

PETITION OF WINDHAM SOLAR LLC

ABINGTON SOLAR FACILITIES

**FOR A DECLARATORY RULING FOR THE CONSTRUCTION
AND OPERATION OF ONE (1) 1.0 MEGAWATT AND ONE (1) 0.99 MEGAWATT
SOLAR PHOTOVOLTAIC RENEWABLE ENERGY GENERATING
FACILITIES LOCATED AT 481 MASHAMOQUET ROAD, POMFRET, CT**

SEPTEMBER 21, 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 one (1) 1.0 megawatt and one (1) 0.99 megawatt solar electric generating facilities (the “Facilities”), located on rural residential-zoned land at 481 Mashamoquet Road in the Town of Pomfret, 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.”¹ 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.²

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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¹ See, 2013 Comprehensive Energy Strategy for Connecticut, p. 70, available at http://www.ct.gov/deep/lib/deep/energy/cep/2013_ces_final.pdf

² *Id.* at p. 71.

III. DESCRIPTION OF PROPOSED PROJECT

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 project will therefore help moderate peak load requirements and reduce the demand on transmission lines.

A. Site Selection

The Site was selected based upon several factors including:

1. Site Suitability (solar resource, soil, and topographic characteristics that allow for efficient facility design and construction), and
2. Site Resources (lack of sensitive natural resources onsite—the Site contains no rare, protected, or sensitive natural resources that would be adversely impacted by the Facilities’ footprint.), and
3. Proximity to electrical infrastructure and roadways—the Site has direct public road access and is directly adjacent to an Eversource electric distribution line.

4. Available for Sale – The site was listed for sale through a licensed Connecticut real estate broker.

B. Site Description

The Site is located on Mashamoquet Road, Pomfret, CT. The Site is comprised of 8.9 acres that is zoned rural residential and is currently vacant with no structures. The Site is partially wooded and Petitioner has sited the project to occupy as much of the currently open land as possible in order to minimize tree removal. The Site is currently being used as un-cleared vacant land, light agriculture, commercial and there are a small number of residences to the west and south of the Site across Mashamoquet Road. The Site's topography slopes west to east. The easterly portion of the site is lower and more heavily wooded and contains a stream and wetland that bisects a portion of the Site (please reference Exhibit "A"). Each solar facility will be located the westerly portion of the Site which contains higher ground. By siting the Facilities in this location, there will be no impacts to the wetlands or the stream and tree clearing will be minimized. Each solar facility averages a project envelope of 3.6 acres and a total project footprint of 7.9 acres as delineated by the projects fence limits. Exhibit A (Facilities Site Plan) illustrates the Facilities' layout on the Site.

The Facilities will be accessed from one ingress and egress point along Mashamoquet Road. Since the Site abuts the public road right of way, no easements or leases will be required to access the Facilities.

Approximately 3.0 acres of the Site have been delineated as wetlands on the far east side of the site approximately 800 feet from the facilities . Each of the Facilities will be connected by a single 14-foot wide gravel access roadway along the west side of the two Facilities. A vernal pool assessment was performed by John P. Ianni M.S., a Professional Soil Scientist of Highland

Soils LLC. No vernal pools were found on the site (see the Wetlands Report in Exhibit F) during Mr. Ianni's investigation, which occurred on April 11th, 2017.

Exhibit C (Cross Sections and Key Observation Point Plan) contains photographs of the Site taken from ground level, as well as a cross section of the sight lines from Mashamoquet Road, illustrating minimal visual impacts to the surrounding parcels.

C. Project Description

The two Facilities are renewable energy generation projects that will use PV solar modules to convert solar radiation to electricity. They will be located on the customer side of the Eversource meter. The 1 MW facility will consist of approximately 3,484 solar modules (based on a module rating of 345 watts) and the 0.99 MW facility will consist of approximately 3,466 solar modules. 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 landscape orientation, with four rows of modules per rack. The racking system will support the modules to maintain a ground clearance of approximately 36 inches. The racking system will be supported above the ground by a series of steel piles that are driven or screwed into the ground, requiring no concrete foundations. The length of pile 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 a 1,000 kilowatt (kW) and 990 kW centralized solar inverters. The inverters alter the DC output of the solar modules to 390V three-phase alternating current ("AC") output.

Output from each project inverter will feed into a step-up transformer to increase the collected 390V three-phase AC output to a 4.8 kV distribution circuit, which will be upgraded by

Eversource to accommodate the generation from the project. Each project output will be connected to a pad-mounted automated recloser, which will provide automated overcurrent protection for each Project 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 Eversource distribution circuit on Mashamoquet Road.

Each facility will contain a centralized equipment skid that will contain the inverters, transformer, 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 14-foot wide gravel driveway for operations, maintenance, and emergency access. Also, the entirety of the Site footprint will be surrounded by a 7.0-foot-tall chain-link security fence. Access to the Site will be via a padlocked gate in the perimeter fence. A series of infrared, 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 fescue and clover seed mix that offers low/slow growing groundcover vegetation that is drought-tolerant and native. Existing trees and natural vegetation will be maintained outside the projects clearing limits to shield it from view along the roadways and from neighboring properties. 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. Each Facility's footprint design and equipment locations can be seen in detail in all the plan sheets provided in Exhibit A.

D. Interconnection

Each Facility is proposed to be interconnected to the Eversource electric distribution grid at an existing 4.8 kV overhead electric line located along Mashamoquet Road, which will be upgraded by Eversource to accommodate the Facilities' generation output. 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 a System Impact Study ("SIS") for the projects. Eversource has confirmed that Facilities can be interconnected from the Site.

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

IV. PROJECT 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_x, SO_x, 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 the Project wherever practical. As part of larger state, national, and global strategies, reductions in greenhouse gas emissions from this Project 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. The project will also 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 Pomfret's Zoning Enforcement Officer, Ryan Brais, for comment on September 19th, 2017. The plans will be circulated internally amongst town departments for comments. The Initial conversation with the town was positive with no major issues. Comments, if received, from the Town of Pomfret review will be forwarded to the Siting Council.

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 to be compatible with the existing environment while avoiding, reducing, and mitigating potential environmental impacts. A response letter has been received from DEEP for the parcel associated with Natural Diversity Database Review. Provisions for the wood turtle have been implemented on the project plans, and training for construction staff will occur prior to project construction

A. Natural Environment and Ecological Balance.

The areas selected for the Facilities have not been identified to contain sensitive, rare, or protected natural resources. The area needed to construct the Facilities will be cleared of any tree/timber vegetation. These removals and provisions associated with site clearing are detailed on Sheets 4 and 5 of Exhibit A. Minimal grading will be required for each Facility, as the solar racking structure is designed to follow the existing topography and can be installed up to 15% slopes. The grading disturbance envelope for the project will be less than 4 acres for

construction of both Facilities, including off site construction. Grading will be performed to create the access roadways to the projects, smooth localized topography within the array field where slopes are greater than 15% and to construct sediment traps for stormwater provisions.

A Phase I Environmental Site Assessment (“ESA”) has also been performed on the parcel. The ESA did not recognize any environmental conditions that warranted additional investigation or action in the areas encompassed by the Facilities’ footprint. For details, 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 project 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 because 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 100,857 tons ³of CO₂ equivalent, which is equal to 21,323 vehicles off the road⁴

³ CO₂ off-set calculations were made using the US Environmental Protection Agency ("EPA") GHG Equivalencies Calculator: <https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references>

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

or 32,018 tons of avoided landfill waste⁵. The Facilities will have a net benefit effect on air quality.

D. Scenic Values and Visual Renderings

Once installed, the Facilities will be not be visible to neighboring property owners nor visible to drivers and passengers traveling on Mashomoquet Road. The solar equipment being installed has a low profile; less than 9 feet in height, except for a few taller poles for video cameras and meteorological equipment. The Facilities would be set far enough back from Mashamoquet Road on the south, as well as the north and west property boundaries so that a robust buffer of trees and natural vegetation can be maintained so that the Facilities will be completely screened from neighboring properties in the area. With respect to the landowner to the east, Petitioner plans to plant landscape screening to shield the view of the solar facility from east. No other perimeter screening will be necessary to screen the Facilities from neighboring properties since the existing trees and vegetation are thick enough to provide adequate screening. 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 a key observation point plan 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”), and received a response letter on April 27, 2017 (Exhibit H). After completing review of the proposed Facilities, “SHPO has determined that there will be no historic properties affected b the proposed ground-mount tilt array and associated

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

equipment/access”. Furthermore, SHPO concluded that “no historic properties will be affected by this undertaking”.

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)

The footprints for both facilities were designed to eliminate any impacts to delineated wetlands. No project racking will be installed within the 100-foot buffer around the wetlands and no clearing is being proposed in the buffer areas.

2) The Connecticut Department of Energy & Environmental Protection (“DEEP”) performed a review of the Natural Diversity Database (“NDDB”) for the proposed Facilities. In its response letter (NDDB Determination No. 201701803), DEEP states that they “do not anticipate negative impacts to State-listed species (RCSA Sec. 26-306) resulting from your proposed activity at the site based upon information contained within the NDDB”.

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 during construction. The sediment traps also provide

permeant Stormwater management, for post construction runoff. 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 0.36 acres of land for gravel access roads, the East solar facility, sediment traps and equipment pads. Specific Graded areas can be found on sheets 6 and 7 in Exhibit A. The Petitioner will also register under the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities at least sixty (60) days prior to commencing any construction activities. The petitioner intends to request coverage under the existing Connecticut General Permit, DEP-PED-GP-015, by submitting a complete and accurate General Permit Registration Form and Transmittal 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 September 21, 2017 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 one (1) – 1.0 megawatt and one (1) – 0.99 megawatt solar photovoltaic renewable energy generating facilities to be located at 481 Mashamoquet Road in the Town of Pomfret, Connecticut. This notice is being given pursuant to Section 16-50(l) of the Connecticut General Statutes. The Petition will be submitted on or after September 21, 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 Pomfret.”

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) 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 both Facilities. 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 4.4 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 4 to 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 to the north and east and low-density residential to the south and west.

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 each of the facilities based on the total number of modules and wattage of such modules.

A15. 2,397,750 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 inverters would be installed?

A18. (1) 1,000-kilowatt inverter and (1) 990-kilowatt inverter is planned to be installed for each Facility respectively, however, Windham may elect to utilize a 60 kilowatt inverter design. In the case of a string inverter design, approximately 33 – 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 and 990 kW centralized inverters are 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-central inverters and 1 2000KvA transformer) in the Exhibit K

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

A21. No. The circuit along Mashamoquet Road will be upgraded to a three-phase circuit to accommodate the generation output from the Facilities.

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. 4,060 cu yd Cut / 3,700 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 powered by Ethernet, and run on an internal 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. Any rock outcroppings and walls interior to the site, if found, 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 for all excavation, removal and filling of earth materials (i.e. earthwork), which are as follows:

“Operating hours for processing shall be limited to Monday through Friday 8 AM to 5 PM. Operating hours for removal shall be limited to 7 AM to 5 PM, Monday through Saturday. No activities generating noise that is perceptible outside the premises shall be allowed during any other hours.” §12.3.5 (e) Zoning: Operating Hours.

For all activities not related to excavation, removal and filling of earth materials, it is anticipated that normal construction hours will be 8 AM to 5 PM, Monday through Friday, except in the event the construction schedule for the Facilities is delayed or falling behind schedule because of weather or other unforeseen circumstances, Petitioner

may elect to work 8 AM to 5 PM on weekends, so long as the work activities are within the allowed parameters of the Town's zoning code.

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 Pomfret 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 Pomfret, 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

ABINGTON SOLAR

CONNECTICUT SITING BOARD DOCUMENTS

FOR

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

IN

POMFRET CENTER, CONNECTICUT

LOCATION MAP



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●	11/17/2015	2	ALTA SURVEY (BY HELLSTROM L.S, LLC)
●	09/19/2017	3	OVERALL SITE PLAN
●	09/19/2017	4	NORTH REMOVAL & EROSION CONTROL PLAN - 1"=50'
●	09/19/2017	5	SOUTH REMOVAL & EROSION CONTROL PLAN - 1"=50'
●	09/19/2017	6	NORTH SITE & GRADING PLAN - 1"=50'
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●	09/19/2017	8	OVERALL LANDSCAPE PLAN
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●	09/19/2017	10	CIVIL DETAILS
●	09/19/2017	11	KEY OBSERVATION POINT PLAN
●	09/19/2017	12	SITE CROSS SECTION

DRAWING INDEX LEGEND

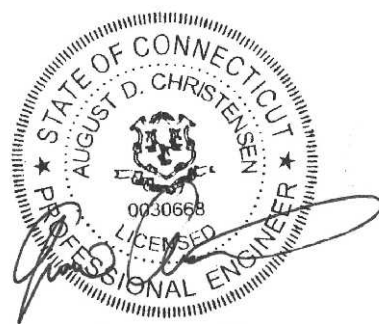
	FILLED CIRCLE INDICATES DRAWING INCLUDED WITHIN THIS ISSUE		
	MOST RECENT REVISION NUMBER		
	MOST RECENT ISSUE OR REVISION DATE		
○	-	X/XX/201X	X SHEET TITLE

Westwood

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Westwood Professional Services, Inc.



9-12-17

Designed: BTB

Checked: ADC

Drawn: JLB

Record Drawing by/date:

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-	09/12/2017	CT SITING BOARD SUBMISSION

Prepared for:



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SOLAR

481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

COVER SHEET

SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 1 of 12

SOURCE: MAP DATA ©2017 GOOGLE (NOT TO SCALE)

CONTACT INFO:

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

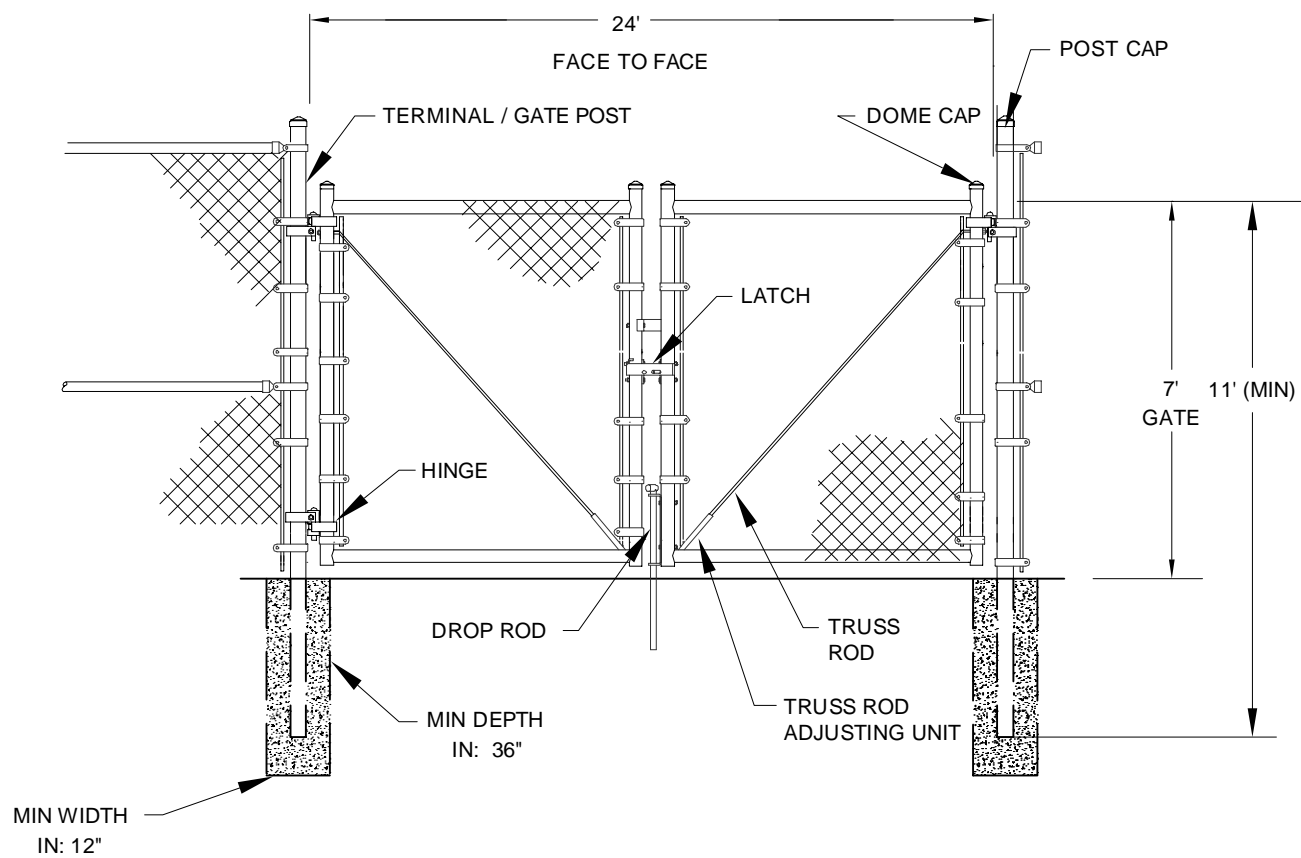
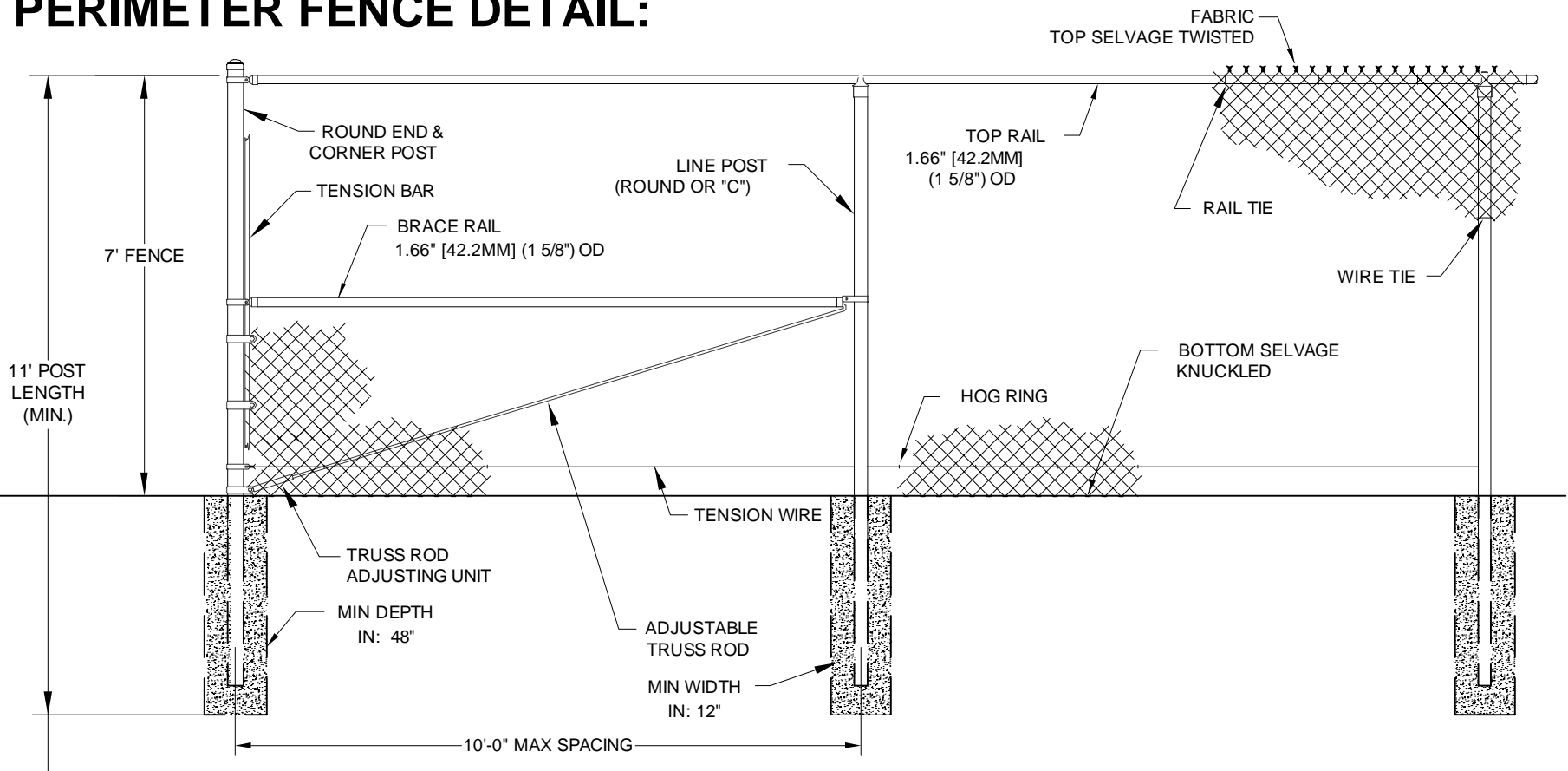
OWNER/DEVELOPER:
ECOS ENERGY
222 SOUTH 9TH STREET
SUITE 1600
MINNEAPOLIS, MN 55402

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

PERIMETER FENCE DETAIL:



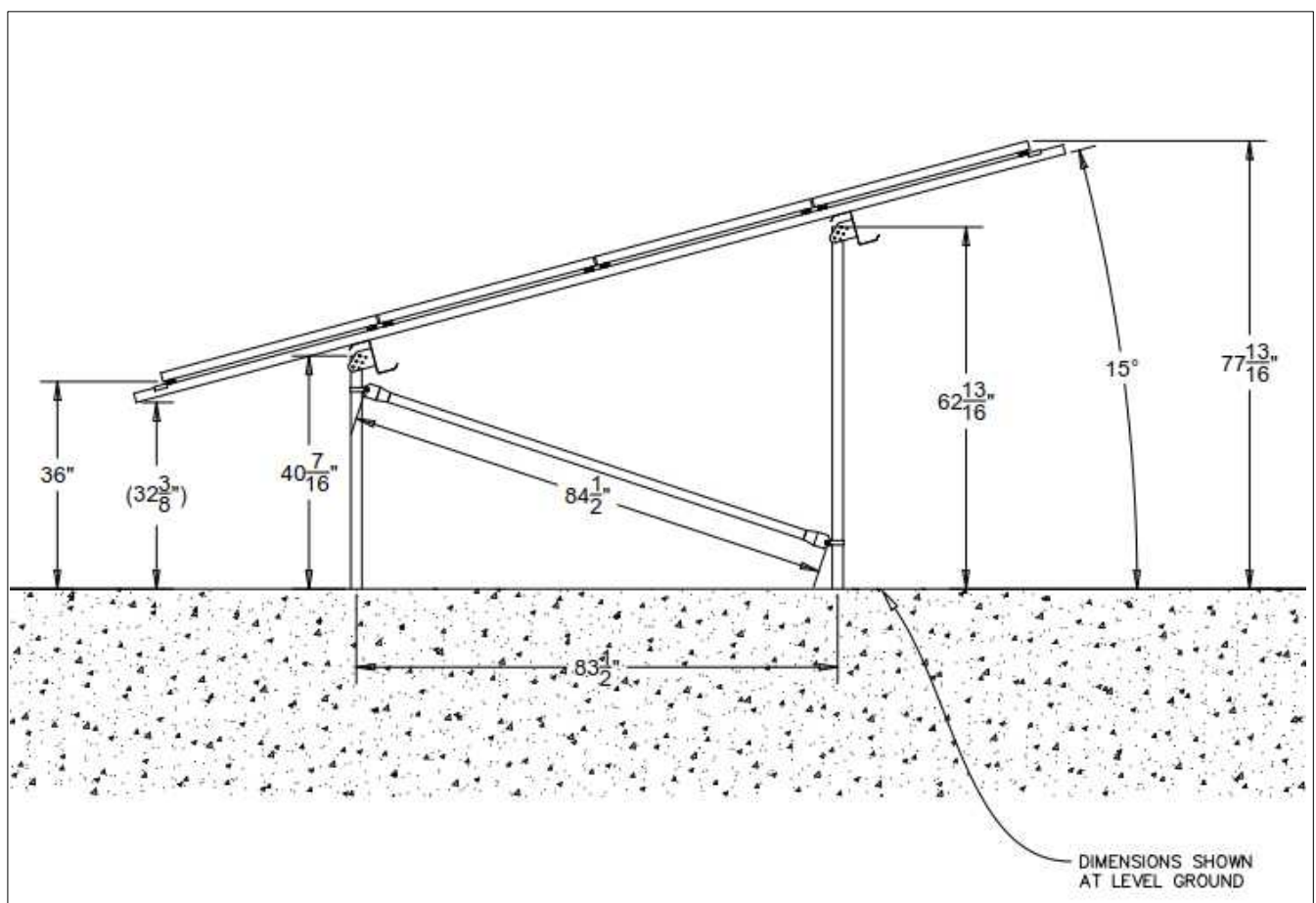
PROJECT AREAS & IMPACTS:

TOTAL SITE AREA = 25.1 ACRES IN THE STATE OF CONNECTICUT
ARRAY FOOTPRINT= 7.86 ACRES (FULL PROJECT FENCE LINE LIMITS)
PROPOSED IMPERVIOUS:
GRAVEL ACCESS ROAD, STRUCTURAL POSTS & EQUIPMENT PADS = .36 ACRES

