA
Substrate	Back sheet
Frame	Anodized aluminum frame with twin wall profile
Mechanical load Test as per IEC & UL	5400 Pa-Front ; 2400 Pa-Back
Maximum Series Fuse Rating	15 A

## Packing Information

Container	20'GP	40'HC
Pieces/ Container	250	600

## Warranty and Certifications

Product Warranty**	25 Years Linear Power Warranty
Performance Guarantee**	Power Degradation < - 2.5 % in First year < - 0.68 % / year in 2-25 year
Approvals and Certificates*	IEC 61215 Ed2, IEC 61730, IEC 61701, UL 1703, MCS, JET, CEC, CEC-Aus, IEC 62716, IEC 62759, IEC 62804

\*CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT

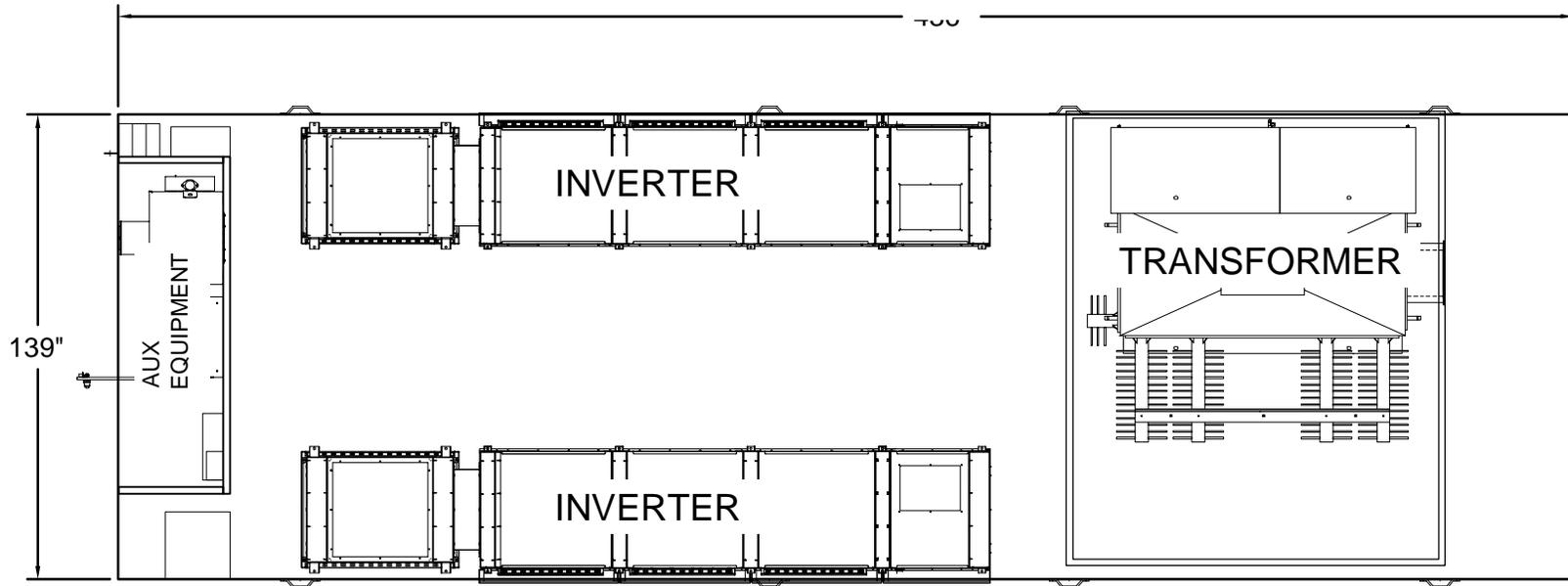
### NOTE:

- The specification included in this datasheet are subject to change without notice.
- The Electrical Data given here are for reference only.
- Please confirm your exact requirements with the Sales Representative while placing your order

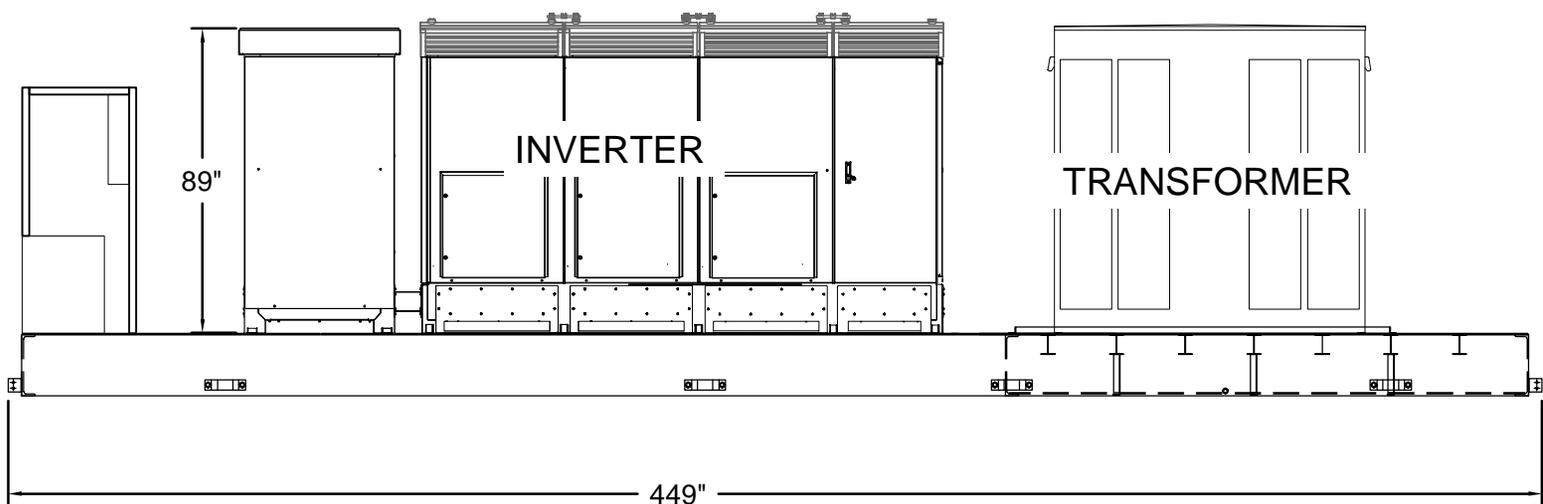
\*All Certifications under progress. \*\* Warranty :- Please read Adani Solar Warranty Documents thoroughly

\*This is a preliminary datasheet and is subjected to change as per manufacturer & Certifying body's results.





PLAN VIEW



ELEVATION

**INVERTER SKID PLAN AND PROFILE**

## **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 16-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 undetermined at this time. 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 7.5 foot high 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 undetermined at this time. 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.

## **23 kV Interconnection Line**

The overhead interconnection cabling that runs north 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 re-developed for another future purpose, whichever comes first.