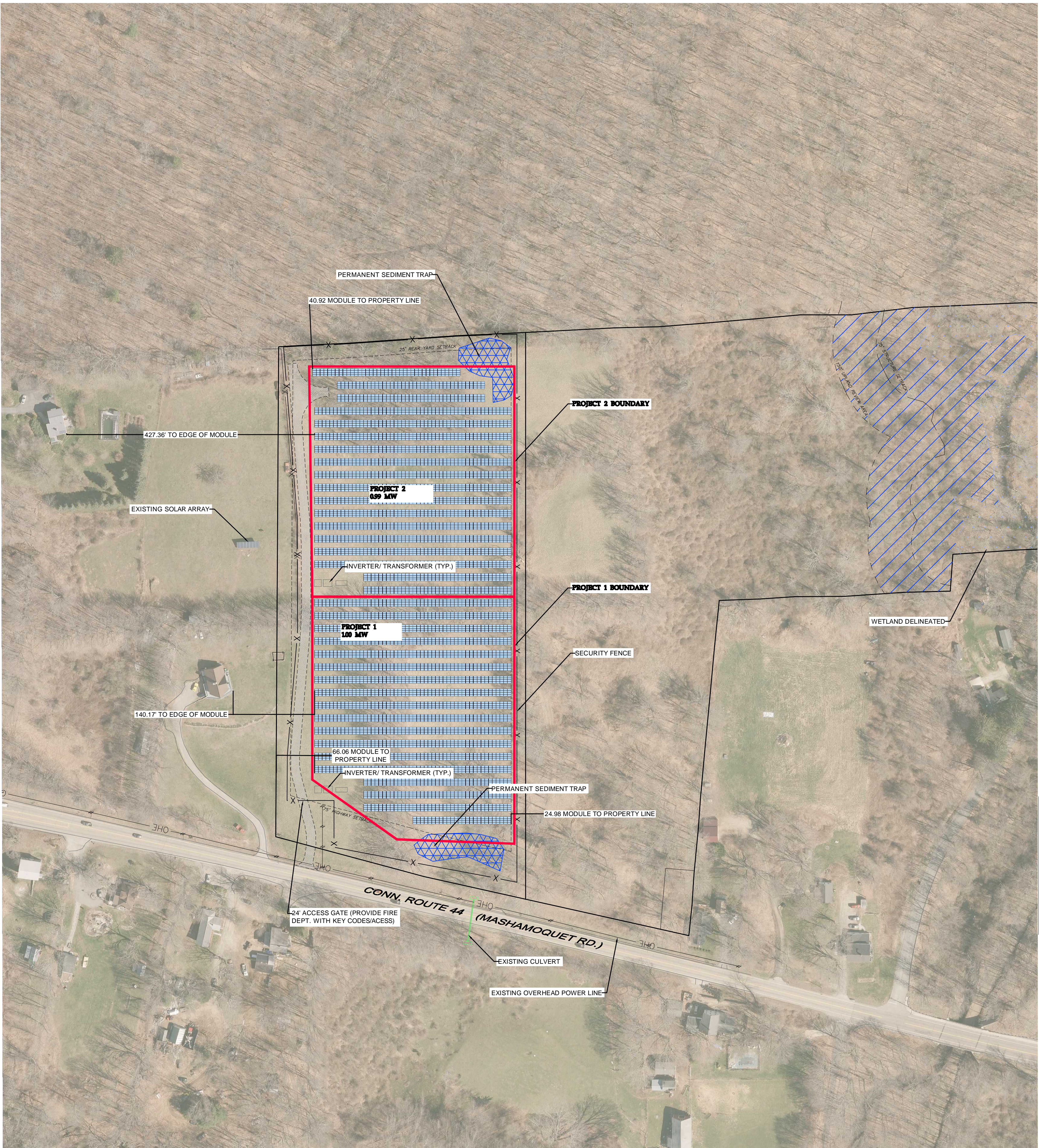
LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED PROJECT FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED AC DISTRIBUTION
- 18 x 2 SOLAR MODULE BOCK
- WETLAND BUFFER AREA
- WETLAND DELINEATION LINE

RACKING PROFILE DETAIL:



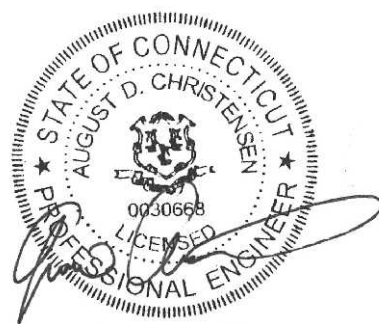
AERIAL SITE PLAN:



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Checked: ADC
Drawn: JLB

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Prepared for:



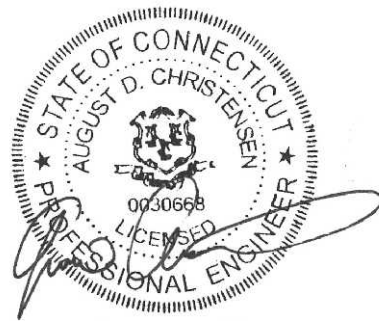
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481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

OVERALL SITE
PLAN

SITING BOARD REVIEW

DATE: 09/19/2017
SHEET: 3 of 12



9-12-17

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Prepared for:



0' 50' 100' 150'

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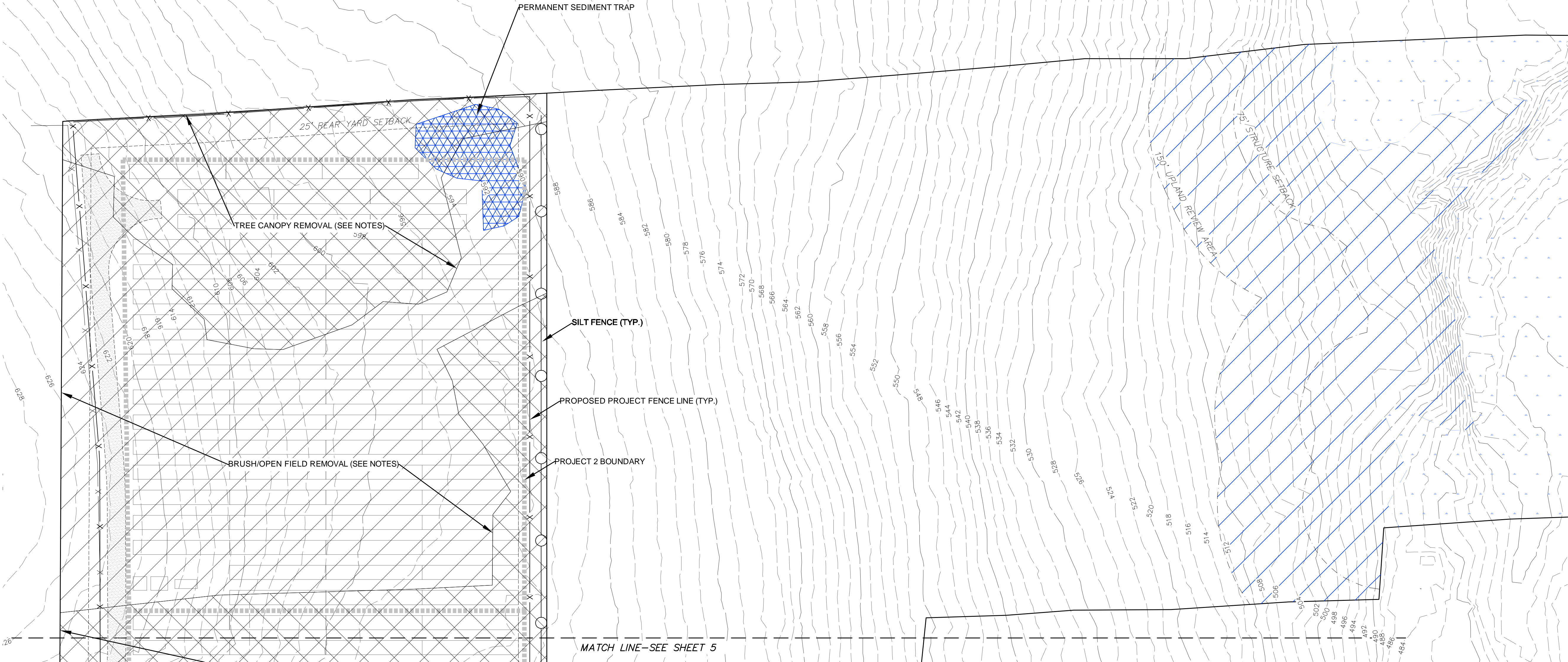
481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

NORTH REMOVAL & EROSION CONTROL PLAN

SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 4 of 12



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
	BRUSH/ OPEN FIELD CLEARING
	TREE CANOPY 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 (4.57 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 (4.41 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.



NOTES & LEGEND:

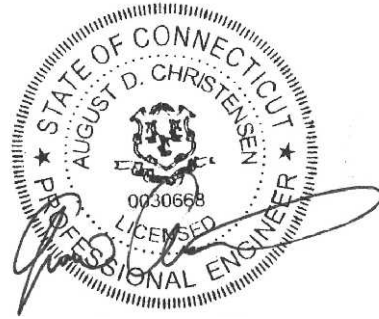
SEE SHEET 4

Westwood

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Checked: ADC

Drawn: JLB

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481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

SOUTH REMOVAL &
EROSION
CONTROL PLAN

SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 5 of 12

LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED SILT FENCE
- PHASING/ DRAINAGE AREA LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 18 x 2 SOLAR MODULE BOCK
- BUFFER AREA
- WETLAND DELINEATION LINE/AREA
- EXISTING GROUND SLOPE
- PROPOSED GROUND SLOPE

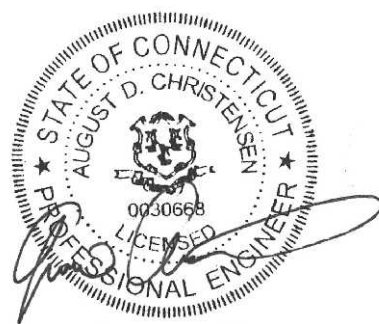
Earthwork Quantities		
Item	Cut	Fill
Access Road Grading	760 CY	165 CY
Permanent Basin Grading	2,600 CY	0 CY
Array Grading	700 CY	3,535 CY
TOTAL	4,060 CY	3,700 CY
EXCESS= 360 CY		

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

Westwood

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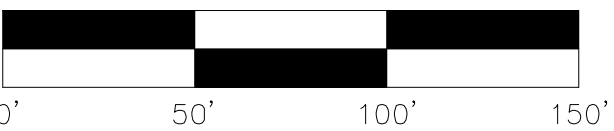
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481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

NORTH SITE &
GRADING PLAN

SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 6 of 12

MATCH LINE--SEE SHEET 6

MATCH LINE--SEE SHEET 7

NOTES:

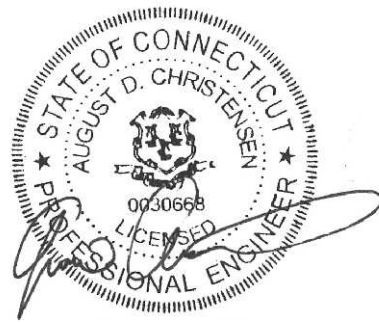
SEE SHEET 6



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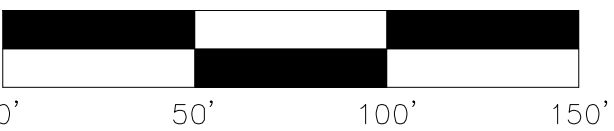
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481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

SOUTH SITE &
GRADING PLAN

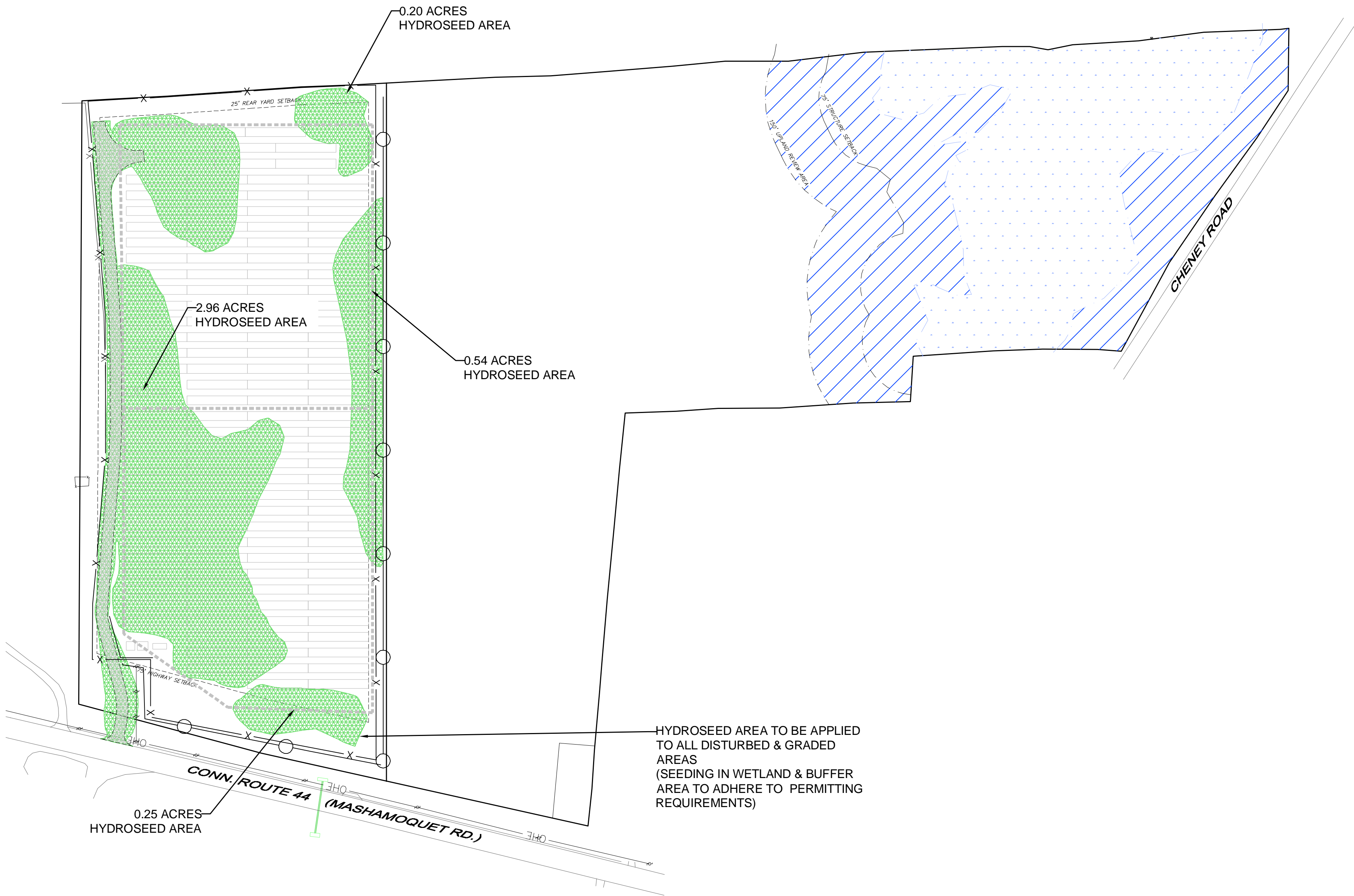
SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 7 of 12

SEEDING NOTES:

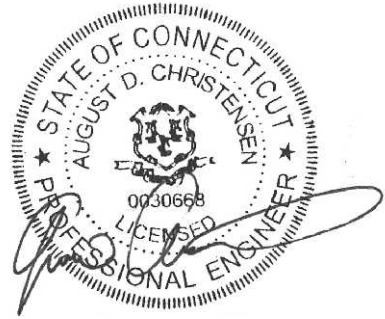
1. THE CONTRACTOR SHALLHYDROSEED ALL DISTURBED AREAS ASSOCIATED WITH THE CONSTRUCTION OF THE SOLAR FACILITY. CONTRACTOR SHALL USE AN APPROVED LOW GROWTH LOW MAINTENANCE SEED MIX APPROVED BY THE APPROPRIATE GOVERNING AUTHORITY.



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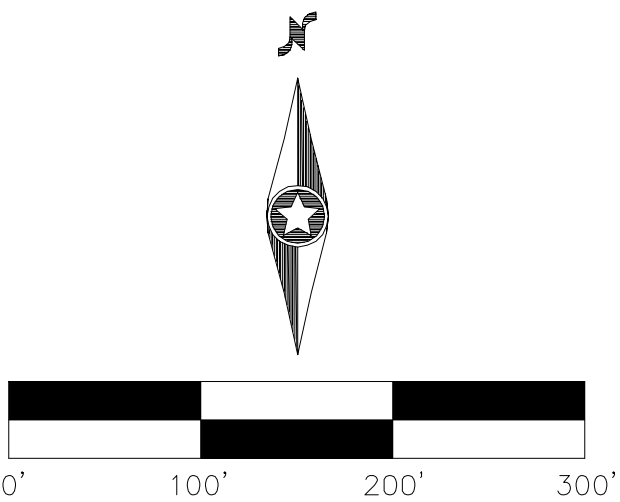
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481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

OVERALL
LANDSCAPE PLAN

SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 8 of 12

ROAD DESIGN PARAMETERS

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

SPECIAL PROVISIONS FOR GRADING AND EROSION CONTROL

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

EXECUTION

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

TESTING REQUIREMENTS:

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

SUBGRADE COMPACTION, TEST ROLLING AND AGGREGATE BASE COMPACTION:

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

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

GENERAL NOTES:

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

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

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

1. PLACEMENT OF RIP-RAP

RIPRAP HAND PLACED. HAND-PLACED RIPRAP SHALL CONSIST OF ROUGH UNHEWN QUARRY STONES, APPROXIMATELY RECTANGULAR, PLACED DIRECTLY ON THE SPECIFIED SLOPES OR SURFACES. IT SHALL BE SO LAID THAT THE WEIGHT OF THE LARGE STONES IS CARRIED BY THE SOIL RATHER THAN BY ADJACENT STONES. STONES SHALL WEIGH BETWEEN 50 AND 150 LB. EACH AND AT LEAST 60 % OF THEM SHALL WEIGH MORE THAN 100 LB. EACH WHEN USED ON EMBANKMENT CONSTRUCTION. RIP RAP FOR BMPS SHALL BE 6"-8" DIA. PREPARATION FOR HAND-PLACED RIP RAP. BEFORE ANY RIP RAP IS PLACED, THE SURFACE TO BE COVERED SHALL BE FULLY COMPACTED AND GRADED TO THE REQUIRED SLOPE. PLACE 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.

2. STABILIZATION WITH EROSION CONTROL AND REVEGITATION MAT (ECRM)
- 1) AREA MUST BE GRADED SMOOTH AND CLEAN TO FINISH GRADES, AND COMPACTED.
- 2) SEED AND MULCH AREA. USE SEED MIX APPROVED BY THE ENGINEER.

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

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

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

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

FOR MAT USE MIRAFI MIRAMAT TM8 OR EQUIVALENT.

SEEDING:

1. 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.
2. 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.
3. 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.
4. RILLING, GULLIES, OR OTHER EROSION DUE TO POOR COVER SHALL BE RAKED AND/OR REFILLED AND REMULCH/RESEEDED.
5. CONTRACTOR SHALL WARRANTEE SEEDING, MULCHING AND EROSION CONTROL FABRIC FOR ONE YEAR FROM THE SUBSTANTIAL COMPLETION OF THE RELEVANT AREA OF WORK.

INVASIVE SPECIES:

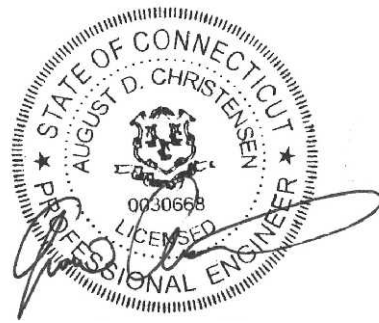
1. ALL EQUIPMENT SHALL BE INSPECTED UPON ARRIVAL. EQUIPMENT ARRIVING WITH OBSERVABLE SOIL OR PLANT FRAGMENTS WILL BE REMOVED AND CLEANED.
2. HAY BALES ARE NOT BE USED ON SITE; ONLY WEED-FREE STRAW BALES ARE APPROVED.
3. OFF-SITE TOPSOIL MUST BE FREE OF INVASIVE SPECIES. THE ENGINEER SHALL BE NOTIFIED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

Westwood

7699 Anagram Drive
Eden Prairie, MN 55344

PHONE (952)-937-5150
FAX (952)-937-5822
TOLL FREE (888)-937-5150

Westwood Professional Services, Inc.



9-12-17

Designed: BTB

Checked: ADC

Drawn: JLB

Record Drawing by/date:

Revisions:	DATE	DESCRIPTION
-	09/12/2017	CT SITING BOARD SUBMISSION

Prepared for:



ABINGTON
SOLAR

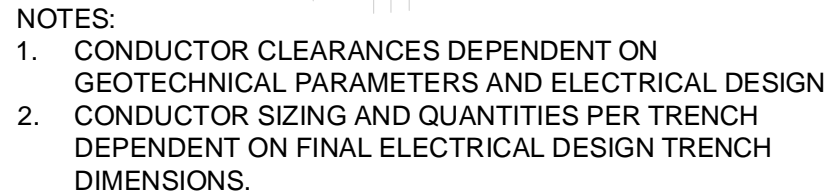
481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

CIVIL NOTES

SITING BOARD REVIEW

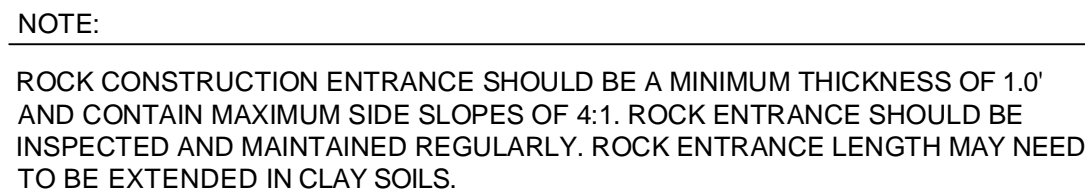
DATE: 09/19/2017

SHEET: 9 of 12

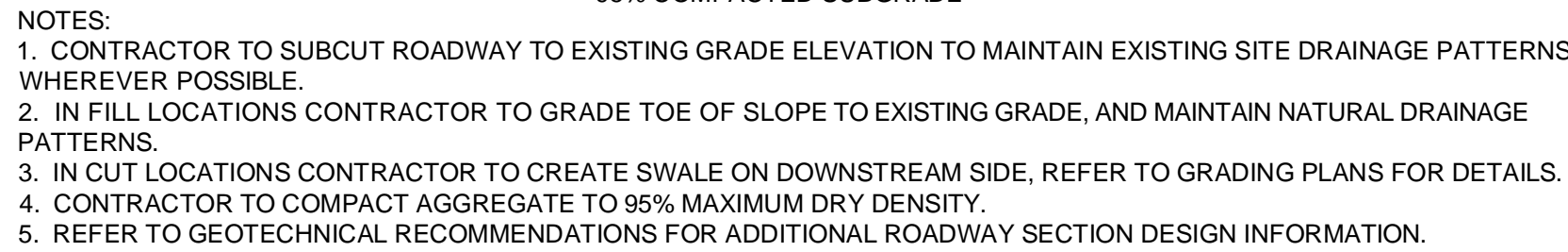


NOTE:

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



WOVEN MONOFILAMENT (36" WIDE)

5" STEEL/WOOD T-POST

FLOW

PONDING HEIGHT

6'-0" MAX. SPACING

5" STEEL T-POST

STANDARD DETAIL

TRENCH WITH NATIVE BACKFILL

FILTER FABRIC, ATTACH SECURELY TO UPSTREAM SIDE OF POST WITH 3-50 LB TENSILE STRENGTH PLASTIC ZIP-TIES PER POST WITHIN TOP 8" OF FABRIC.

RUNOFF

8"

4"

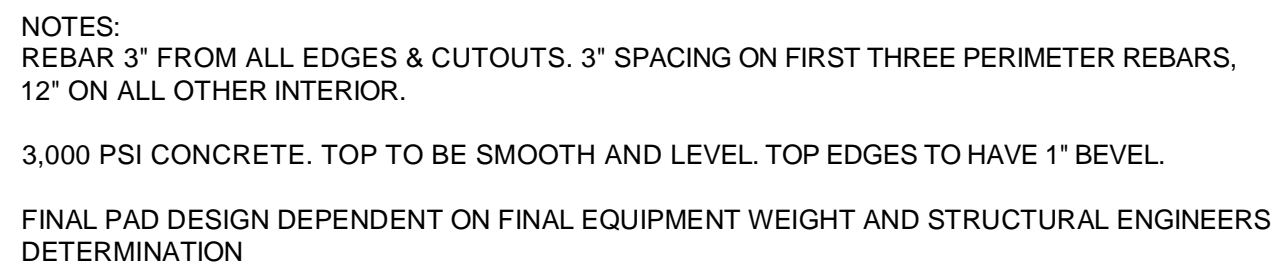
12" MIN.

FABRIC SLICED INTO SOIL WITH COMPACTED BACKFILL

NOTE:

- | NOTE: | BACKFILL |
|--|----------|
| 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



UTILITY PADS CONCRETE SECTION

SEDIMENT TRAP BASIN DETAILS



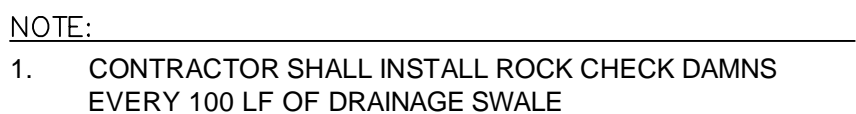
CATEGORY	ACCEPTABLE TYPES
1	STRAW RD 1S, WOOD FIBER RD 1S
2	STRAW 1S, WOOD FIBER 1S
3	STRAW 2S, WOOD FIBER 2S
4	STRAW/COCONUT 2S, WOOD FIBER HV 2S

THE LETTERING DESIGNATION SHALL BE DEFINED AS FOLLOWS:

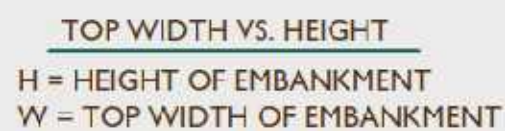
- 1S - NETTING ON ONE SIDE
RD - RAPIDLY DEGRADABLE
2S - NETTING ON TWO SIDES
HV - HIGH VELOCITY

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

ROLLING DIP AND WATERBAR

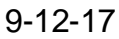


ROCK CHECK FOR SWALE



1. PVIOUS STONE DIKE SHALL BE CONSTRUCTED OF CT DOT MODIFIED RIPRAP WITH #3 STONE ON FACE.
2. NON-OVERFLOW PORTIONS AND ABUTMENTS OF TEMPORARY SEDIMENT TRAPS MAY BE CONSTRUCTED OF COMPACTED EARTHFILL.

TEMPORARY/PERMANENT SEDIMENT TRAP



Designed: BTB

Checked: _____ ADC

Drawn: JLB

Record Drawing by/date: _____

Revisions:		
#	DATE	DESCRIPTION
-	09/12/2017	CT SITING BOARD SUBMISSION

Prepared for:



481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

CIVIL DETAILS

SITING BOARD REVIEW

DATE: 09/19/2017

SHEET: 10 of 12



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

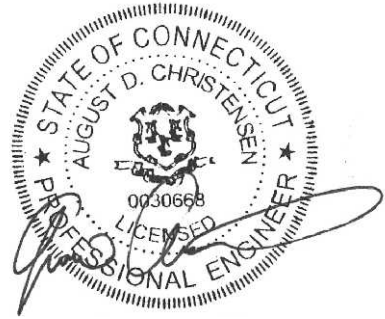


Westwood

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TOLL FREE (888) 937-5150

Westwood Professional Services, Inc.



9-12-17

Designed: BTB

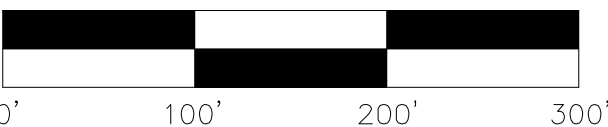
Checked: ADC

Drawn: JLB

Record Drawing by/date:

Revisions:	DATE	DESCRIPTION
-	09/12/2017	CT SITING BOARD SUBMISSION

Prepared for:



ABINGTON
SOLAR

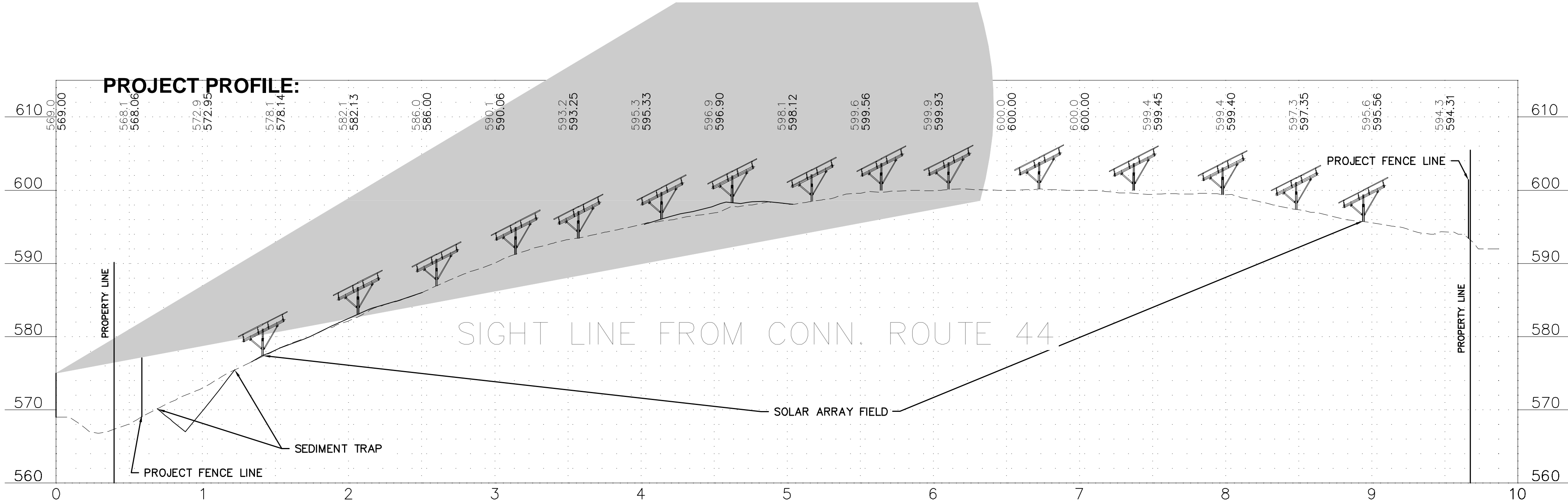
481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

KEY OBSERVATION
POINT PLAN

SITING BOARD REVIEW

DATE: 09/19/2017

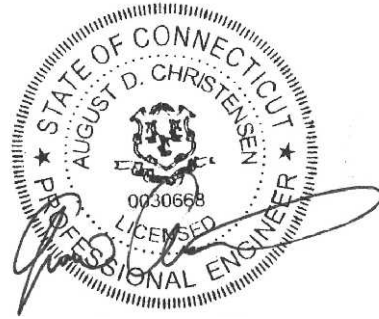
SHEET: 11 of 12



Westwood

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POMFRET, CT 06259
TOLLAND COUNTY

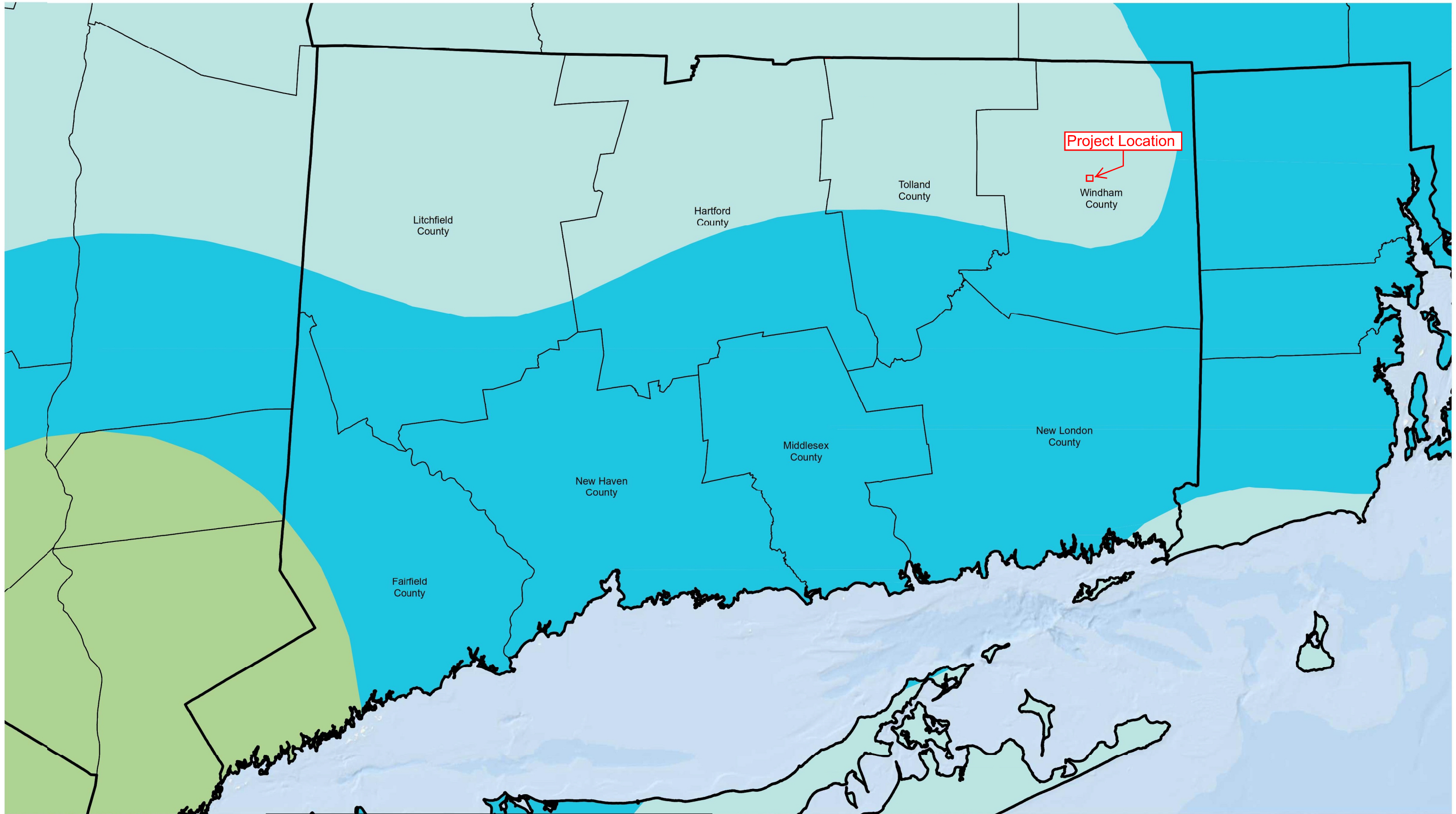
SITE CROSS
SECTION

SITING BOARD REVIEW

DATE: 09/19/2017
SHEET: 12 of 12




Exhibit B

GIS Maps






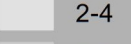


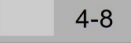
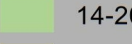


Data Source(s): World Oceans Map via Esri WMS (Accessed 2015);

Legend

-  Project Area
-  County Boundary
-  State Boundary

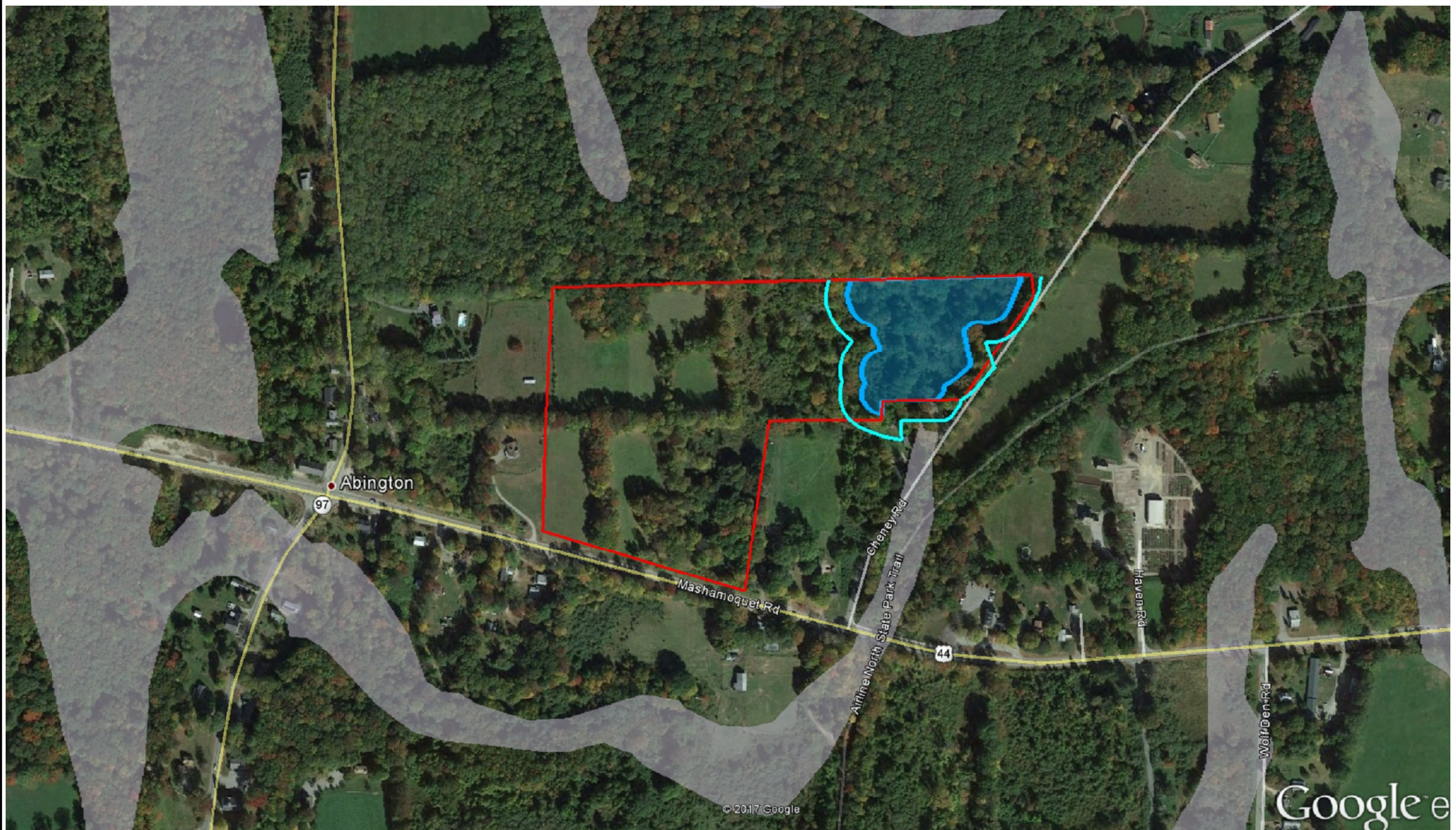
U.S. Seismic Hazard 2% in 50 years PGA

Hazard (%g)

 0-2	 8-10	 30-40
 2-4	 10-14	 40-80
 4-8	 14-20	 > 80
	 20-30	



Abington Solar
Windham County
Connecticut
Hazard Map



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

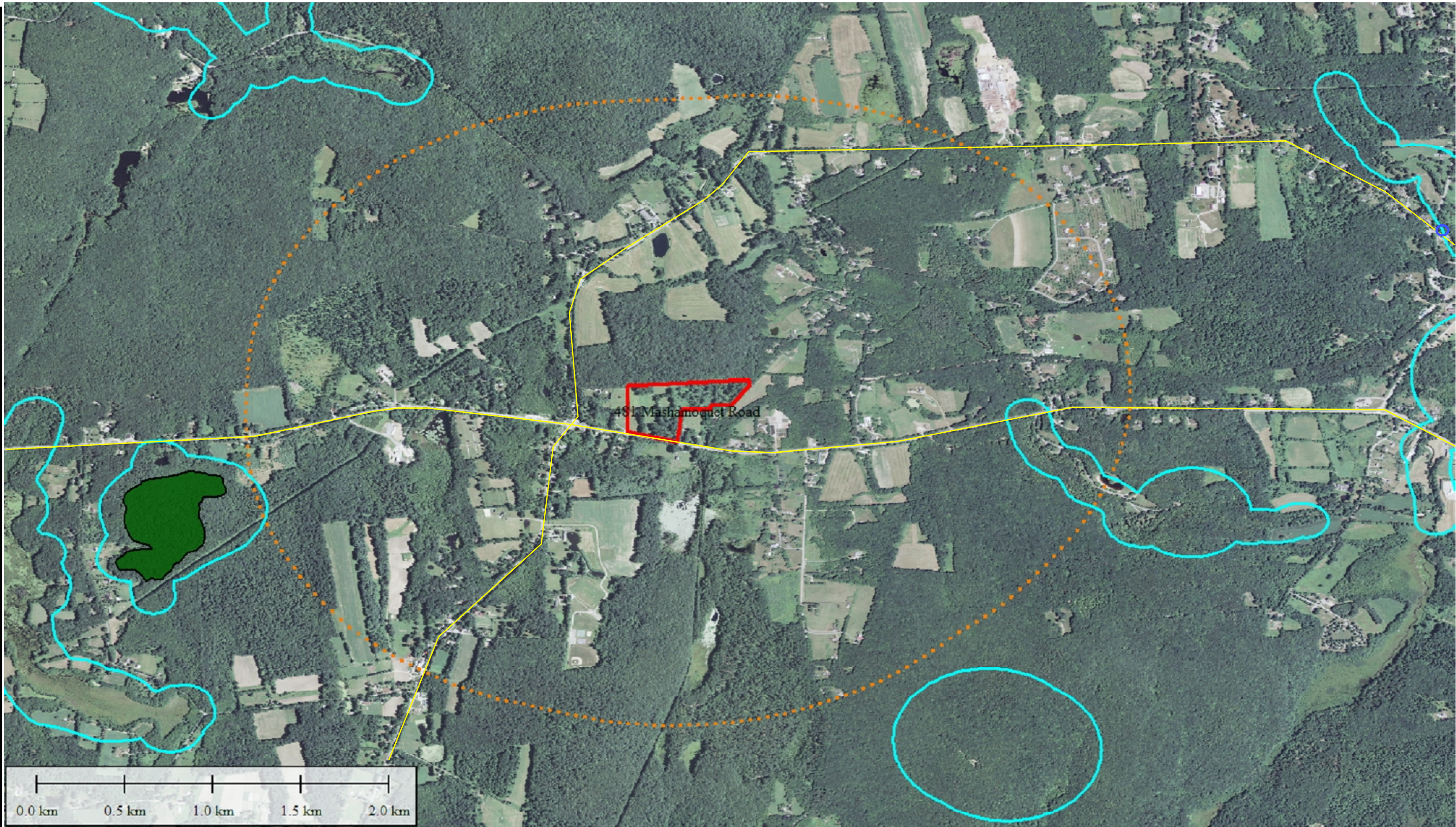
Legend

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

Google

Abington Solar

Soils and
Delineated Wetlands



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

Abington Solar
Vicinity Map



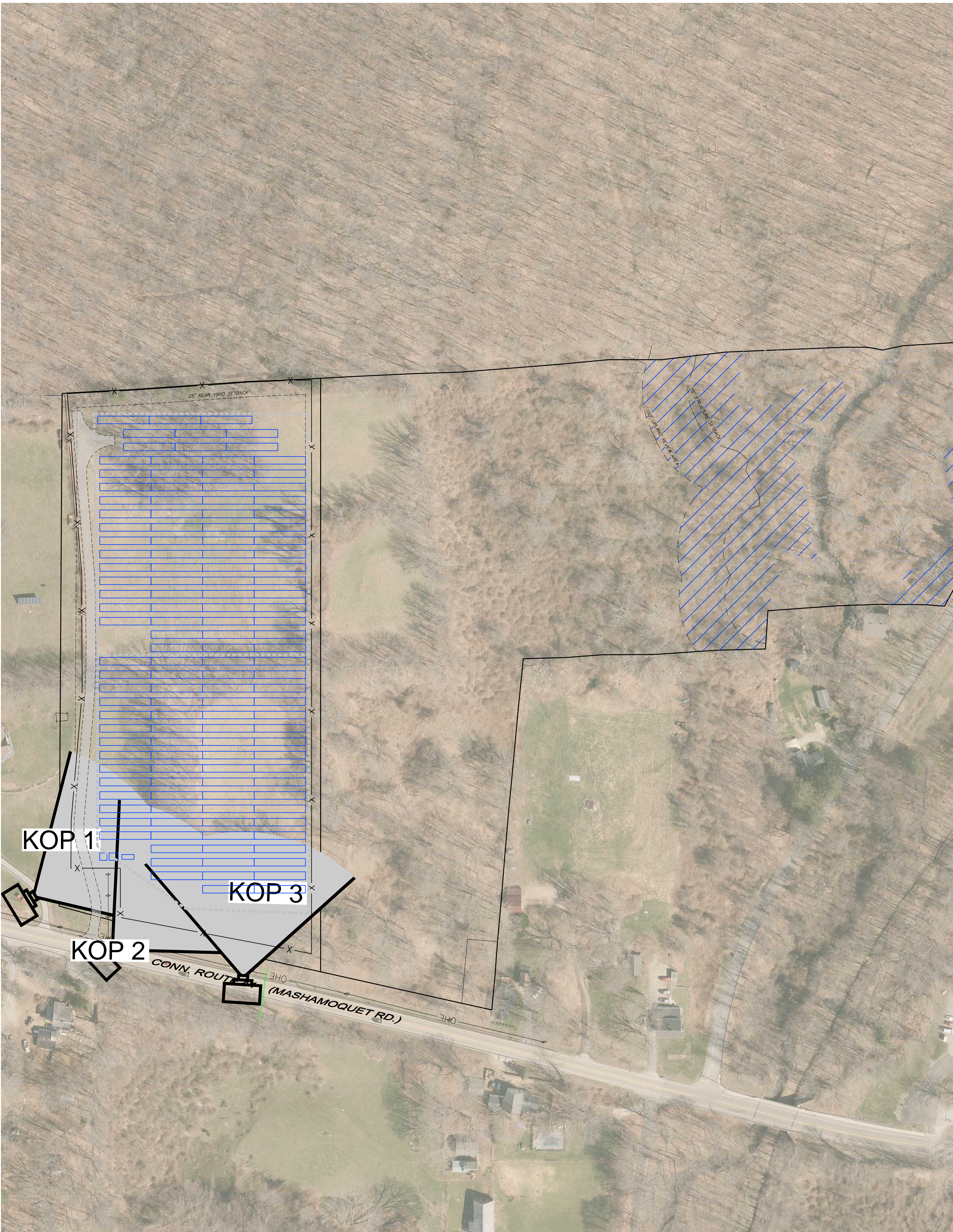
KOP 1 - BILTON ROAD SE CORNER OF PARCEL LOOKING NW



KOP 2 - ON SITE NEAR PROPOSED PROJECT ENTRANCE



KOP 3 - HILL PASTURE ROAD CUL-DE-SAC

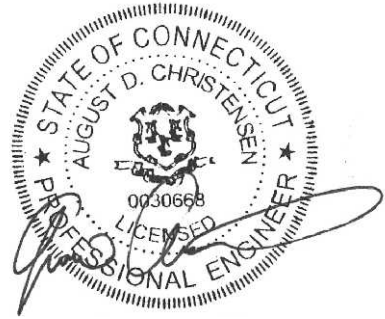


Westwood

7699 Anagram Drive
Eden Prairie, MN 55344

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FAX (952) 937-5822
TOLL FREE (888) 937-5150

Westwood Professional Services, Inc.



9-12-17

Designed: BTB

Checked: ADC

Drawn: JLB

Record Drawing by/date:

Revisions:	DATE	DESCRIPTION
-	09/12/2017	CT SITING BOARD SUBMISSION

Prepared for:



ABINGTON
SOLAR

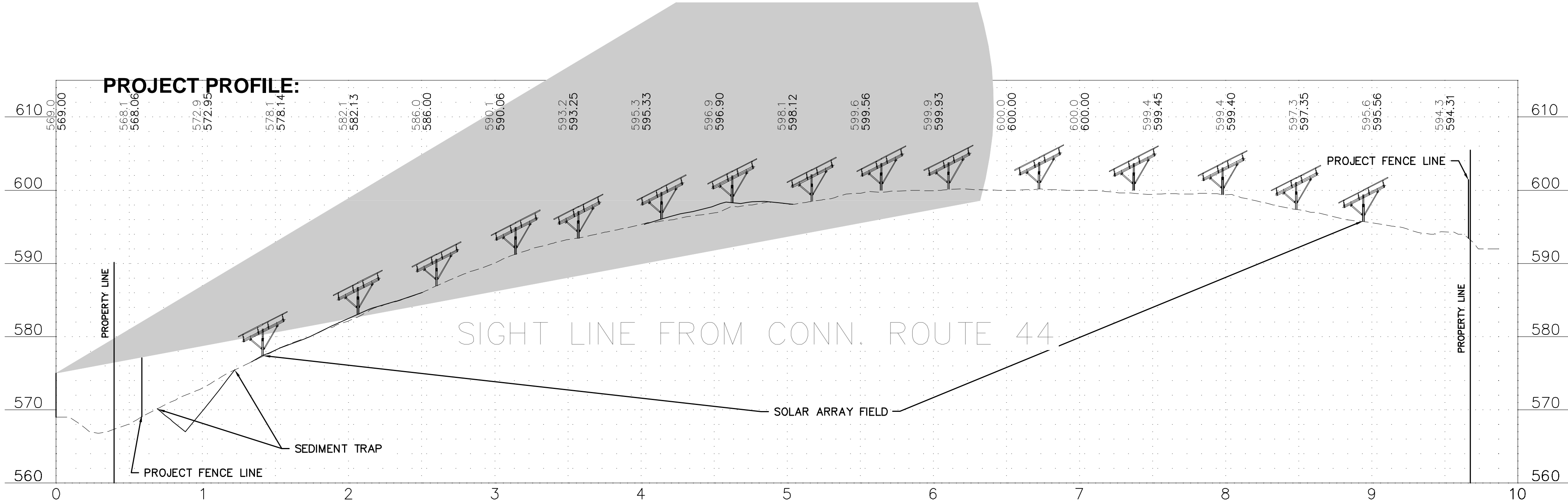
481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

KEY OBSERVATION
POINT PLAN

SITING BOARD REVIEW

DATE: 09/19/2017

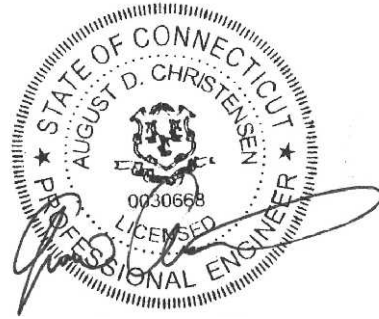
SHEET: 11 of 12



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-	09/12/2017	CT SITING BOARD SUBMISSION

Prepared for:



ABINGTON
SOLAR

481 MASHMOQUET ROAD
POMFRET, CT 06259
TOLLAND COUNTY

SITE CROSS
SECTION

SITING BOARD REVIEW

DATE: 09/19/2017
SHEET: 12 of 12

Exhibit D

Notice Service List

Order ID: 5199203

* Agency Commission not included

GROSS PRICE * : **\$98.61**

PACKAGE NAME: Legal Notice FR Daily

Order ID: 5199203

* Agency Commission not included

GROSS PRICE * : \$98.61

PACKAGE NAME: Legal Notice FR Daily

Product(s): Hartford Courant, Affidavits, MyPublicNotices.com

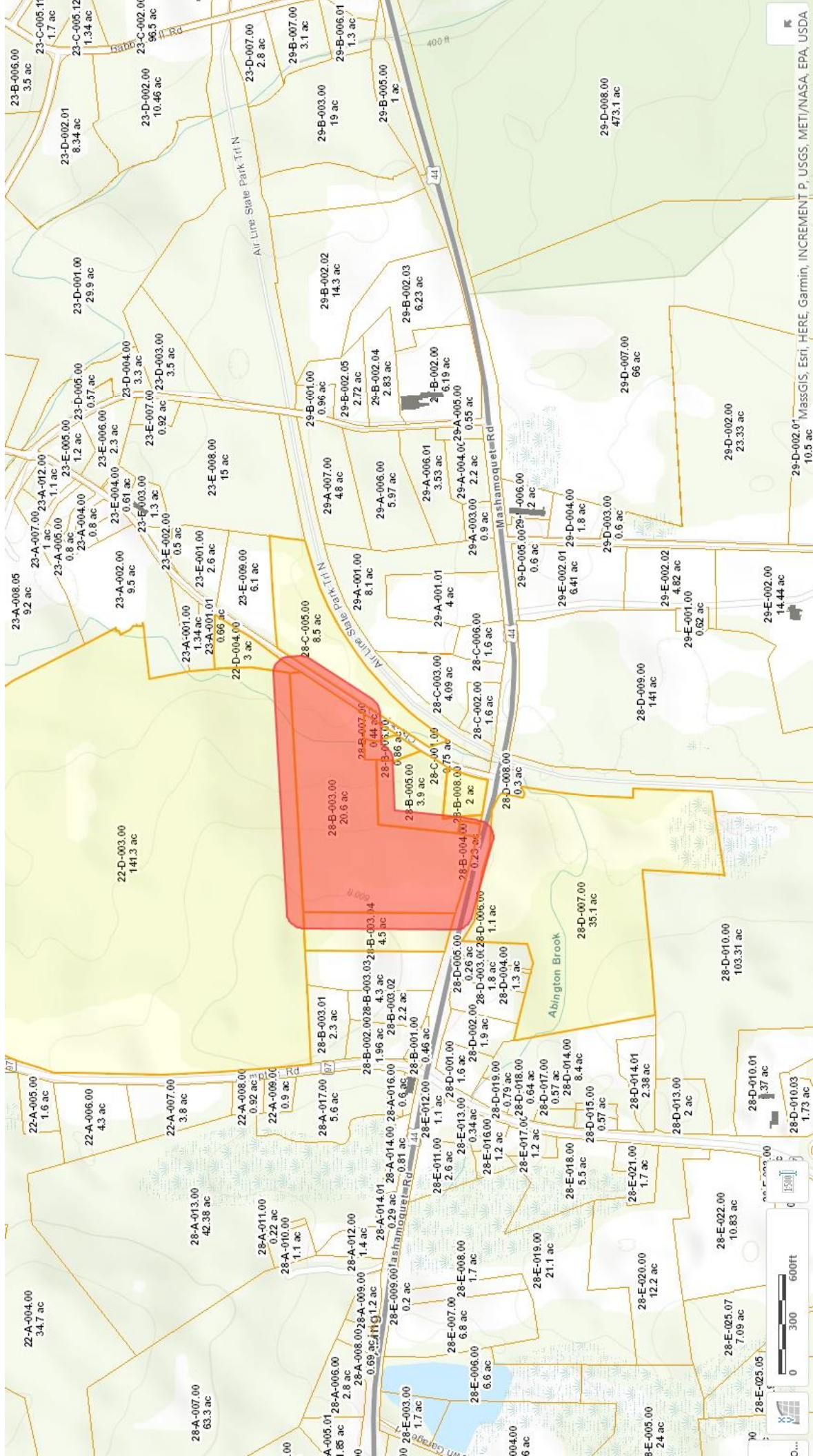
AdSize(s): 1 Column,

Run Date(s): Thursday, September 21, 2017

Color Spec. B/W

Preview

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 one (1) – 1.0 megawatt and one (1) – 0.99 megawatt solar photovoltaic renewable energy generating facilities to be located at 481 Mashamoquet Road in the Town of Pomfret, Connecticut. This notice is being given pursuant to Section 16-50(l) of the Connecticut General Statutes. The Petition will be submitted on or after September 21, 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 Pomfret.



David and Lorena Morin
PO Box 9
Chepachet, RI 02814

Dana Ellen Flori
PO Box 33
Pomfret Center, CT 06259

Robert Neugent
215 Yetter Road
Mystic, CT 06355

Paul and Donald Cheney
126 Cheney Road
Pomfret Center, CT 06259

Paul and Donald Cheney
126 Cheney Road
Pomfret Center, CT 06259

David Hernandez
477 Mashamoquet Road
Pomfret Center, CT 06259

473 Holding LLC
473 Mashamoquet Road
Pomfret Center, CT 06259

Mary-Ann Donovan
482 Mashamoquet Road
Pomfret Center, CT 06259

Mashamoquet Farm II LLC
333 Hampton Road
Pomfret Center, CT 06259

Paul and Donald Cheney
126 Cheney Road
Pomfret Center, CT 06259

Ecos Energy
222 S 9TH ST STE 1600
MINNEAPOLIS MN 55402-3382

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David and Lorena Morin
PO BOX 9
CHEPACHET RI 02814-0009



Petition for Declaratory Ruling for Abington Solar Project

Ecos Energy
222 S 9TH ST STE 1600
MINNEAPOLIS MN 55402-3382

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Dana Ellen Flori
PO BOX 33
POMFRET CENTER CT 06259-0033



Petition for Declaratory Ruling for Abington Solar Project

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222 S 9TH ST STE 1600
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Robert Neugent
215 YETTER RD
MYSTIC CT 06355-1029



Petition for Declaratory Ruling for Abington Solar Project

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MINNEAPOLIS MN 55402-3382

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Paul and Donald Cheney
126 CHENEY RD
POMFRET CENTER CT 06259-1706



Petition for Declaratory Ruling for Abington Solar Project

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Paul and Donald Cheney
126 CHENEY RD
POMFRET CENTER CT 06259-1706



Petition for Declaratory Ruling for Abington Solar Project

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David Hernandez
477 MASHAMOQUET RD
POMFRET CENTER CT 06259-1731



Petition for Declaratory Ruling for Abington Solar Project

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222 S 9TH ST STE 1600
MINNEAPOLIS MN 55402-3382

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473 Holding LLC
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Paul and Donald Cheney
126 CHENEY RD
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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
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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
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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
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HARTFORD CT 06106-1629



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CT State Representative District 050
Patrick Boyd
Legislative Office Building
Room 4005
HARTFORD CT 06106-1591



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CT State Senate District S35
Anthony Gugleilmo
Legislative Office Building
Room 3604
HARTFORD CT 06106



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Town of Pomfret Board of Selectman
Craid Baldwin, First Selectman
5 HAVEN RD
POMFRET CENTER CT 06259-1741



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Town of Pomfret Planning and Zoning Commission
Walter Hinchman, Chairman
5 HAVEN RD
POMFRET CENTER CT 06259-1741



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Town of Pomfret Conservation Commission
Pamela Cartledge, Chairman
5 HAVEN RD
POMFRET CENTER CT 06259-1741



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Town of Pomfret Inland Wetlands Commission

John Folsom, Chairman

5 HAVEN RD

POMFRET CENTER CT 06259-1741



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Pomfret Town Clerk
Cheryl Girst, Town Clerk
5 HAVEN RD
POMFRET CENTER CT 06259-1741



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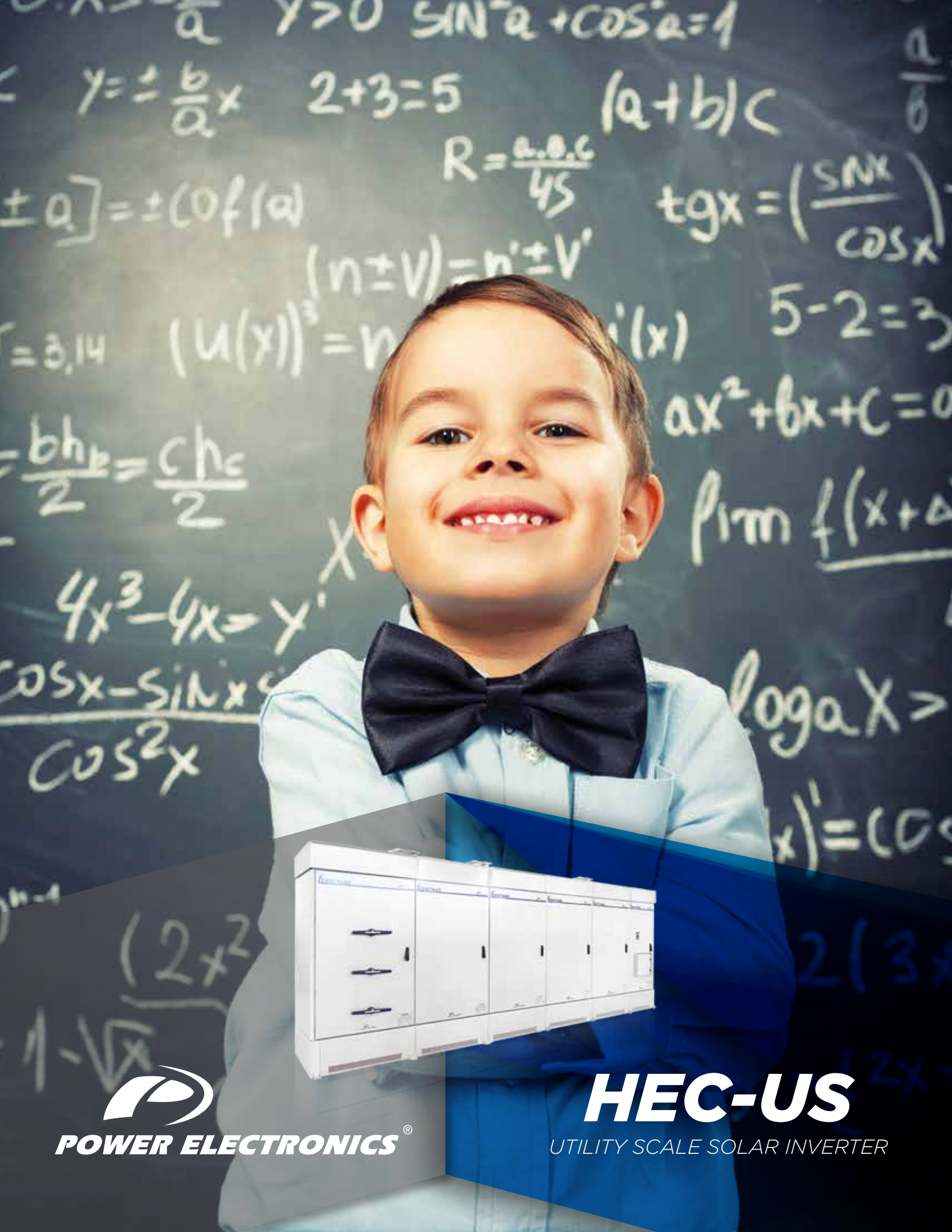
Northeastern CT Council of Governments
John Filchak, Executive Director
125 PUTNAM PIKE
DAYVILLE CT 06241-1626



Petition for Declaratory Ruling for Abington Solar Project

Exhibit K

Equipment Specification Sheets




POWER ELECTRONICS®

HEC-US
UTILITY SCALE SOLAR INVERTER

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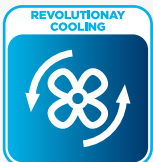
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page 4	Power Electronics
page 5	Power On Support
page 6	HEC-US Topology
page 8	ARM ² S ²
page 9	Revolutionary Cooling System
page 10	Var at night and Dynamic Grid Support
page 11	Technical characteristics
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page 13	FSDU NEC2011 Configuration table
page 13	FSDK NEC2014 Configuration table
page 14	HEC-US 1500V
page 15	HEC-US Technical characteristics and Dimensions
page 16	Contact

HEC-US

UTILITY SCALE SOLAR INVERTER



A MODULAR AND
REDUNDANT SYSTEM
MAXIMIZES UP-TIME AND
PERFORMANCE



HEC-US

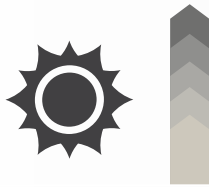
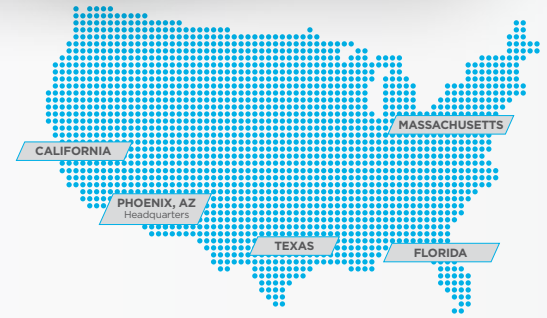
The HEC-US central inverter is an industry leading modular system designed for outdoor use with a NEMA 3R Stainless Steel enclosure, pre-engineered DC Recombiner, AC output circuit breaker and built-in ARM²S² revolutionary filter-less cooling system.

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

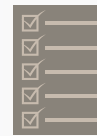
of product diversification
and longevity



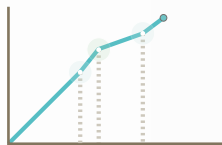
+10
years

proven electronics with
outstanding results

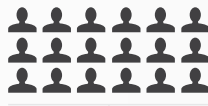
BANKABILITY



Product and Factory independent
Reports and Certifications



Financial stability and Strength



+1000 Employees
all over the world



25 year design life

5 years solar warranty

25 years extension warranty

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**

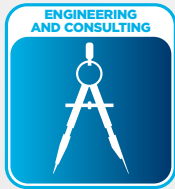
**POWER
METAL WORKS**

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.



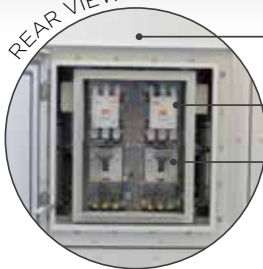
REAR VIEW



REVOLUTIONARY COOLING CONCEPT

DC FUSE AND CONTACTOR

REAR VIEW



- Output filter
- AC Contactor
- AC breaker

• 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



User control area

- NEMA4 protection
- 1kVA for aux. power
- NEC2011 and NEC2014 compliance ground fault protection

• TESTS

Random units are batch tested at the Factory for NEMA3R compliance.

• CONFORMAL COATING

Conformal coating on electronic board shields PCBs from harsh environments.

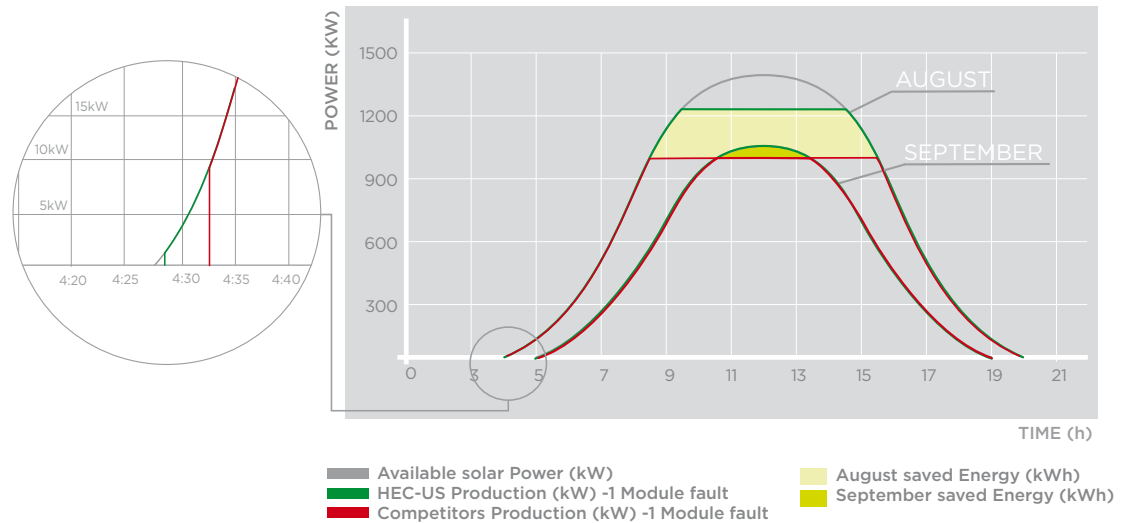


AUTOMATIC REDUNDANT MODULAR MASTER SLAVE SYSTEM

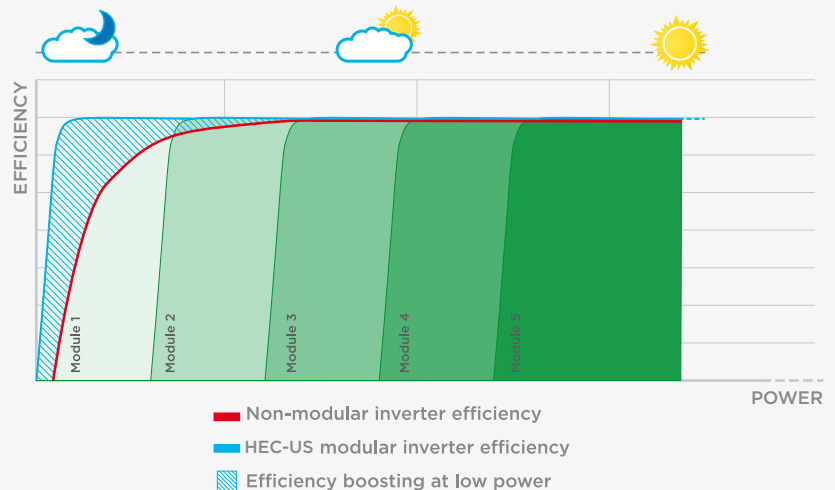
HEC-US topology combines the advantages of a central inverter with the availability of string inverters. HEC-US inverters are designed using 80 to 160 KVA independent modules. Each module is self-contained with its own control board, an independent power platform and its own cooling system, coupled together 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.

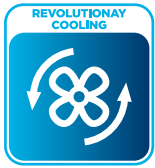
If there is a fault in one module, the faulted module is taken off-line and the output power is distributed evenly among the remaining system modules.

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.

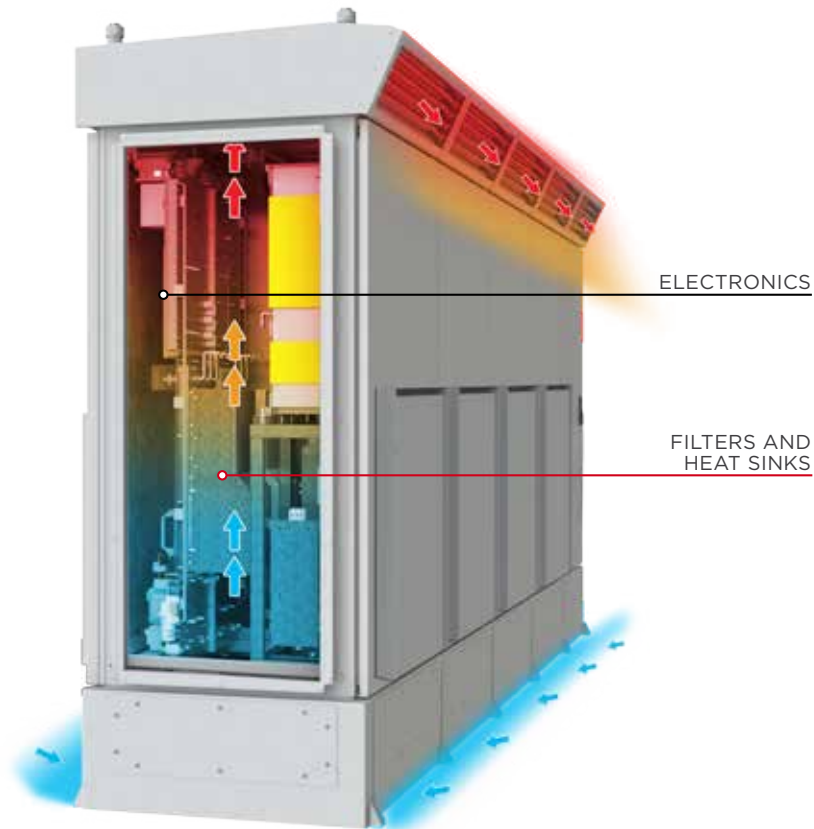




REVOLUTIONARY COOLING SYSTEM

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

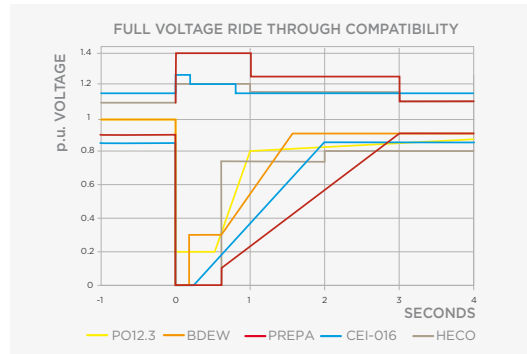


VAR AT NIGHT

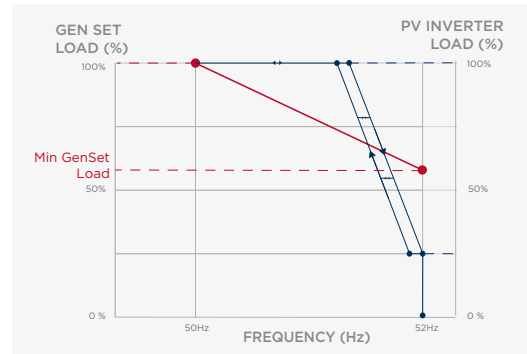
At night, the HEC-US inverter can shift to reactive power compensation mode. The inverter can respond to an external dynamic signal, a Power Plant Controller command or pre-set reactive power level (kVar).

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.

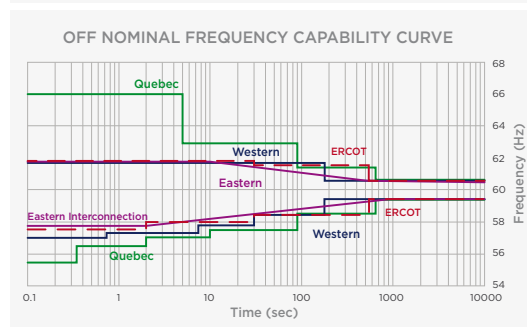
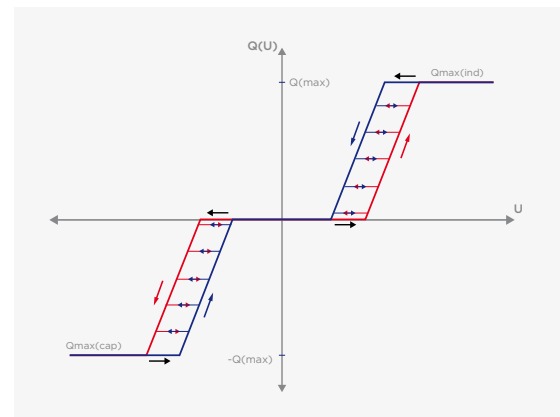
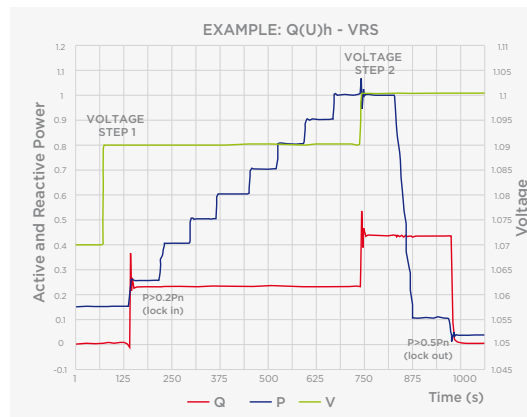


▲ **LVRT or ZVRT (Low Voltage Ride Through).** Inverters can withstand any voltage dip or profile required by the local utility. The inverter can immediately feed the fault with full reactive power, as long as the protection limits are not exceeded.



▲ **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.

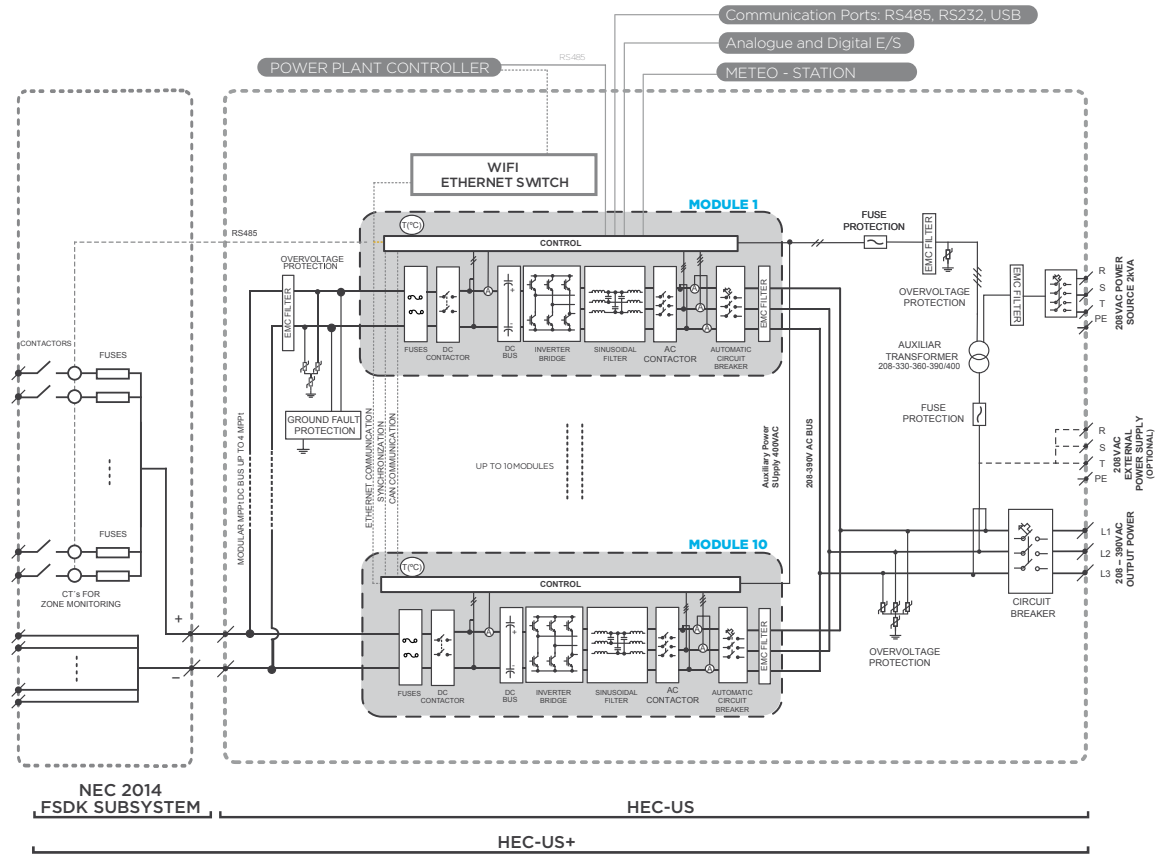
		390VAC						
		FRAME 1	FRAME 2		FRAME 3		FRAME 4	
NUMBER OF MODULES		4	5	6	7	8	9	10
MODEL NUMBER		FS0600CU	FS0751CU	FS0900CU	FS1050CU	FS1250CU	FS1350CU ^[4]	FS1500CU ^[5]
OUTPUT	Maximum Power (kW/kVA) @PF=1; 50°C	680	850	1020	1190	1360	1530	1700
	Maximum Power (kW) @PF=0.9; 50°C	600	750	900	1050	1250	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)						
INPUT	Power Factor ^[1]	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
EFFICIENCY & AUX. SUPPLY	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
ENVIRON- MENT	Degree of protection	NEMA 3R						
	Cooling system	Forced air intake through bottom and exhausted through upper exhaust hood						
	Permissible Ambient Temperature ^[2]	-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) ^[2]	4000m; >1000m power derating 1% Sn (kVA) per 100m						
CONTROL INTERFACE	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)						
	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)						
PROTECTIONS	NEC2011 Recombiner ^[3]	Max. 4x700A switches. Max. 32 inputs (70-200A fuse). Max. 28 (400A fuse)						
	NEC2014 Recombiner ^[3]	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						
	Safety	UL 1741; CSA 22.2 No.1071-I-01						
CERTI- FICA- TIONS	Utility Interconnect	IEEE 1547						

		360VAC						
		FRAME 2			FRAME 3		FRAME 4	
NUMBER OF MODULES		5	6	6	7	8	9	10
MODEL NUMBER		FS0701CU	FS0752CU	FS0830CU	FS1003CU	FS1100CU	FS1251CU ^[4]	FS1400CU ^[5]
OUTPUT	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)						
INPUT	Power Factor ^[1]	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
EFFICIENCY & AUX. SUPPLY	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.

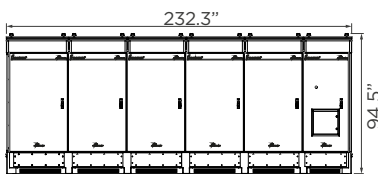
[3] Check maximum shortcircuit DC current of the inverter to assure full recombinder compatibility.
[4] FS1251CU is listed as FS1401CU on CEC site.
[5] FS1400CU is listed as FS1550CU on CEC site.

OPERATIONAL DIAGRAM

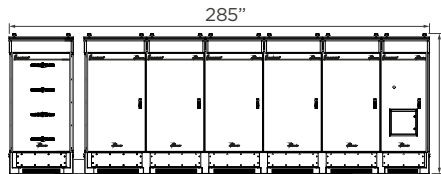


DIMENSIONS

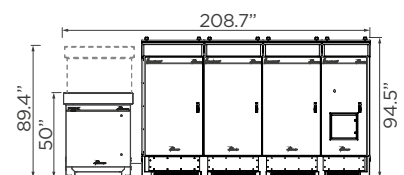
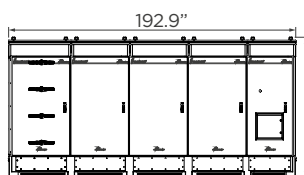
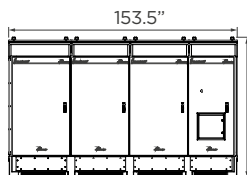
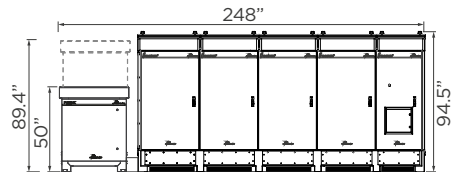
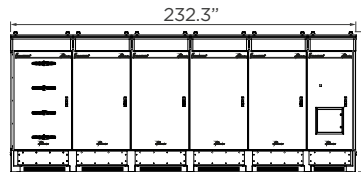
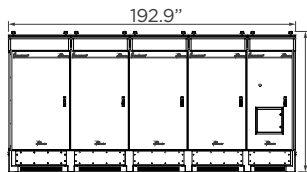
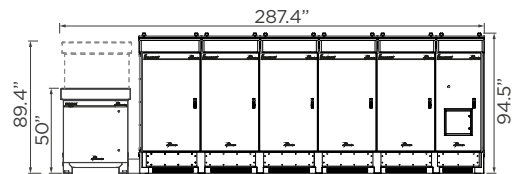
HEC-US



HEC-US+ NEC2011



HEC-US+ NEC2014



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 ^[1]		DISCONNECTS SIZE		# FUSES PER DISCONNECTOR ^[2]		FUSE FRAME SIZE			STRING CONFIGURATION		STRING MONITORING		# MPPT ^[3]		TYPE ^[4]	
	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 ^[3]	32A, 40A, 50A, 63A, 80A, 100A,125A, 160A, 200A		N	Negative Pole grounded			4	4 MPPT		
					0	10 Fuses	B2 ^[3]	250A	IEC								
							B3 ^[3]	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									

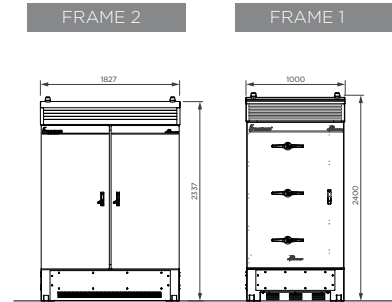
FRAME 2

FRAME 1

1827

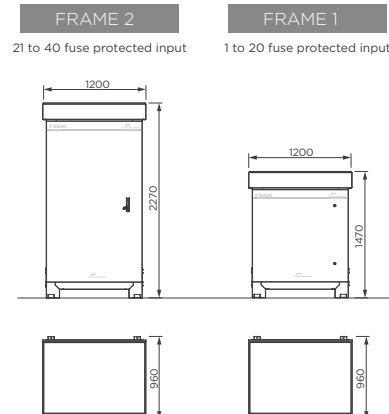
1000

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 ^[1]		FUSE FRAME SIZE		INDEPENDENT STRING LOCKOUT AND TAGOUT		STRING CONFIGURATION		ZONE MONITORING		# MPPT ^[2]		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 ^[2]	63A, 80A, 100A, 125A, 160A	40	1 ON/OFF selector per 40 inputs	N	Negative Pole grounded			4	4 MPPT		
	...	...	B2 ^[2]	160A, 200A, 250A, 315A, 355A							5	5 MPPT		
	40	40 Inputs (Max UL)	B3 ^[2]	350A, 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										



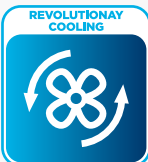
NOTES
 [1] Not all combinations available, consult Power Electronics.
 [2] Consult availability.

HEC-US_{1500V}

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.

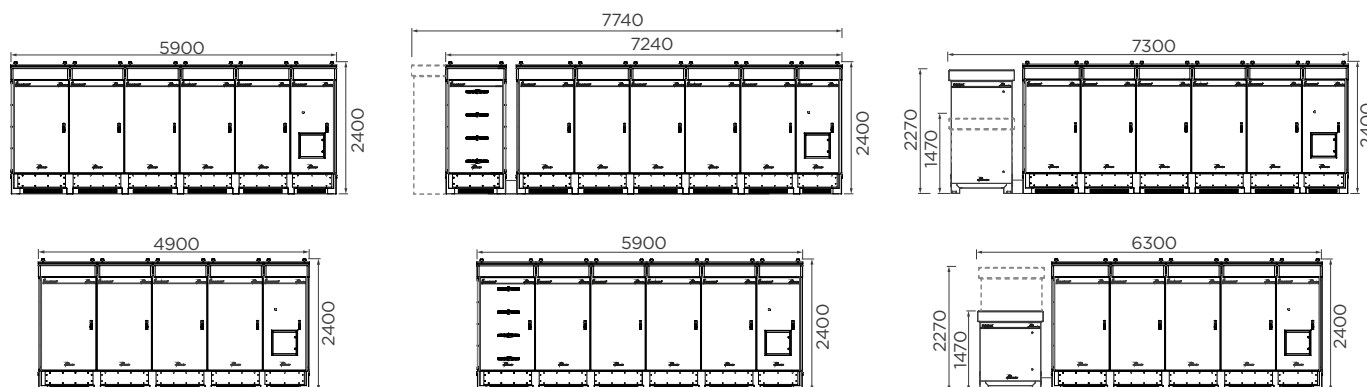
The HEC 1500V is offered with the optional PV array transfer kit and the Smart FSDK DC recombiner. The FSDK is a NEC2014 compliant recombiner featuring up to 40 fused inputs, individual contactors and current monitoring to detect and isolate damaged strings.

TECHNICAL CHARACTERISTICS

		565VAC	600VAC			645VAC		690VAC	
		FR4	FR2	FR3	FR4	FR3	FR4	FR3	FR4
NUMBER OF MODULES		10	5	8	10	7	10	7	10
REFERENCE		FSI880CH15	FSI000CH15	FSI600CH15	FS2000CH15	FSI500CH15	FS2I50CH15	FSI600CH15	FS2300CH15
OUTPUT	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) ^[1]	0.9 leading ... 0.1 lagging / Reactive Power injection at night							
INPUT	Power Curtailment (kVA)	0...100% / 0.1% Steps							
	Minimum MPpt voltage ^[2]	800V	849V			913V		976V	
	MPpt @full power 50°C (VDC) ^[2]	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
EFFICIENCY & AUX. SUPPLY	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							
ENVIRON- MENT	Degree of protection	IP54, NEMA 3R							
	Permissible Ambient Temperature	-30°C ^[3] 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 ^[4]	< 70 dBA							
CONTROL INTERFACE	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							
PROTECTIONS	Digital Outputs	1 electrically-isolated programmable switched relays (250VAC, 8A or 30VDC, 8A)							
	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.

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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/m²
- 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 %



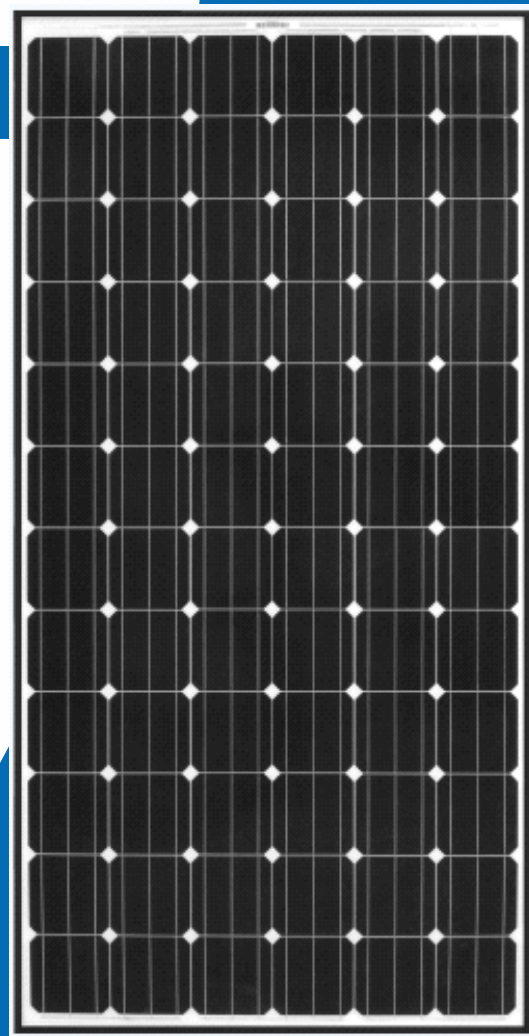
Higher Energy generating module (kWh/kWp)

- 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.

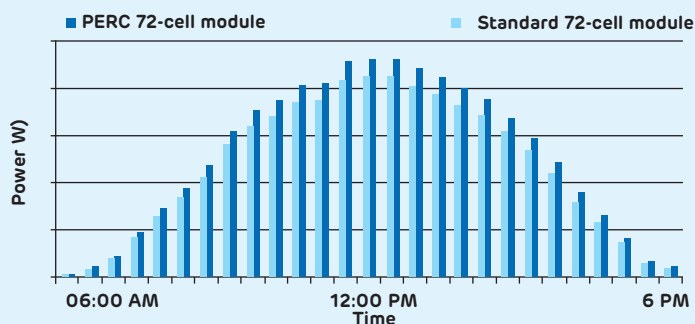


Highly Reliable module with Superior quality control

- **Triple EL** Inspection stages.
- **PID Resistant**.
- Resistance to Salt Mist , Ammonia, Sand & Dust Abrasion.



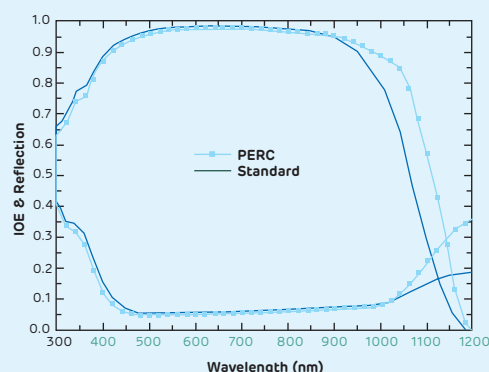
Higher Generation due to PERC Technology



Rigorous Quality Controls

- Rigorous quality control meeting the highest international standards: ISO 9001: 2015, ISO 14001: 2015 and ISO17025: 2005

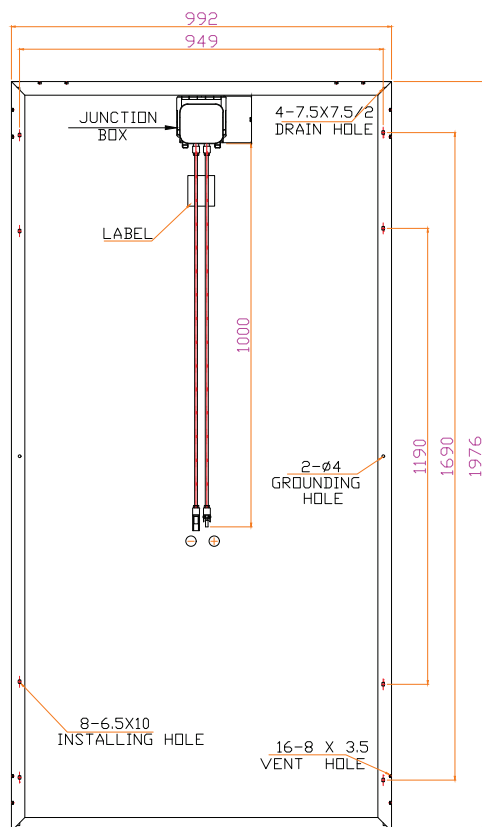
PERC Technology enables better light capturing abilities at longer wavelength, weak & diffused light and at cloudy conditions.



*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/m², 25°C)

Peak Power, (0 ~+ 4.99 Wp) Pmax(Wp)	335	340	345	350
Maximum Voltage, Vmpp (V)	37.96	38.19	38.40	38.59
Maximum Current, Impp (A)	8.84	8.92	9.00	9.08
Open Circuit Voltage, Voc (V)	46.69	46.88	47.08	47.26
Short Circuit Current, Isc (A)	9.39	9.48	9.56	9.68
Module Efficiency (%)	17.09	17.34	17.60	17.85

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5% at 200 W/m² according to EN 60904-1.

Electrical Parameters at NOCT

Power(Wp) at NOCT	244.94	248.6	253.22	256.1
V@Pmax(V) at NOCT	34.79	35.08	35.33	35.61
I@Pmax (A) at NOCT	7.04	7.09	7.17	7.19
Voc (V) at NOCT	42.98	43.19	43.4	43.64
Isc (A) at NOCT	7.64	7.71	7.76	7.84

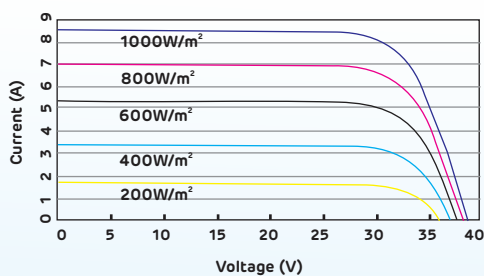
*NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec

Temperature Coefficients (Tc) and permissible operating conditions

Tc of Open Circuit Voltage (β)	- 0.31 % /°C
Tc of Short Circuit Current (α)	0.069 % /°C
Tc 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

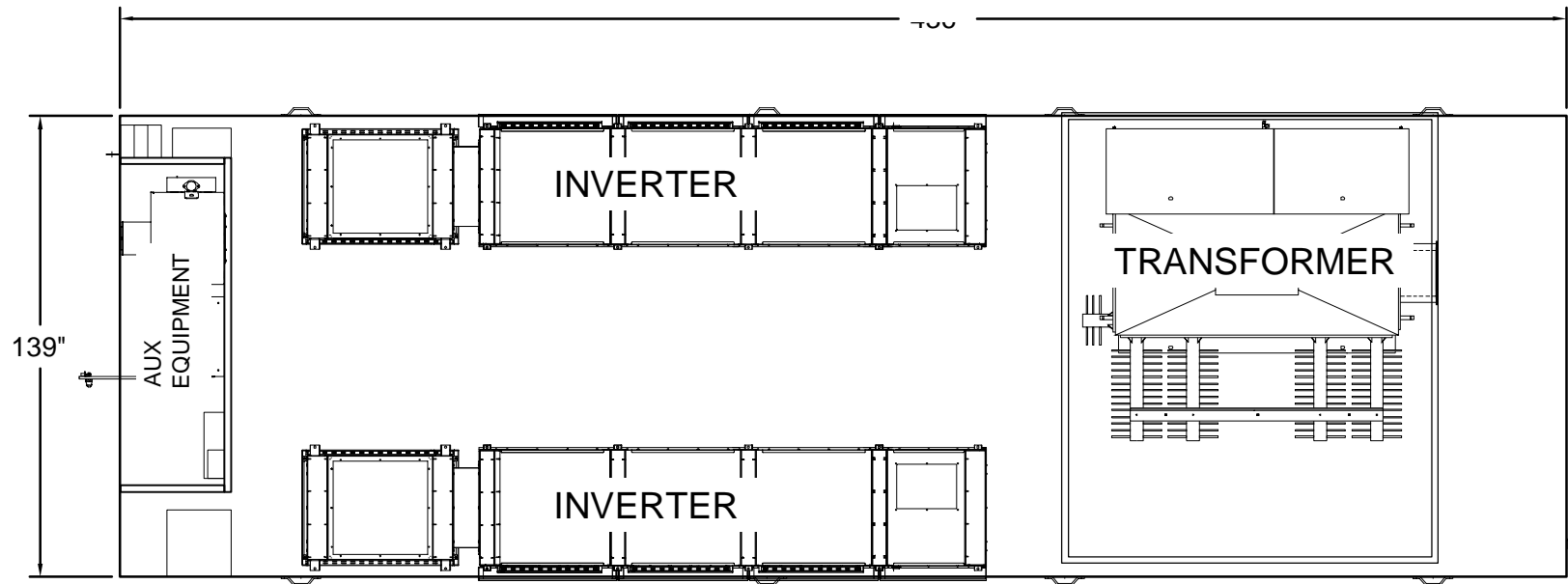
NOTE:

- 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

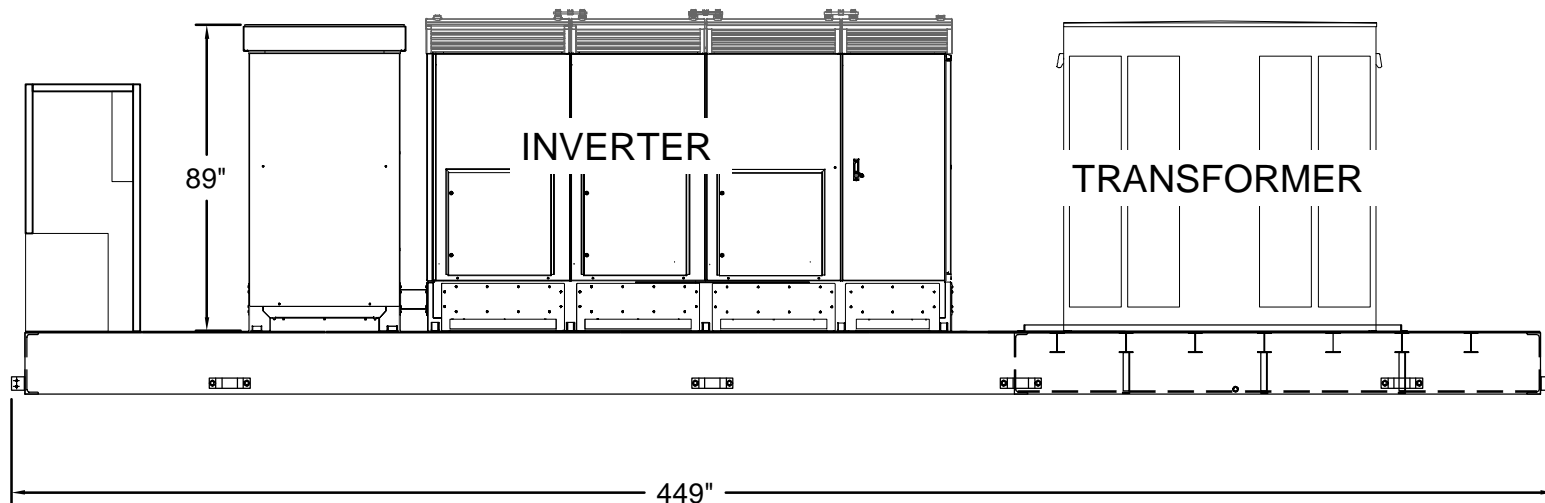
*All Certifications under progress. ** Warranty :- Please read Adani Solar Warranty Documents thoroughly

*This is a preliminary datasheet and is subjected to change as per manufacturer & Certifying body's results.





PLAN VIEW



449"
ELEVATION

INVERTER SKID PLAN AND PROFILE

Exhibit E

Phase I ESA

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
481 & 505 MASHAMOQUET ROAD
POMFRET, CONNECTICUT**

APRIL 2017

Prepared For:

Ecos Energy, LLC
222 South 9th Street, Suite 1600
Minneapolis, Minnesota 55402

Prepared By:



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April 18, 2017

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

**Re: Phase I Environmental Site Assessment Report
481 & 505 Mashamoquet Road, Pomfret, CT**

Dear Mr. Little:

Anchor Engineering has completed the Phase I Environmental Site Assessment (ESA) for the above referenced property in connection with its due diligence investigation. The Phase I ESA study was conducted in accordance with procedures outlined in the American Society of Testing and Materials (ASTM) Designation #E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ESA report also satisfies the requirement that "all appropriate inquiry into the previous ownership and uses of the subject property consistent with good commercial or customary practice" has been performed.

If you have any questions or comments on this report, please feel free to contact us at (860) 633-8770.

Sincerely,

Solomon A. Gibson
Environmental Scientist

Paul W. Martell, LEP
Senior Environmental Geologist

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1.0 INTRODUCTION

1.1 Purpose

Ecos Energy, LLC retained Anchor Engineering Services, Inc. (Anchor Engineering) (herein after referred to as the “*environmental professional*”) to conduct a Phase I Environmental Site Assessment (ESA) of approximately 25.1-acres for two abutting properties located at 481 & 505 Mashamoquet Road, Pomfret, Connecticut (referred to herein after as the “*subject property*”).

The purpose of this Phase I ESA is to identify, to the extent feasible, recognized environmental conditions in connection with the property. This is accomplished via:

- Site reconnaissance
- Review of an environmental database search of the property
- Review of state, federal, and local records of an environmental nature pertaining to the subject property and other properties within the specified search radii.
- Interviews with persons familiar with the current and former site uses and operations, and with local government officials as applicable.

1.2 Scope of Services

The Phase I ESA was completed in accordance with procedures outlined in the American Society of Testing and Materials (ASTM) Designation #E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The United States Environmental Protection Agency (EPA) has determined that this standard is in full compliance with the requirements for conducting All Appropriate Inquiry (AAI) established by the EPA in 40 CFR Part 312. Other reference materials that were also utilized in the preparation of this Phase I ESA include the Connecticut Department of Energy & Environmental Protection’s (DEEP’s) “Transfer Act Site Assessment (TASA) Guidance Document” (1989, rev. 1991) and “Site Characterization Guidance Document” (September, 2007, rev. 2010).

The methodologies contained in these reference materials represent good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. This Phase I ESA study does not include any sample collection or analysis of soil, water, gases, or other on-site materials. Asbestos, lead-based paint, and mold surveys were neither requested nor performed as part of this Phase I ESA.

1.3 Significant Assumptions

Anchor Engineering has performed the historical and environmental records searches in accordance with current ASTM and industry practice. The data, findings, and conclusions presented in this ESA report are based upon a detailed search, review and analysis of the documents, and interviews as well as observations made during the site inspection.

While this report provides a technical overview of past and present environmental concerns, it is limited by the availability of information at the time of this ESA study. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the property may have occurred which could not be identified. The conclusions and recommendations regarding environmental conditions that are presented in this report are based on a scope of work authorized by Ecos Energy, LLC.

1.4 Limitations

This report has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM 1527-13, and contains all of the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

Anchor Engineering obtained the standard environmental record sources for review and analysis from a non-governmental commercial source Environmental Data Resources Inc. (EDR) that updates the records from the source government agencies at least every 90 days, or within 90 days of the date each government agency makes the information available to the public. The government records report compiled by EDR contains information on sites that are listed on select environmental databases and where their exact mapped location is not known. These sites are referred to as orphan sites in the database report. Anchor Engineering reviewed these orphan sites to determine if any of these listings apply to the subject property or specified minimum search radii. When the locations of these orphan sites were determined, information on these sites was incorporated into the corresponding sections.

Several environmental databases, available at the Connecticut DEEP public file room, were reviewed as part of this ESA study for the subject property. When reviewing public record sources, only files that were publicly available and reasonably ascertainable were reviewed during this ESA study. While reviewing files from various government sources, all data in the files were assumed complete and accurate. Obvious errors or inconsistencies in the files, where encountered, are documented in this report.

The services performed and outlined in this report were based, in part, upon visual observations of the site and attendant structures. Our opinion cannot be extended to portions of the site that were unavailable for direct observation, or reasonably beyond the control of Anchor Engineering.

The conclusions of this report are based in part, on information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the site in locations not specifically investigated. Should such an event occur, Anchor Engineering must be notified in order that we may determine if modifications to our conclusions are necessary.

1.5 Special Terms and Conditions

There are no special terms and conditions concerning this project other than those specifically described in Section 1.2 (Scope of Services).

1.6 User Reliance

This report may be distributed and relied upon by the user, Ecos Energy, LLC. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the expressed written consent of Anchor Engineering or Ecos Energy, LLC.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The subject property consists of two undeveloped parcels that cover approximately 25.1-acres in total. The parcels have an address of 481 & 505 Mashamoquet Road, Pomfret, Connecticut. Tax Assessor records identify the parcel as Map 28, Lot B, Block 003.00 and Map 28, Lot B, Block 003.04. The parcels are zoned as residential properties. A site location map is included as *Figure 1*.

The approximate site coordinates are latitude 41°51'41.99"N and longitude 72°00'4.11"W. The legal descriptions of the subject property are provided in *Appendix A*.

2.2 Site and Vicinity General Characteristics

The subject property is located on the north side of Mashamoquet Road (Rout 44) in Pomfret (see *Figure 1*). The subject property is surrounded by residential and undeveloped land on every side.

2.3 Current Use of Property

The subject property contains no structures, the foundation remains of both a residential building and a barn/garage building located directly behind the remains of the residence in the south. The exact locations of the foundations are plotted on a map attached in *Appendix A*. Some open space in the west may have been used as a hay field. The northeastern portion of the site is heavily wooded and abuts farmland. Abington Brook also crosses the property in the northeast portion of the site.

2.4 Descriptions of Structures, Roads, and/or Other Improvements on site

There are currently no structures on the subject property. There are areas of open fields to the west abutting a residence. The northern portion of the subject property is abutted by a heavily forested area. A portion of Abington Brook passes through the forested area in the northeast portion of the property.

2.5 Current Use of Adjoining Properties

The surrounding properties along Mashamoquet Road (Rout 44) contain a mixture of rural and residential properties. More specific details on the land use for the surrounding area are provided below.

North:	Heavy wooded and farm land.
South:	Residential properties.
East:	Residential properties and undeveloped land.
West:	Manicured grassland/open field.

3.0 USER PROVIDED INFORMATION

3.1 Title Records

Research of this site for this Phase I ESA found that:

- No information was received pertaining to a search of past title records for the subject property.
- A professional title search company was not retained for the Phase I ESA study.

3.2 Environmental Liens or Activity and Use Limitations

No environmental liens or Activity Use Limitations (AUL) were identified on the subject property during the conduct of this Phase I ESA study.

3.3 Specialized Knowledge

No specialized knowledge was identified for the subject property during the conduct of this Phase I ESA study.

3.4 Commonly Known or Reasonable Ascertainable Information

No commonly known or reasonably ascertainable file information was identified for the subject property in the reviewed municipal or state files.

Copies of site specific municipal file documents found for the subject property are presented in *Appendix A*.

3.5 Valuation Reduction for Environmental Issues

It is Anchor Engineering's opinion that the environmental professional is not qualified to consider the relationship of the purchase price to the fair market value of the property, or consider whether any differential is due to potential environmental contamination. Anchor Engineering has no appraisal or valuation reduction information for the subject property.

3.6 Owner, Property Manager, and Occupant Information

The current owner of the two subject properties are David and Lorena Morin. The properties are currently vacant with no structures.

3.7 Reason for Performing Phase I

The purpose of this Phase I ESA study is the due diligence for a potential purchase of the property.

4.0 RECORDS REVIEW

4.1 Standard Environmental Record Sources

State and Federal regulatory information was reviewed for the site and vicinity by conducting a review of available files at the DEEP, the Pomfret Town Hall and other municipal offices, and through an electronic database search performed by EDR. The electronic database search distances were reviewed based on minimum search distance requirements as outlined in the American Society of Testing and Materials (ASTM) Designation #E 1527-13 for ESAs. A copy of the EDR database summary report is provided in *Appendix B*.

The EDR database report includes sites that are listed on select environmental databases where their exact mapped location is not known. These sites are referred to as orphan sites in the database report. Anchor Engineering reviewed these orphan sites to determine, if possible, if any of these listings apply to the subject property. When the locations of these orphan sites were determined, information on these sites was incorporated into the corresponding subsections.

4.2 Federal Environmental Records

4.2.1 Federal NPL Site List

The subject property is not included on the EPA's *National Priority List* (NPL). No NPL site was identified within the specified minimum search distance (1.0-mile).

4.2.2 Federal Delisted NPL Site List

Neither the subject property nor any site within a 0.5-mile search radius of the subject property was included on the EPA's *Federal Delisted NPL Site List*.

4.2.3 Federal CERCLIS List (Active & Archived Sites)

The *Comprehensive Environmental Response, Compensation and Liability Information System* (CERCLIS) list is a database maintained by the EPA and contains sites that have been investigated or are currently being investigated for possible inclusion on the NPL. It is used to track activities conducted under its Superfund program. Specific information is tracked for each individual site, and they are generally divided into two categories: active and archived sites. Active CERCLIS sites are sites at which site assessment; removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted under the Superfund program. Archive sites (referred to as NFRAP on the FirstSearch database report) indicate the site has no further interest under the Federal Superfund Program based on available information.

The subject property is not included on the CERCLIS list (Active & Archived Sites). No active sites were identified on the CERCLIS list within the specified minimum search radius (0.5-mile). No active

sites or NFRAP sites on the CERCLIS List were identified within the specified minimum search radius. Federal RCRA CORRACTS *Facilities List*

The subject property was not included on the *Resource Conservation and Recovery Act (RCRA) Corrective Action Sites (CORRACTS) Facilities List*. No sites were identified on the list within the specified minimum search distance (1.0-mile).

4.2.4 Federal RCRA non-CORRACTs TSD Facilities List

The subject property is not included on the *Federal RCRA non-CORRACTS Treatment, Storage, and Disposal (TSD) Facilities List*. No sites were identified on the list within the specified minimum search distance (0.5-mile).

4.2.5 Federal RCRA Generators List

The subject property was not identified on the *Federal RCRA Generators list*. No site was identified within the specified minimum search distance (abutting properties).

4.2.6 Federal Institutional Controls/Engineering Controls Registries

The subject property is not included on the *Federal Institutional Controls/Engineering Controls Registries*.

4.2.7 Federal ERNS List

The subject property was not identified on *the Federal Emergency Response Notification System (ERNS) List*.

4.3 State Environmental Records

4.3.1 State and Tribal-Equivalent NPL (a.k.a. State Priority List [SPL])

The subject property is not identified on the *State and Tribal-Equivalent NPL*.

4.3.2 State and Tribal-Equivalent Hazardous Waste Sites/CERCLIS List (a.k.a. Inventory of Hazardous Waste Disposal Sites)

The subject property is not included on the *State and Tribal-Equivalent Hazardous Waste Sites/CERCLIS List*. No sites within a 1.0 radius are identified on the *State and Tribal-Equivalent Hazardous Waste Sites/CERCLIS List*.

4.3.3 State and Tribal Solid Waste Disposal Sites

The subject property is not included on the State and *Tribal Solid Waste Disposal* list. No sites were within a 0.5-mile search radius of the subject property.

4.3.4 State and Tribal Leaking Underground Storage Tank (LUST) List

The subject property was not identified on the *State and Tribal LUST* List. One site was identified within a 0.5-mile radius of the subject property were identified on the *State and Tribal LUST* list. Summary information is provided in *Appendix C*.

- **Elwood Elford Residence (138 Covell Rd):** This site is located 0.377-mile east-northeast (down gradient) of the subject property according to the EDR report. Records indicate that there was an unknown quantity of heating oil leaking from an underground storage tank. The case status is listed as under investigation. However, the incident date was reported as February 27, 1996.

Bases on the topographical factors, the identified off-site LUST site is not anticipated to pose a significant environmental concern to the subject property.

4.3.5 State and Tribal Registered Underground Storage Tank (UST) List

The subject property was not identified on the *State and Tribal UST List*. One site was identified within the specified minimum search distance (adjoining properties) in the EDR report. Summary information is presented below:

- **Mashamoquet Brook State Park (RT 44):** This site is located 0.124-mile southeast (down gradient) of the subject property according to the EDR report. Records indicate that there was 1,000-gallon gasoline tank was filled with inert material in 1986, and the case status is listed as permanently closed.
- **Pomfret General Repair Inc. (RT 44):** The site location of this property is unknown in relation to the subject property. According to the EDR report, records indicate that a steel or asphalt coated 4,000-gallon gasoline tank was installed in 1983. The case status is listed as permanently closed as the tank has been removed from the ground. The date of the UST removal was not reported.

Bases on the topographical factors, and incident date, the identified off-site UST sites are not anticipated to pose a significant environmental concern to the subject property.

4.3.6 State and Tribal Institutional Control/Engineering Control Registries

The subject property was not listed on the *State and Tribal Institutional Control Registry*. No sites were identified within a 0.5-mile radius of the subject property.

4.3.7 State and Tribal Voluntary Clean Up Sites

The subject property was not identified as a *State and Tribal Voluntary Clean Up Site*. No sites were identified within a 0.5-mile radius of the subject property on this list.

4.3.8 State and Tribal Brownfield Sites

The subject property was not identified on the *State and Tribal Brownfield Sites* list. No Brownfield sites were identified within a 0.5-mile radius of the subject property. Environmental investigator

4.3.9 Additional Environmental Record Sources

State Oil & Chemical Spills

The DEEP maintains incident reports and related correspondence pertaining to oil and chemical spills. Oil and chemical spill information for the Town of Pomfret, dated from 1973 through 2016, were reviewed for the subject property and for sites within a 0.25-mile search radius. No spills were identified for the subject property. There are no spills identified within the search radius.

Anchor Engineering has reviewed the identified SPILLS sites within the search radius and based on distance, topography, and the fact that the subject property is connected to municipal water service, none of the off-site spills are anticipated to have a significant environmental impact on the subject property.

Connecticut Property Transfer Act Sites

The DEEP maintains a list of sites that have been transferred pursuant to the *Connecticut Property Transfer Act* (Sections 22a-134 through 22a-134e of the Connecticut General Statutes (CGS)). This Act requires the disclosure of environmental conditions when certain real properties and/or businesses ("establishments") are transferred. The subject property is not included on the *Property Transfer Act Sites* list.

Hazardous Waste Generator Inventory

The DEEP obtains copies of manifests associated with shipments of hazardous wastes into and out of the state. The subject property was not identified as a generator or manifest site in the EDR report.

Leachate and Wastewater Discharge Sites

The subject property was not identified in this database. No *Leachate and Wastewater Discharge Sites* were identified within a 0.5-mile radius of the subject property

Vapor Migration

Anchor Engineering has reviewed the possibility for migration of volatile chemical vapors from contaminated groundwater and soil at nearby sites. Based on the topography and presumed groundwater flow direction, it is unlikely that vapor migration due to off-site impacts has impacted the subject property.

4.4 Municipal Environmental Records

4.4.1 Pomfret Assessor's and Clerk's Offices

The Town of Pomfret Assessor's and Clerk's Offices were visited on September 5, 2016 to ascertain ownership information on the subject property. Ownership history information found for the site was previously discussed in section 3.1 (Title Records). The Assessor's cards and legal descriptions of the subject property are provided in *Appendix A*.

4.4.2 Pomfret Fire Marshal

The Town of Pomfret Fire Marshal's Office was visited on March 29, 2017 regarding the subject property. No file information of an environmental nature was found on file for the subject property.

4.4.3 Pomfret Department of Public Works

The Town of Pomfret Department of Public Works was visited on March 29, 2017 regarding the subject property. No File information of an environmental nature was found on the file for the subject property.

4.4.4 Pomfret Building Department

The Town of Pomfret Building Department was visited on March 29, 2017 regarding the subject property. No File information of an environmental nature was found on the file for the subject property.

4.4.5 Pomfret Planning & Zoning Department

The Town of Pomfret Planning and Zoning Department was visited on March 29, 2017 regarding the subject property. No File information of an environmental nature was found on the file for the subject property.

4.4.5 NDDH-Northeast District Department of Health

The NDDH-Northeast District Department of Health was visited on March 29, 2017 regarding the subject property. No File information of an environmental nature was found on the file for the subject property.

4.5 Physical Setting Sources

The site physical setting was compiled from the DEEP Geographic Information System (GIS) database, and available USGS quadrangle maps.

4.5.1 Groundwater Characterization

The GIS mapping was reviewed to determine the groundwater classification for the area of the subject property. Groundwater at the subject property is listed as “GA”. The “GA” classification is utilized by the State to identify: Groundwater existing private and potential public or private supplies of water suitable for drinking without treatment; baseflow for hydraulically connected surface water bodies. Based upon local topography, it appears that regional groundwater flows east to southeast towards Abington Brook.

4.5.2 Surface Water Characterization

There is a surface water identified on the subject property. Abington Brook runs through the northeast portion of the subject site. Abington Brook is classified as a class A surface water body. Class A water bodies are designated habitats for fish and wildlife; recreational use; agricultural and industrial supply and other legitimate uses including navigation.

4.5.3 Geologic Characterization

According to Geographic Information Services (GIS) mapping and information provided by the DEEP, soils beneath the subject property comprised of five soil types.

- 84C Paxton and Montauk fine sandy loams, 8 to 15 percent slopes (western end of site) approx. 5% of site.
- 45B Woodbridge fine sandy loam 3 to 8 percent slopes (western side of site) approx. 20% of site.
- 45C Woodbridge fine sandy loam 8 to 15 percent slopes (center of site) approx. 25% of site.
- 47C Woodbridge fine sandy loam 2 to 15 percent slopes (eastern side of site) approx. 35% of site.
- 102 Pootatuck fine sandy loam (eastern end of site) approx. 15% of site.

The GIS review of surficial materials indicated that surficial materials at the subject property were identified as Thick Till over the western and central areas of the site, comprising approximately 75% of the site; and Till over the eastern area of the site, comprising approximately 25% of the site. Bedrock at the subject property is mapped as the Scotland Schist. The bedrock formation is described as gray to silvery, locally rusty, fine to medium grained schist. Bedrock was not visible at the site or in the vicinity.

4.5.4 Topographic Characterization

The subject property has a gentle slope to the southeast and east in the northern portion. Wetlands were not delineated as part of this Phase I Environmental Site Assessment. There is a potential for wetland areas near Abington Brook in the northeastern portion of the subject property.

4.5.5 Flood Zone Information

The Federal Emergency Management Agency (FEMA) Flood Insurance mapping was reviewed. The subject property is not located in a flood zone.

4.6 Historical Use Information of the Property

The site history has been compiled for the subject property in the subsequent paragraphs. This information was gathered from historic aerial photographs (1934, 1951, 1965, 1970, 1975, 1980, 1985, 1986, 1990, 1995, 2000, 2004, and 2010), and file information from various municipal Departments (i.e. Assessor's Office, Clerk's Office, Planning and Zoning Department, Fire Marshal's Office, Health Department, etc.).

A review of aerial photographs revealed the following information on the subject property:

- 1934 The house and a barn are visible on the subject property. The subject property is surrounded by farmland to the west and south, and with scarce developed commercial to the east. There is a mixture of residential properties, agricultural fields and wooded land in all directions.
- 1951 The subject property is similar to the 1934 photograph with slight increase in residential development in all directions.
- 1965 The subject property is similar to the 1951 photograph. There is a noticeable increase in residential development to the southwest and slightly less wooded land in all directions around the subject property. The farmland located to the north of the main structure is visible.
- 1970 The subject property and surrounding area is similar to the 1965 photograph.
- 1975 The subject property is similar to the 1970 photograph.
- 1980 The house and barn have been demolished and vicinity appear similar to the 1975 photograph.
- 1985 The structures on the subject property are no longer visible. There is only barren land visible.
- 1986 The subject property appears similar to the 1985 photograph.
- 1990 The subject property and surrounding area appear similar to the 1986 photograph.
- 1995 The subject property and surrounding area appear similar to the 1990 photograph.

- 2000 The subject property and surrounding area appear similar to the 1995 photograph.
- 2004 The subject property and surrounding vicinity appear similar to the 2000 photograph.
- 2010 The subject property and surrounding vicinity appear similar to the 2004 photograph.

Select directories from the town of Putman were also researched in an attempt to gather information on former site tenants. Directory information was limited to select years from 1964 to 2016. Limited information was listed and city directories listed one residential tenant for the subject property.

481 & 505 Mashamoquet Road:

- 2001-2003: David and Lorena Morin

Historical Sanborn Fire Insurance Maps for the Town of Pomfret were researched to gather additional information about the history of the subject property. The subject property and immediate vicinity were not mapped.

4.7 Historical Use Information on Adjoining Properties

The area history has been compiled from the same sources referenced in the previous section (Section 4.6 - Historical Use Information of the Property). Historically, the area around the site was mostly residential and wooded/agricultural land. There has been increased residential development in all directions of the subject property since 1934 with increased light commercial development along Mashamoquet Road.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

The subject property was inspected on March 29, 2017 by Mr. Solomon Gibson of Anchor Engineering. Mr. Robert Keith, a realtor completed the owner portion of the ASTM Environmental Questionnaire on behalf of the owner. Mr. Solomon Gibson completed the site visit portion of the ASTM Environmental Questionnaire, which is included in *Appendix E*. Site photographs taken during the site inspection are included in *Appendix D*.

5.2 General Site Settings

The subject site consists of uneven terrain that gently slopes to the east and southeast. There are open grass fields to the west, and slightly wooded areas to the east. The subject property contains the remnants of two building foundations at the center of the property, a concrete barn platform in the southeast, and a shed to the south of the main structure.

Past Use(s) of the Property

The subject property has historically been utilized as residential housing.

Current Uses of Adjoining Properties

The current use of adjoining properties was previously discussed in section 2.5 (Current Uses of Adjoining Properties).

Past Uses of Adjoining Properties

Past uses of adjoining properties was previously discussed in section 4.7 (Historical Use Information on Adjoining Properties).

Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

The geologic, hydrogeologic, hydrologic and topographic conditions on the subject property were previously discussed in section 4.5 (Physical Setting Sources).

Roads

The subject property is accessed by a dirt driveway leading up to the old foundations, spanning from the north to south ends of the main structure along Mashamoquet Road (Route 44).

Potable Water Supply

The subject property is not connected to a Public Water system. There is a well refenced on the map in *Appendix A* on the south side of the main house foundation. However, the well was not located during the site visit.

Sewage Disposal System

The subject property is not connected to a Public Sewer system. There is most likely a septic system associated with the subject property. No records of a septic system removal were found at the time of investigation.

5.3 Exterior Observations

An undeveloped parcel of land frontage along Mashamoquet Road (Route 44). There is a dirt road path that allows access the property via Mashamoquet Road. The property is landscaped in some areas (mainly to the west) with grasslands and lightly wooded areas scattered throughout. The northeastern portion of the property is heavily wooded and crossed by Abington Brook. More trees and shrubs are located at the eastern and northern property boundaries.

Current Use(s) of the Subject Property

The subject property currently contains the remains of a residential building and one barn for storage. No structures are currently present on the subject property.

Past Use(s) of the Subject Property

Past uses of the subject properties have previously been discussed in section 5.2 (General Site Settings).

Storage Tanks, Drums, Hazardous Substance or Petroleum Product Containers

No drums or hazardous substance containers were observed on the subject property.

PCBs

No features were identified on the subject property that is currently suspected of potentially containing PCBs.

Odors

There were no odors detected on the subject property during the site inspection.

Pits, Ponds or Lagoons

No pits, ponds or lagoons used in association with waste disposal or waste treatment were observed on the subject property during the site inspection.

Stained Soil or Pavement

No stained soil was observed outside the building during the site inspection.

Stressed Vegetation

No stressed vegetation was observed during the site inspection.

Solid Waste

No solid waste was observed during the site inspection

Waste Water

No sign of waste water, either generated or discharged, was observed on the subject property at the time of the site inspection.

Wells

No monitoring wells were observed on site. There is a well referenced on a map in Appendix A used for a potable water supply.

Septic Systems

There is no known septic system on the property, but it is likely there was one associated with the subject property.

5.4 Interior Observations

No structures are present on the subject property. There are only remnants of the foundations where structures once stood.

6.0 INTERVIEWS

6.1 Interview with Owner

Mr. Robert Keith a realtor, completed the “owner” portion of the ASTM Environmental Questionnaire. Solomon A. Gibson of Anchor Engineering completed the “observed during site visit” section of the ASTM Environmental Questionnaire as part of this ESA study, which is included in *Appendix E*.

6.2 Interviews with Site Manager

The owner of the property is also the site manager, as such, no separate interview is applicable.

6.3 Interview with Site Occupants

There are no occupants living on site currently.

6.4 Interviews with Local Government Officials

Anchor Engineering personnel interviewed individuals from the Town of Pomfret Assessor’s Office, Clerk’s Office, Engineering, Planning & Zoning Department and the NDDH-Northeast District Department of Health to obtain information regarding site ownership, zoning classification, current and former property uses.

6.5 Interviews with Others

No other people associated with the property were interviewed as part of this report.

7.0 FINDINGS

The following findings were made based on information generated through the Phase I ESA report:

- The subject property consists of two undeveloped parcels that cover 25.1-acres in total. The properties addresses are 481 & 505 Mashamoquet Road, Pomfret, Connecticut. Tax assessor records identify the parcels as Map 28, Lot B, Block 003.00 and Map 28, Lot B, Block 003.04 respectively. The parcels are zoned residential.
- The property is undeveloped with the remains of a residential building and barn foundations.
- The subject property has historically been utilized as a residential dwelling. Records show different tenants from 2001 to 2003.
- The subject property is located in a GA groundwater area.
- Based on the local topography, it appears that groundwater flows east towards Abington Brook.
- The surrounding properties are a mixture of residential and commercial land.
- Neither the subject property or any of the adjacent properties are listed on any federal or state databases for hazardous materials.
- Several properties in the area were identified on various environmental databases (spills, LUST, UST, etc.) within minimum search radii. None of these properties appear to present a significant environmental concern to the site.

8.0 CONCLUSIONS

Anchor Engineering has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 on approximately 25.1-acres of property located at 481 & 505 Mashamoquet Road, Pomfret, Connecticut. No exceptions to, or deletions from, this practice are described in this report. This assessment did not reveal evidence of a recognized environmental conditions (RECs) in connection with the subject property.

9.0 OPINION

Based on the conditions identified in the findings section (above), Anchor Engineering offers the following opinions on the subject property:

- Based observations and file information found during the course of this Phase I Environmental Assessment, the subject property does not appear to qualify as an “establishment” as defined by Section 22a-134 through 22a-134e of the Connecticut General Statutes (and amended by Public Acts 09-03 and 09-235). No file records have been found showing hazardous waste was ever generated on site. No evidence has been found to indicate that the site was ever used for purposes that would qualify it as an establishment (dry cleaning, furniture stripping, auto body repairs, or hazardous waste generation).

10.0 DEVIATIONS

Any data gaps or inconsistencies have been identified in this Phase I ESA report.

11.0 ADDITIONAL SERVICES

No additional services related to completing the Phase I environmental site assessment are proposed at this time.

12.0 REFERENCES

The following documents, maps, or other publications may have been used in the preparation of this report:

- American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-13)
- United States (US) Environmental Protection Agency (EPA) Code of Federal Regulations 40 CFR Part 312 Standards and Practices for All Appropriate Inquiries; Final Rule (November 1, 2005)
- Environmental Data Resources, Inc. –First Search Report (March 30, 2017)
- Federal Emergency Management Agency, National Flood Insurance Program, Flood Insurance Maps
- Geographic Information Systems at DEEP, includes:
 1. United States Department of Agriculture, Natural Resources Conservation Service, Soil Surveys
 2. United States Geological Survey Topographic Maps, Surficial and Bedrock Geologic Maps
 3. Connecticut Department of Environmental Protection, Drainage Basins/Watersheds
- Connecticut Department of Energy & Environmental Protection files
- Connecticut State Library, Historical Sanborn Fire Insurance Maps, aerial photos, and Town directories for the subject property.
- Town of Pomfret Departmental files (Assessor's Office, Clerk's Office, Department of Public Works, Planning and Zoning, Engineering, NDDH-Northeast Department of Health and Fire Marshal)

13.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

This Phase I ESA report was prepared by Mr. Solomon A. Gibson and Mr. Paul Martell of Anchor Engineering Services, Inc.

I declare that to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in 40CFR 312.10. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property.



Solomon A. Gibson
Environmental Scientist



Paul W. Martell, LEP
Senior Environmental Geologist

14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Resumes for Mr. Gibson and Mr. Martell are included in *Appendix F*.

FIGURES

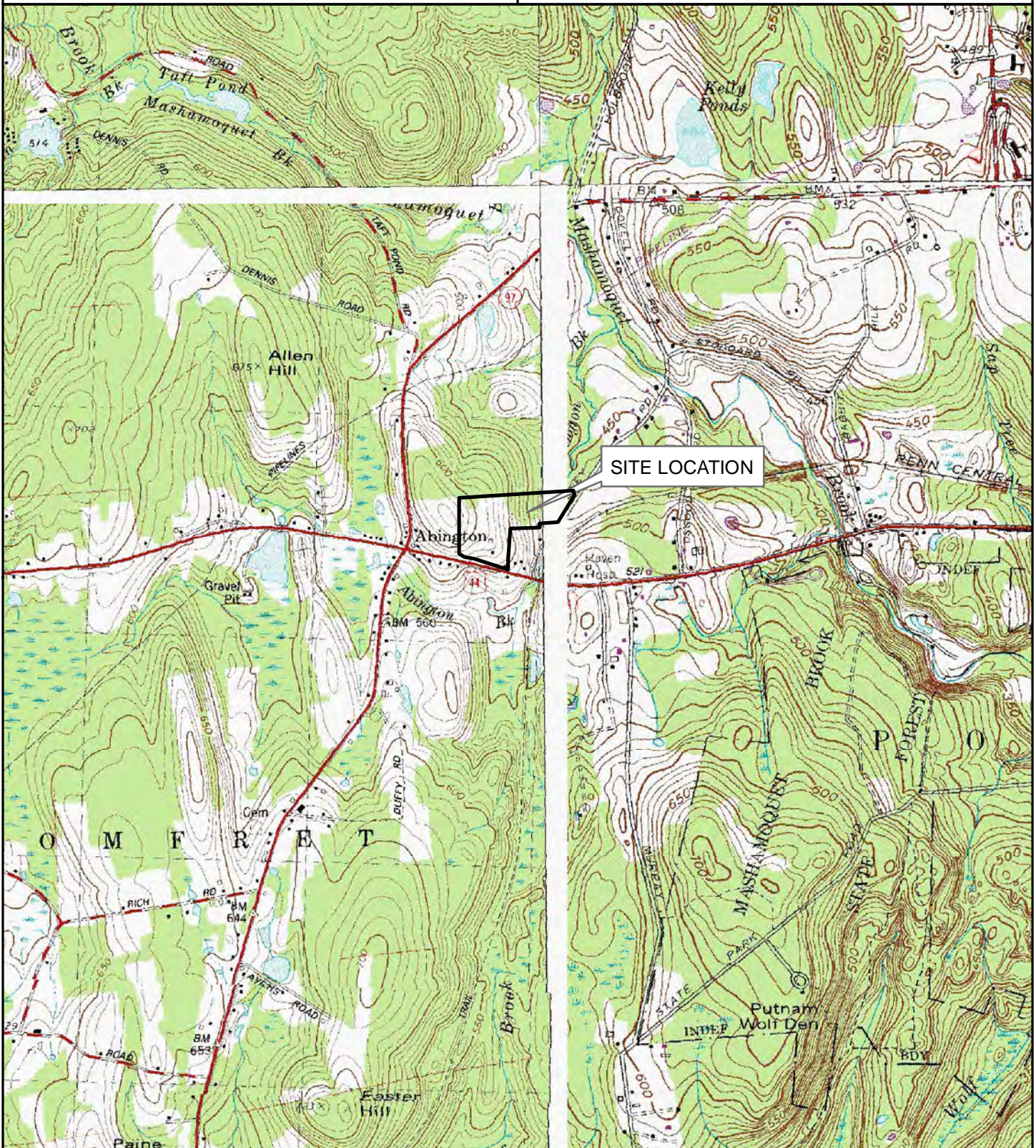


ANCHOR
ENGINEERING SERVICES, INC.

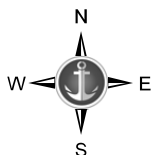
41 Sequin Drive
Glastonbury, CT 06033
Phone: (860) 633-8770
Fax: (860) 633-5971

PHASE I ENVIRONMENTAL SITE ASSESSMENT

481 AND 505 MASHAMOQUET ROAD
POMFRET, CONNECTICUT



USGS TOPO
QUAD # 42 & 43
HAMPTON AND
DANIELSON, CT



0 1,000 2,000 4,000 6,000 Feet

FIGURE
1

PROJECT
1308-02

DATE
03/29/17

APPENDIX A
MUNICIPAL FILE INFORMATION

CURRENT OWNER MORIN DAVID V & LORENA PO BOX 9 CHEPACHET, RI 02814 Additional Owners:		TOPO. 4 Rolling	UTILITIES	STRT./ROAD 1 Paved	LOCATION 2 Suburban	CURRENT ASSESSMENT Code 6-3 Appraised Value 150,650 Assessed Value 6,630		6112 POMFRET, CT			
SUPPLEMENTAL DATA Other ID: 490 PENALTY EXPIRED DEV RIGHT COM/IND US SURVEY # 310 DEV LOT # 4 CENSUS 9025 EASEMENTS ADD'L EASEM 10 MILL EXP GIS ID: 00115300 ASSOC PID#						VISION					
RECORD OF OWNERSHIP MORIN DAVID V & LORENA HOWE VICTOR J		BK-VOL/PAGE 0083/0258 0038/0335	SALE DATE q/u v/i 11/15/1989 U 06/28/1962 U I	SALE PRICE V.C. 0	PREVIOUS ASSESSMENTS (HISTORY) Yr. Code Assessed Value Yr. Code Assessed Value Yr. Code Assessed Value 2016 6-3 6,630 2015 6-3 6,630 2014 6-3 6,630 Total: 6,630 Total: 6,630 Total: 4,830						
EXEMPTIONS		OTHER ASSESSMENTS		APPRAISED VALUE SUMMARY							
Year	Type	Amount	Description	Number	Amount	Comm. Int.	Appraised Bldg. Value (Card) 0				
NBHD/ SUB		NBHD Name		Tracing		Appraised XF (B) Value (Bldg) 0					
0060/A						Appraised OB (L) Value (Bldg) 0					
						Appraised Land Value (Bldg) 0					
						Special Land Value 150,650					
						Total Appraised Parcel Value 150,650					
						Valuation Method: C					
						Adjustment: 0					
						Net Total Appraised Parcel Value 150,650					
BUILDING PERMIT RECORD											
Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments	Purpose/Result		
									Field Review		
									Measure+ Listed		
									Change		
									Review by A-		
									Measure+ Listed		
LAND LINE VALUATION SECTION											
B #	Use Code	Use Description	Zone	D	Front	Depth	Units	Unit Price	C. ST. Factor Idx		
1	8100	Open Space	RR				1.00 AC	58,500.00	1.0000 5		
1	8100	Open Space	RR				1.90 AC	5,000.00	1.0000 0		
1	8100	Open Space	RR				17.70 AC	5,000.00	1.0000 0		
Total Card Land Units: 20.60 AC									Parcel Total Land Area: 20.6 AC		
Total Land Value:									150,650		

CONSTRUCTION DETAIL				CONSTRUCTION DETAIL (CONTINUED)			
Element	Cd.	Ch.	Description	Element	Cd.	Ch.	Description
Model	00		Vacant				
				MIXED USE			
				Code	Description	Percentage	
				8100	Open Space	100	
				COST/MARKET VALUATION			
				Adj. Base Rate: 0.00			

CONSTRUCTION DETAIL				CONSTRUCTION DETAIL (CONTINUED)																																																																																																																								
Element	Cd.	Ch.	Description	Element	Cd.	Ch.	Description																																																																																																																					
Model	00		Vacant																																																																																																																									
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				Code	Description	Sub	Sub Descript	L/B Units	Unit Price	Yr	Gde	Dp Rt	Cnd	%Cnd	Apr Value																																																																																																													
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Ttl. Gross Liv/Lease Area:

0	0	0	0
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No Photo On Record

No Photo On Record

SCHEDULE A

A certain tract or parcel of land with the buildings thereon situated in the Town of Pomfret, County of Windham and State of Connecticut, and more particularly bounded and described as follows:

"The Home Place with the buildings thereon situated on the northerly side of Highway Route U.S. #44, on the easterly side of State Highway Route #97, and on the northwesterly side of Cheney Road: Beginning at a concrete highway bound in the northerly line of Highway Route U.S. #44, said concrete highway bound marking a southeasterly corner of the within described tract of land and being in the westerly line of land now or formerly of Reuel E. Young; thence N 15° 36' E 112.5 feet, along wall adjoining said Young land, to a corner of land now or formerly of Orren A. Weeks; thence N 15° 31' E 468 feet, along wall adjoining said Weeks land, to a corner of wall; thence S 81° 36' E 404 feet, along wall adjoining said Weeks land, to a corner of wall and fence in the westerly line of land now or formerly of William T. Cheney; thence N 13° 11' E 65.3 feet, along fence adjoining said Cheney land, to an iron bound; thence S 80° 10' E 239.6 feet, along fence and wall adjoining said Cheney land and adjoining land now or formerly of David M. Robbins, to an iron bound at a corner of wall on the northwesterly side of Cheney Road; thence N 43° 44' E 438.4 feet, along wall on the northwesterly side of Cheney Road, to an iron bound at a corner of wall at a corner of land now or formerly of William Cheney; thence N 9° 01' E 85 feet, along wall adjoining said Cheney land to a corner of wall and fence, a corner of land now or formerly of Alfred L. Arnold and Gertrude S. Arnold; thence N 84° 30' W 354 feet, along fence and crossing a brook adjoining said Arnold land; thence N 82° 45' W 392 feet, along wall adjoining said Arnold land; thence N 82° 15' W 127 feet, along wall adjoining said Arnold land; thence N 82° 30' W 171 feet along wall adjoining said Arnold land; thence N 82° 45' W 213 feet, along wall adjoining said Arnold land; thence N 82° 15' W 761 feet, along wall adjoining said Arnold land; thence N 81° 00' W 363 feet, along wall adjoining said Arnold land, to a drill hole in a rock in a corner of wall in the easterly line of the before mentioned State Highway Route #97; thence S 5° 00' W 220.7 feet, along wall on the easterly line of said State Highway Route #97, to a drill hole in a rock in a corner of wall at a corner of land now or formerly of Edna B. Sharpe; thence S 72° 35' E 239.4 feet, along wall adjoining said Sharpe land, to a corner of wall; thence S 16° 35' E 239.4 feet, along wall adjoining said Sharpe land, to a corner of wall; thence S 16° 35' W 436.2 feet, partly along wall adjoining said Sharpe land, to a drill hole in a rock in the line of remains of wall in the northerly line of land now or formerly of the Town of Pomfret; thence S 57° 43' E 72.99 feet, along remains of wall adjoining said Town land, to a concrete highway bound in the northerly line of Highway Route U.S. #44; thence S 64° 09' E 670.75 feet, along the northerly line of said Route #44, to a concrete highway bound; thence S 67° 07' E 468.68 feet, along the northerly line of said Route #44, to the place of beginning. Containing 34.6 acres of land more or less.

For further reference see a certain plan entitled "Plan of the Home Place of the Estate of John R. Stromberg in the Town of Pomfret, Conn. Scale 1" = 100', Feb. 1, 1962 William W. Pike, Surveyor."

Being the same premises described in a certain Fiduciary Deed from the Estate of John R. Stromberg to Victor J. Howe and Isabel B. Howe, dated June 28, 1962 and recorded in Vol. 38 at Page 335 of the Pomfret Land Records.

Said Isabel F. Howe a/k/a Isabel B. Howe died on July 26, 1985 and reference may be had to a Probate Tax Certificate dated May 21, 1986 and recorded in Vol. 59 at Page 48 of the Pomfret Land Records.

EXCEPT the following tracts or parcels of land which have been conveyed from the aforesaid premises:

1. A certain tract or parcel of land situated on the easterly side of Route #97 in the Abington section of said Town of Pomfret and being more particularly bounded and described in a certain Warranty Deed from Victor J. Howe and Isabel B. Howe to John E. West and Rita A. West, dated January 4, 1985 and recorded in Vol. 55 at Page 20 of the Pomfret Land Records.

2. A certain piece or parcel of land located on the northerly side of Route #44, so-called, in said Abington section of the Town of Pomfret and being the same premises described in a certain Warranty Deed from Victor J. Howe to Walter J. Rucki and Lillian A. Rucki, dated April 30, 1986 and recorded in Vol. 58 at Page 245 of said land records.

(MORE)

SCHEDULE A - Cont'd

3. A certain piece or parcel of land located on the northerly side of said Route #44, containing by estimation 4.34 acres of land, more or less, and known as Lot #2 on a certain map or plan entitled, "Subdivision Map Remaining Land of Victor & Isabella (sic) Howe Conn. Rte 44 and Cheney Road Pomfret, Conn.", and being more particularly bounded and described in a certain Executrix Deed from Lorena Morin, Executrix of the Will of Victor J. Howe to Walter A. Bankowski and Deborah J. Bankowski, dated November 9, 1988 and recorded in the Pomfret Land Records.

Being the same premises described in a certain Certificate of Devise from the Estate of Victor J. Howe to Lorena Morin, dated October 12, 1989 and recorded in the Pomfret Land Records.

RECEIVED: 11/15/89 9:15 ^{A.M.}_{P.M.}

Deborah Johnson
TOWN CLERK OF POMFRET, CT

258

WARRANTY DEED - STATUTORY FORM
Volume 83

#950

I, LORENA MORIN,
of PO Box 9, Chepachet, RI 02814

for consideration paid, grant to DAVID V. MORIN and LORENA C. MORIN, both

of PO Box 9, Chepachet, RI 02814, as joint tenants with the right of survivorship,
with WARRANTY COVENANTS

(Description and encumbrances, if any and any additional provisions)

A certain tract or parcel of land with the buildings thereon, situated on Route 44
in the Town of Pomfret, County of Windham and State of Connecticut, more particularly
bounded and described in Schedule A attached hereto and made a part hereof.

CONVEYANCE TAX RECEIVED

STATE \$ None TOWN \$ None NOLora Johnson
TOWN CLERK OF POMFRET

Signed this 13th day of November 19 89.

Witnessed by:

Thomas E. Dupont
Thomas E. DupontLorena Morin
Lorena MorinJeanne Averna
Jeanne AvernaState of Connecticut,
County of WINDHAM

ss: Killingly

November 13, 1989.

Personally Appeared LORENA MORIN

Signer and Sealer of the foregoing Instrument, and acknowledged the same to be her
free act and deed
before me,

Latest mailing address of Granter:

No. and Street PO Box 9

City Chepachet

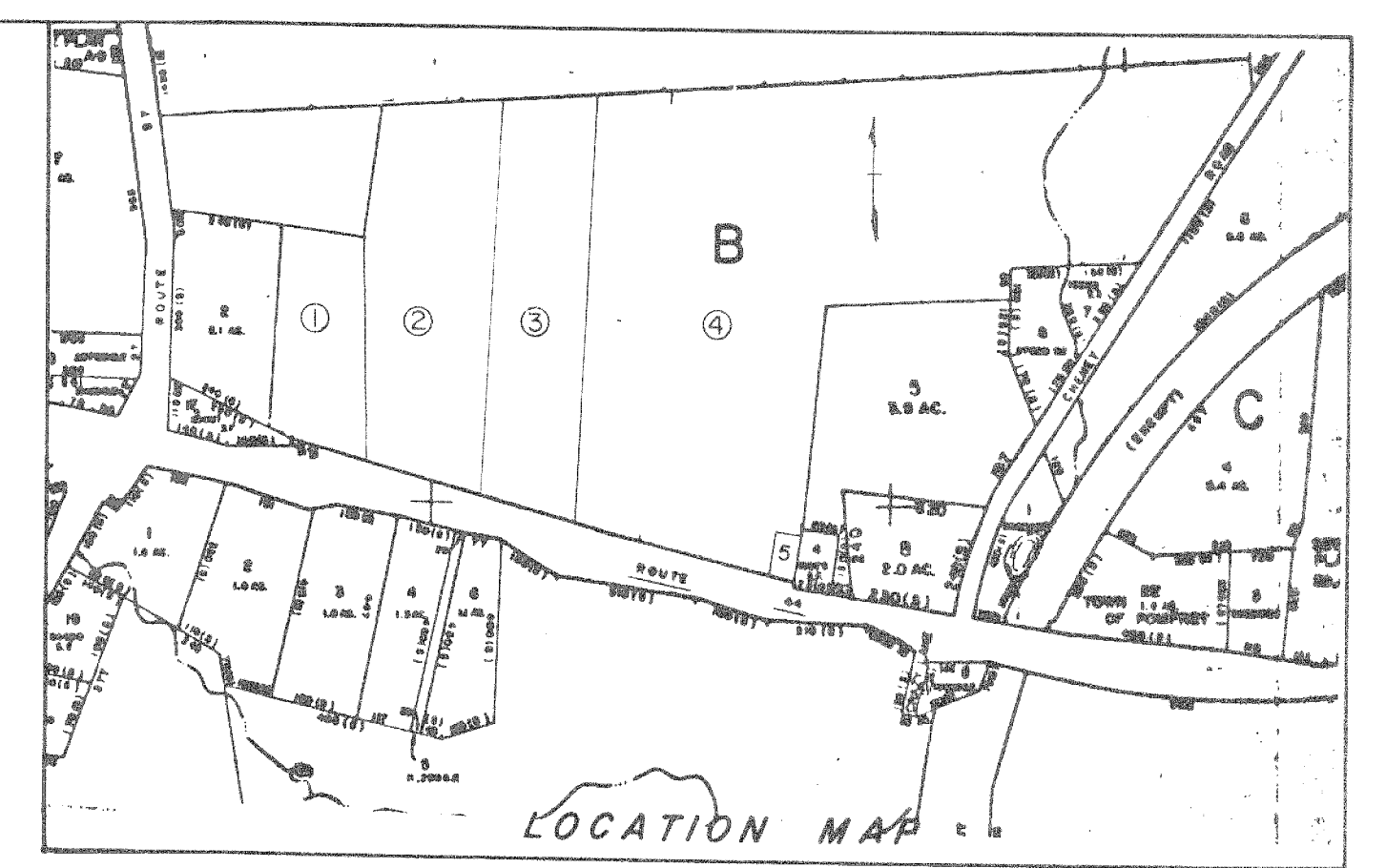
State Rhode Island Zip 02814

Thomas E. Dupont
Thomas E. Dupont
Commissioner of the Superior Court

Title of Officer



N/F ALFRED L. & BEATRICE ARNOLD



LOCATION MAP

N/F JOHN WEST ET. AL.

LOT 1
AREA = 2.15 ± AC.

LOT 2
AREA = 4.34 ± AC.

LOT 3
AREA = 4.52 ± AC.

LOT 4
AREA = 20.51 ± AC.

N/F TOWN OF POMFRET

CONN. RTE. 44

N/F BRADLEY BEELER

N/F EARL CHENEY
N/F DAVID ROBBINS

N/F RUEL YOUNG

LOT 5 IS A LOT "FOR SALE" ONLY AND IS TO BE CONVEYED TO RUEL YOUNG.

NO PERC. TESTS HAVE BEEN TAKEN ON PROPOSED LOTS.
LOTS MAY REQUIRE ENGINEERED SEPTIC SYSTEM.

NOTES

- REFERENCE MADE TO MAPS ENTITLED:
- "PLAN OF THE HOME PLACE OF THE ESTATE OF JOHN R. STROMBERG IN THE TOWN OF POMFRET, CONN. SCALE 1" = 100', FEB. 1, 1962, WILLIAM PIKE, SURVEYOR"
 - "CONNECTICUT STATE HIGHWAY DEPARTMENT, RIGHT OF WAY MAP, TOWN OF POMFRET - HARTFORD - PROVIDENCE ROAD, SCALE 1" = 40', NUMBER III-119, DATE: NOV. 9, 1965, SHEET 1 OF 7."
- HIGHWAY LINE AS SHOWN REPRESENTS CONDITIONS AS FOUND IN THE FIELD.
- CONTOURS AS SHOWN WERE TAKEN FROM U.S. DEPT. OF THE INTERIOR, GEOLOGICAL SURVEY.
- STONE WALLS AND TREES WITH WIRE MAY VARY FROM PRINCIPLE COURSES SHOWN.
- BOUNDARY AS SHOWN MAY VARY FROM THOSE OF DEEDS AND OR REFERENCED MAPS, BUT REPRESENTS CONDITIONS AS FOUND IN THE FIELD.
- WETLANDS TAKEN FROM THE TOWN OF POMFRET, INLAND WETLANDS MAP.
- NO PERC. TEST HAVE BEEN TAKEN ON PROPOSED LOTS. LOTS MAY REQUIRE ENGINEERED SEPTIC SYSTEMS. ALL SYSTEMS MUST BE APPROVED BY THE NORTHEAST DISTRICT DEPARTMENT OF HEALTH, BROOKLYN, CT.
- TOWN SELECTMAN TO APPROVE CURB CUT LOCATION FOR DRIVEWAY PRIOR TO START OF CONSTRUCTION.

SPECIAL NOTE

- Subdivision approved by the Pomfret Planning Commission on January 21, 1986 contingent on the following special conditions:
- 1.) Lots 1, 2 & 3 are "LOTS FOR SALE" only and not to be construed as a building lot at this time.
 - 2.) The following procedure shall be adhered to when applicant is applying to create a buildable lot for Lots 1, 2 & 3.
 - A.) Lots 1, 2 and 3 shall have on site soil testing and require a site plan and may require an engineered design septic system which shall be approved by the Northeast District Department of Health, Brooklyn, Connecticut.
 - B.) Applicant shall apply to the Pomfret Inland Wetlands Commission and present a site plan for their approval showing the proposed location of the house, septic system, driveway, wetlands (if any) etc. and erosion and sediment control procedures to be utilized.
 - C.) Applicant shall apply to the State of Connecticut, Department of Transportation for a curb cut showing location of proposed driveway and obtain their approval.
 - D.) Upon approval by the Inland Wetlands Commission, Northeast Health District and the Department of Transportation the applicant shall apply to the Pomfret Planning Commission for their approval of site plan (each lot shall be approved separately).
 - E.) Applicant upon receiving all necessary and required approvals may apply to the building official for a building permit.

POMFRET LAND RECORDS

RECEIVED FOR RECORDING

DATE February 2, 1986 TIME 10:00 AM MAP NO. 12056

TOWN CLERK William Pike

APPROVED POMFRET PLANNING COMMISSION:

CHAIRMAN William Pike

DATE RECEIVED January 21, 1986

I HEREBY CERTIFY THAT THIS MAP AND SURVEY WERE PREPARED IN ACCORDANCE WITH THE STANDARDS OF A CLASS "A" SURVEY AS DEFINED IN THE CODE OF PRACTICE FOR STANDARDS OF ACCURACY OF SURVEYS AND MAPS ADOPTED DECEMBER 10, 1975 AS AMENDED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.

William Pike 12-15-85 12056 REGISTRATION NO.

TOTAL AREA = 31.65 ± AC.

DATE	INIT	DESCRIPTION

MESSIER & ASSOCIATES
ENGINEERS - SURVEYORS
MANCHESTER, CONNECTICUT

SITE PLANNING FOR SURVEY & CONSTRUCTION

RE-SUBDIVISION MAP

REMAINING LAND OF:
VICTOR & ISABELLA HOWE
CONN. RTE. 44 & CHENEY RD.
POMFRET, CONN.

DATE: 6-86
SCALE: 1" = 100'
DRAWN: W.J.K.
CHECK: R.R.M.
APPROD: R.R.M.

310

SHEET 1

APPENDIX B
ENVIRONMENTAL FIRSTSEARCH DATABASE REPORT

Mashamoquet Rd ESA

481 Mashamoquet Rd
Pomfret Center, CT 06259

Inquiry Number: 4893776.2s
March 30, 2017

FirstSearch Area/Linear Report



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

Search Summary Report

TARGET SITE **481 MASHAMOQUET RD**
POMFRET CENTER, CT 06259

Category	Sel	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
<i>NPL</i>	Y	0	0	0	0	0	0	0
<i>NPL Delisted</i>	Y	0	0	0	0	0	0	0
<i>CERCLIS</i>	Y	0	0	0	0	-	0	0
<i>NFRAP</i>	Y	0	0	0	0	-	0	0
<i>RCRA COR ACT</i>	Y	0	0	0	0	0	0	0
<i>RCRA TSD</i>	Y	0	0	0	0	-	0	0
<i>RCRA GEN</i>	Y	0	0	0	-	-	0	0
<i>Federal IC / EC</i>	Y	0	0	0	0	-	0	0
<i>ERNS</i>	Y	0	-	-	-	-	0	0
<i>State/Tribal CERCLIS</i>	Y	0	0	0	0	0	0	0
<i>State/Tribal SWL</i>	Y	0	0	0	0	-	0	0
<i>State/Tribal LTANKS</i>	Y	0	0	0	1	-	0	1
<i>State/Tribal Tanks</i>	Y	0	2	0	-	-	0	2
<i>State/Tribal IC / EC</i>	Y	0	0	0	0	-	0	0
<i>State/Tribal VCP</i>	Y	0	0	0	0	-	0	0
<i>ST/Tribal Brownfields</i>	Y	0	0	0	0	-	0	0
<i>US Brownfields</i>	Y	0	0	0	0	-	0	0
<i>Other SWF</i>	Y	0	0	0	0	-	0	0
<i>Other Haz Sites</i>	Y	0	-	-	-	-	0	0
<i>Local Land Records</i>	Y	0	-	-	-	-	0	0
<i>Spills</i>	Y	0	-	-	-	-	0	0
<i>Other</i>	Y	0	0	1	1	-	0	2
<i>EDR Exclusive</i>	Y	0	0	0	0	0	0	0
- Totals --		0	2	1	2	0	0	5

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Search Summary Report

**TARGET SITE: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
NPL	NPL	12/05/2016	1.000	0	0	0	0	0	0	0
	Proposed NPL	12/05/2016	1.000	0	0	0	0	0	0	0
	NPL LIENS	10/15/1991	TP	0	-	-	-	-	0	0
NPL Delisted	Delisted NPL	12/05/2016	1.000	0	0	0	0	0	0	0
CERCLIS	FEDERAL FACILITY	09/14/2016	0.500	0	0	0	0	-	0	0
	SEMS	10/10/2016	0.500	0	0	0	0	-	0	0
NFRAP	SEMS-ARCHIVE	10/10/2016	0.500	0	0	0	0	-	0	0
RCRA COR ACT	CORRACTS	12/12/2016	1.000	0	0	0	0	0	0	0
RCRA TSD	RCRA-TSDF	12/12/2016	0.500	0	0	0	0	-	0	0
RCRA GEN	RCRA-LQG	12/12/2016	0.250	0	0	0	-	-	0	0
	RCRA-SQG	12/12/2016	0.250	0	0	0	-	-	0	0
	RCRA-CESQG	12/12/2016	0.250	0	0	0	-	-	0	0
Federal IC / EC	LUCIS	05/28/2015	0.500	0	0	0	0	-	0	0
	US ENG CONTROLS	11/15/2016	0.500	0	0	0	0	-	0	0
	US INST CONTROL	11/15/2016	0.500	0	0	0	0	-	0	0
ERNS	ERNS	09/26/2016	TP	0	-	-	-	-	0	0
State/Tribal CERCLIS	SHWS	04/23/2010	1.000	0	0	0	0	0	0	0
	SDADB	04/23/2010	0.500	0	0	0	0	-	0	0
State/Tribal SWL	SWF/LF	12/16/2016	0.500	0	0	0	0	-	0	0
State/Tribal LTANKS	LUST	10/26/2016	0.500	0	0	0	1	-	0	1
	INDIAN LUST	10/27/2015	0.500	0	0	0	0	-	0	0
State/Tribal Tanks	FEMA UST	01/01/2010	0.250	0	0	0	-	-	0	0
	UST	11/22/2016	0.250	0	2	0	-	-	0	2
	AST	07/01/2016	0.250	0	0	0	-	-	0	0
	INDIAN UST	10/20/2015	0.250	0	0	0	-	-	0	0
State/Tribal IC / EC	ENG CONTROLS	03/05/2013	0.500	0	0	0	0	-	0	0
	AUL	11/09/2016	0.500	0	0	0	0	-	0	0

Search Summary Report

**TARGET SITE: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
State/Tribal VCP	INDIAN VCP	07/27/2015	0.500	0	0	0	0	-	0	0
	VCP	11/09/2016	0.500	0	0	0	0	-	0	0
ST/Tribal Brownfields	BROWNFIELDS	03/25/2016	0.500	0	0	0	0	-	0	0
US Brownfields	US BROWNFIELDS	12/19/2016	0.500	0	0	0	0	-	0	0
Other SWF	SWRCY	12/15/2016	0.500	0	0	0	0	-	0	0
	INDIAN ODI	12/31/1998	0.500	0	0	0	0	-	0	0
	DEBRIS REGION 9	01/12/2009	0.500	0	0	0	0	-	0	0
	ODI	06/30/1985	0.500	0	0	0	0	-	0	0
Other Haz Sites	US HIST CDL	09/30/2016	TP	0	-	-	-	-	0	0
	CDL	10/26/2016	TP	0	-	-	-	-	0	0
	US CDL	09/30/2016	TP	0	-	-	-	-	0	0
Local Land Records	CT PROPERTY	11/09/2016	TP	0	-	-	-	-	0	0
	LIENS	08/11/2016	TP	0	-	-	-	-	0	0
	LIENS 2	02/18/2014	TP	0	-	-	-	-	0	0
Spills	HMIRS	12/28/2016	TP	0	-	-	-	-	0	0
	SPILLS	10/26/2016	0.250	0	0	0	-	-	0	0
	SPILLS 90	10/15/2012	0.250	0	0	0	-	-	0	0
Other	RCRA NonGen / NLR	12/12/2016	0.250	0	0	1	-	-	0	1
	FUDS	01/31/2015	1.000	0	0	0	0	0	0	0
	DOD	12/31/2005	1.000	0	0	0	0	0	0	0
	SCRD DRYCLEANERS	03/07/2011	0.500	0	0	0	0	-	0	0
	US FIN ASSUR	10/11/2016	TP	0	-	-	-	-	0	0
	EPA WATCH LIST	08/30/2013	TP	0	-	-	-	-	0	0
	2020 COR ACTION	04/22/2013	0.250	0	0	0	-	-	0	0
	TSCA	12/31/2012	TP	0	-	-	-	-	0	0
	TRIS	12/31/2014	TP	0	-	-	-	-	0	0
	SSTS	12/31/2009	TP	0	-	-	-	-	0	0
	ROD	11/25/2013	1.000	0	0	0	0	0	0	0
	RMP	08/01/2016	TP	0	-	-	-	-	0	0
	RAATS	04/17/1995	TP	0	-	-	-	-	0	0
	PRP	10/25/2013	TP	0	-	-	-	-	0	0
	PADS	01/20/2016	TP	0	-	-	-	-	0	0
	ICIS	11/18/2016	TP	0	-	-	-	-	0	0
	FTTS	04/09/2009	TP	0	-	-	-	-	0	0

Search Summary Report

**TARGET SITE: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
	MLTS	08/30/2016	TP	0	-	-	-	-	0	0
	COAL ASH DOE	12/31/2005	TP	0	-	-	-	-	0	0
	COAL ASH EPA	07/01/2014	0.500	0	0	0	0	-	0	0
	PCB TRANSFORMER	02/01/2011	TP	0	-	-	-	-	0	0
	RADINFO	01/04/2017	TP	0	-	-	-	-	0	0
	HIST FTTS	10/19/2006	TP	0	-	-	-	-	0	0
	DOT OPS	07/31/2012	TP	0	-	-	-	-	0	0
	CONSENT	09/30/2016	1.000	0	0	0	0	0	0	0
	INDIAN RESERV	12/31/2014	1.000	0	0	0	0	0	0	0
	UMTRA	09/14/2010	0.500	0	0	0	0	-	0	0
	LEAD SMELTERS	12/05/2016	TP	0	-	-	-	-	0	0
	US AIRS	10/12/2016	TP	0	-	-	-	-	0	0
	US MINES	08/05/2016	0.250	0	0	0	-	-	0	0
	FINDS	07/15/2016	TP	0	-	-	-	-	0	0
	AIRS	01/11/2017	TP	0	-	-	-	-	0	0
	CPCS	11/29/2016	0.500	0	0	0	1	-	0	1
	DRYCLEANERS	07/18/2008	0.250	0	0	0	-	-	0	0
	ENF	01/24/2017	TP	0	-	-	-	-	0	0
	Financial Assurance	06/30/2016	TP	0	-	-	-	-	0	0
	LWDS	07/17/2009	0.250	0	0	0	-	-	0	0
	MANIFEST	07/30/2013	0.250	0	0	0	-	-	0	0
	NPDES	01/04/2017	TP	0	-	-	-	-	0	0
EDR Exclusive	EDR MGP	08/28/2009	1.000	0	0	0	0	0	0	0
	EDR Hist Auto	02/20/2007	0.250	0	0	0	-	-	0	0
	EDR Hist Cleaner	02/20/2007	0.250	0	0	0	-	-	0	0
	- Totals --			0	2	1	2	0	0	5

Site Information Report

Request Date: MARCH 30, 2017
Request Name: SOLOMON GIBSON

Search Type: COORD
Job Number: 1308-02

Target Site: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	72.001142	72.0011420 - 72° 0' 4.11"	Easting: 748914.9
Latitude:	41.861664	41.8616640 - 41° 51' 41.99"	Northing: 4638553.0
Elevation:	551 ft. above sea level		Zone: Zone 18

Demographics

Sites: 5 **Non-Geocoded:** 0 **Population:** N/A

RADON

Federal EPA Radon Zone for WINDHAM 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: 06259

Number of sites tested: 2

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
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	3.300 pCi/L	50%	50%	0%

Federal Area Radon Information for WINDHAM COUNTY, CT

Number of sites tested: 204

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area	1.410 pCi/L	86%	14%	0%
Basement	2.180 pCi/L	77%	21%	2%

Federal Area Radon Information for WINDHAM COUNTY, CT

Number of sites tested: 113

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	3.214 pCi/L	93%	0%	7%
Living Area - 2nd Floor	1.300 pCi/L	100%	0%	0%
Basement	4.791 pCi/L	63%	35%	2%

Site Information Report

RADON

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
Sterling	72	52 (72.2)	13 (18)	4 (5.6)	4 (4.2)	0 (0)	0 (0)
Thompson	2	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)
Willimantic	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Windham	82	67 (81.7)	12 (14.6)	3 (3.7)	0 (0)	0 (0)	0 (0)
Woodstock	20	15 (75)	5 (25)	0 (0)	0 (0)	0 (0)	0 (0)
Canterbury	8	4 (50)	1 (12.5)	2 (25)	1 (12.5)	0 (0)	0 (0)
Abington	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Brooklyn	5	3 (60)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)
Chaplin	97	78 (80.4)	18 (1)	1 (18.6)	0 (0)	0 (0)	0 (0)
Danielson	5	3(60)	1 (20)	1 (20)	0 (0)	0 (0)	0 (0)
Dayville	7	5 (71.4)	2 (28.6)	0 (0)	0 (0)	0 (0)	0 (0)
Hampton	2	1 (50)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)
Lisbon	3	1 (33.3)	2 (66.7)	0 (0)	0 (0)	0 (0)	0 (0)
Moosup	3	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
North Windham	6	1 (16.7)	4 (66.7)	1 (16.7)	0 (0)	0 (0)	0 (0)
Pomfret	85	76 (89.4)	6 (7.1)	2 (2.4)	3 (3.5)	0 (0)	0 (0)
Pomfret Center	12	4 (33.3)	7 (58.3)	1 (8.3)	0 (0)	0 (0)	0 (0)
Putnam	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Scotland	22	12 (54.5)	7 (9.1)	1 (4.5)	2 (9.1)	0 (0)	0 (0)
South Windham	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Target Site Summary Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

TOTAL: 5

GEOCODED: 5

NON GEOCODED: 0

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
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No sites found for target address

Sites Summary Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

TOTAL: 5

GEOCODED: 5

NON GEOCODED: 0

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
4	CPCS --Investigation	ELWOOD ELFORD RESIDENCE	138 COVELL RD. POMFRET, CT 06258	0.38 ENE	- 127	1
4	LUST --Investigation --29506	ELWOOD ELFORD RESIDENCE	138 COVELL RD. POMFRET, CT 06258	0.38 ENE	- 127	2
3	RCRA NonGen / NLR M & D TRANSPORTATION --CTR000500637		417 MASHAMOQUET RD POMFRET, CT 06258	0.20 SE	- 22	6
1	UST --Permanently Closed --112-1473	POMFRET GENERAL REPAIR INC.	RT 44 BOX 158 POMFRET CENTER, CT	0.00	+ 5	8
2	UST --Permanently Closed --112-9435	MASHAMOQUET BROOK STATE PARK	ROUTE 44 POMFRET, CT	0.12 SE	- 28	10

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

CPCS

EDR ID: S102413993 **DIST/DIR:** 0.377 ENE **ELEVATION:** 424 **MAP ID:** 4

NAME: ELWOOD ELFORD RESIDENCE

Rev: 11/29/2016

ADDRESS: 138 COVELL RD.
POMFRET, CT 06258

ID/Status: Investigation

SOURCE: CT Department of Energy & Environmental Protection

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

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

LUST

EDR ID: S102413993 **DIST/DIR:** 0.377 ENE **ELEVATION:** 424 **MAP ID:** 4

NAME: ELWOOD ELFORD RESIDENCE

Rev: 10/26/2016

ADDRESS: 138 COVELL RD.
POMFRET, CT 06258

ID/Status: Investigation
ID/Status: 29506

SOURCE: CT Department of Energy & Environmental Protection

LUST:

LUST Id: 1397

UST Facility Id: Not reported

LUST Case Id: 29506

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: 02/27/1996

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: 1396

Contact Info: Not reported

Contact Email: Not reported

Site Contact City,St,Zip: UNKNOWN

2nd Contact: Not reported

2nd Contact Email: Not reported

2nd Contact Address: Not reported

2nd Contact City,St,Zip: UNKNOWN

2nd Contact Address 2: Not reported

2nd Contact City 2: Not reported

2nd Contact Phone Number: Not reported

2nd Contact Fax Number: Not reported

2nd Contact Type: Not reported

Facility City Num: 112

Site Contact: Not reported

Site Contact Address: Not reported

- Continued on next page -

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

LUST

EDR ID: S102413993 **DIST/DIR:** 0.377 ENE **ELEVATION:** 424 **MAP ID:** 4

NAME: ELWOOD ELFORD RESIDENCE

Rev: 10/26/2016

ADDRESS: 138 COVELL RD.
POMFRET, CT 06258

ID/Status: Investigation
ID/Status: 29506

SOURCE: CT Department of Energy & Environmental Protection

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: True
Private Heating Fuel: True
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: 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: 20
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

- Continued on next page -

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

LUST

EDR ID: S102413993 **DIST/DIR:** 0.377 ENE **ELEVATION:** 424 **MAP ID:** 4

NAME: ELWOOD ELFORD RESIDENCE

Rev: 10/26/2016

ADDRESS: 138 COVELL RD.
POMFRET, CT 06258

ID/Status: Investigation
ID/Status: 29506

SOURCE: CT Department of Energy & Environmental Protection

Receptor: Not reported
Ground Water Flow Direction: Not reported
Ground Water Depth: Not reported
Areas Of Concern: Not reported
Free Product Inches: Not reported
Fund Date: Not reported
Fund Planned: No
Fund Obligated: No
Fund Outlayed: No
Fund Judgment: No
Fund Recovered: No
Cellar Borings: 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

- Continued on next page -

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

LUST

EDR ID: S102413993 **DIST/DIR:** 0.377 ENE **ELEVATION:** 424 **MAP ID:** 4

NAME: ELWOOD ELFORD RESIDENCE

Rev: 10/26/2016

ADDRESS: 138 COVELL RD.
POMFRET, CT 06258

ID/Status: Investigation
ID/Status: 29506

SOURCE: CT Department of Energy & Environmental Protection

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

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

RCRA NonGen / NLR

EDR ID: 1016140402 **DIST/DIR:** 0.203 SE **ELEVATION:** 529 **MAP ID:** 3

NAME: M & D TRANSPORTATION

Rev: 12/12/2016

ADDRESS: 417 MASHAMOQUET RD
POMFRET, CT 06258
WINDHAM

ID/Status: CTR000500637

SOURCE: US Environmental Protection Agency

RCRA NonGen / NLR:

Date form received by agency: 10/13/2000

Facility name: M & D TRANSPORTATION

Facility address: 417 MASHAMOQUET RD
POMFRET, CT 06258

EPA ID: CTR000500637

Mailing address: MASHAMOQUET RD
POMFRET, CT 06258

Contact: Not reported

Contact address: Not reported
Not reported

Contact country: US

Contact telephone: Not reported

Contact email: Not reported

EPA Region: 01

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: Not reported

Owner/operator address: Not reported
Not reported

Owner/operator country: Not reported

Owner/operator telephone: Not reported

Legal status: Not reported

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

- Continued on next page -

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

RCRA NonGen / NLR

EDR ID:	1016140402	DIST/DIR:	0.203 SE	ELEVATION:	529	MAP ID:	3
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NAME: M & D TRANSPORTATION

Rev: 12/12/2016

ADDRESS: 417 MASHAMOQUET RD
POMFRET, CT 06258
WINDHAM

ID/Status: CTR000500637

SOURCE: US Environmental Protection Agency

Used oil transfer facility: No

Used oil transporter: No

Violation Status: No violations found

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

UST

EDR ID: U002172258 **DIST/DIR:** 0.000 **ELEVATION:** 556 **MAP ID:** 1

NAME: POMFRET GENERAL REPAIR INC.
ADDRESS: RT 44 BOX 158
POMFRET CENTER, CT

Rev: 11/22/2016
ID/Status: Permanently Closed
ID/Status: 112-1473

SOURCE: CT Department of Energy & Environmental Protection

UST:
Facility State: CT
Facility Id: 112-1473
Latitude: 41.861545
Longitude: -72.001231

Contact:
Owner Name: GEORGE MORRARTY
Owner Address: PO BOX 36
Owner City/State/Zip: ABINGTON, CT 062300036
Owner Phone: Not reported
Owner Phone Ext: Not reported
Affiliation Type: Owner
Contact Name: Not reported
Contact Title: Not reported
Contact EMail: Not reported

Owner Name: GEORGE MORRARTY
Owner Address: PO BOX 36
Owner City/State/Zip: ABINGTON, CT 062300036
Owner Phone: Not reported
Owner Phone Ext: Not reported
Affiliation Type: Registrant
Contact Name: Not reported
Contact Title: Not reported
Contact EMail: Not reported

Tank ID: A-1
Compartment ID: a
Tank Status: Permanently Closed
Tank Material: Asphalt Coated or Bare Steel
Secondary Material: Not reported
Capacity: 4000
Substance: Gasoline
Date Installed: 01/01/1983
Date Last Used: Not reported
Closure Status: Tank was Removed From Ground
Pipe Material: Other (Specify)
Pipe Mode Description: Not reported
Spill Installed: Not reported
Overfill Installed: Not reported
Tank Latitude: Not reported
Tank Longitude: Not reported

- Continued on next page -

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

UST

EDR ID: U002172258 **DIST/DIR:** 0.000 **ELEVATION:** 556 **MAP ID:** 1

NAME: POMFRET GENERAL REPAIR INC.

Rev: 11/22/2016

ADDRESS: RT 44 BOX 158

ID/Status: Permanently Closed

POMFRET CENTER, CT

ID/Status: 112-1473

SOURCE: CT Department of Energy & Environmental Protection

Tank ID: B-1

Compartment ID: a

Tank Status: Permanently Closed

Tank Material: Asphalt Coated or Bare Steel

Secondary Material: Not reported

Capacity: 4000

Substance: Gasoline

Date Installed: 01/01/1983

Date Last Used: Not reported

Closure Status: Tank was Removed From Ground

Pipe Material: Other (Specify)

Pipe Mode Description: Not reported

Spill Installed: Not reported

Overfill Installed: Not reported

Tank Latitude: Not reported

Tank Longitude: Not reported

Site Detail Report

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

UST

EDR ID: U003540965 **DIST/DIR:** 0.124 SE **ELEVATION:** 523 **MAP ID:** 2

NAME: MASHAMOQUET BROOK STATE PARK

Rev: 11/22/2016

ADDRESS: ROUTE 44
POMFRET, CT

ID/Status: Permanently Closed
ID/Status: 112-9435

SOURCE: CT Department of Energy & Environmental Protection

UST:

Facility State: CT
Facility Id: 112-9435
Latitude: 41.897418
Longitude: -71.959754

Contact:

Owner Name: STATE OF CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
Owner Address: 79 ELM ST
Owner City/State/Zip: HARTFORD, CT 061061650
Owner Phone: 860-344-2513
Owner Phone Ext: Not reported
Affiliation Type: Owner
Contact Name: PETER B. HOULE
Contact Title: Not reported
Contact EMail: Not reported

Owner Name: STATE OF CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
Owner Address: 79 ELM ST
Owner City/State/Zip: HARTFORD, CT 061061650
Owner Phone: Not reported
Owner Phone Ext: Not reported
Affiliation Type: Registrant
Contact Name: Not reported
Contact Title: Not reported
Contact EMail: Not reported

Tank ID: A1
Compartment ID: a
Tank Status: Permanently Closed
Tank Material: Asphalt Coated or Bare Steel
Secondary Material: Not reported
Capacity: 999
Substance: Gasoline
Date Installed: 01/01/1950
Date Last Used: 04/01/1986
Closure Status: Tank Filled with Inert Material
Pipe Material: Not reported
Pipe Mode Description: Not reported
Spill Installed: Not reported
Overfill Installed: Not reported
Tank Latitude: Not reported
Tank Longitude: Not reported

Database Descriptions

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

NPL Delisted: Delisted NPL 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. Delisted NPL - National Priority List Deletions

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

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

RCRA COR ACT: CORRACTS CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. CORRACTS - Corrective Action Report

RCRA TSD: RCRA-TSDF 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. RCRA-TSDF - RCRA - Treatment, Storage and Disposal

RCRA GEN: RCRA-LQG 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. RCRA-LQG - RCRA - Large Quantity Generators RCRA-SQG - RCRA - Small Quantity Generators. RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generators.

Federal IC / EC: LUCIS LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties. LUCIS - Land Use Control Information System US ENG CONTROLS - Engineering Controls Sites List. US INST CONTROL - Sites with Institutional Controls.

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

Database Descriptions

State/Tribal CERCLIS: SHWS 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. SHWS - Inventory of Hazardous Disposal Sites SDADB - Site Discovery and Assessment Database.

State/Tribal SWL: SWF/LF 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. SWF/LF - List of Landfills/Transfer Stations

State/Tribal LTANKS: LUST 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. LUST - Leaking Underground Storage Tank List INDIAN LUST R1 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R5 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R8 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R10 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R9 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R4 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R7 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R6 - Leaking Underground Storage Tanks on Indian Land.

State/Tribal Tanks: FEMA UST A listing of all FEMA owned underground storage tanks. FEMA UST - Underground Storage Tank Listing UST - Underground Storage Tank Data. AST - Marine Terminals and Tank Information. INDIAN UST R10 - Underground Storage Tanks on Indian Land. INDIAN UST R4 - Underground Storage Tanks on Indian Land. INDIAN UST R1 - Underground Storage Tanks on Indian Land. INDIAN UST R6 - Underground Storage Tanks on Indian Land. INDIAN UST R5 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R8 - Underground Storage Tanks on Indian Land. INDIAN UST R7 - Underground Storage Tanks on Indian Land.

State/Tribal IC / EC: ENG CONTROLS 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. ENG CONTROLS - Engineering Controls Listing AUL - ELUR Sites.

State/Tribal VCP: VCP INDIAN VCP R1 - Voluntary Cleanup Priority Listing. INDIAN VCP R7 - Voluntary Cleanup Priority Listing. Sites involved in the Voluntary Remediation Program. INDIAN VCP R7 - Voluntary Remediation Sites

ST/Tribal Brownfields: BROWNFIELDS 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?" BROWNFIELDS 2 - Brownfields Inventory

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

Database Descriptions

Other SWF: SWRCY A listing of recycling facilities. SWRCY - Recycling Facilities INDIAN ODI - Report on the Status of Open Dumps on Indian Lands. ODI - Open Dump Inventory. DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations.

Other Haz Sites: US HIST CDL A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register. US HIST CDL - National Clandestine Laboratory Register CDL - Clandestine Drug Lab Listing. US CDL - Clandestine Drug Labs.

Local Land Records: CT PROPERTY 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. CT PROPERTY - Property Transfer Filings LIENS - Environmental Liens Listing. LIENS 2 - CERCLA Lien Information.

Spills: HMIRS Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT. HMIRS - Hazardous Materials Information Reporting System SPILLS - Oil & Chemical Spill Database. SPILLS 90 - SPILLS90 data from FirstSearch.

Other: RCRA NonGen / NLR 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. RCRA NonGen / NLR - RCRA - Non Generators / No Longer Regulated FUDS - Formerly Used Defense Sites. DOD - Department of Defense Sites. FEDLAND - Federal and Indian Lands. SCRDRYCLEANERS - State Coalition for Remediation of Drycleaners Listing. US FIN ASSUR - Financial Assurance Information. EPA WATCH LIST - EPA WATCH LIST. 2020 COR ACTION - 2020 Corrective Action Program List. TSCA - Toxic Substances Control Act. TRIS - Toxic Chemical Release Inventory System. SSTS - Section 7 Tracking Systems. ROD - Records Of Decision. RMP - Risk Management Plans. RAATS - RCRA Administrative Action Tracking System. PRP - Potentially Responsible Parties. PADS - PCB Activity Database System. ICIS - Integrated Compliance Information System. FTTS - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). FTTS INSP - 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. HIST FTTS INSP - FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing. DOT OPS - Incident and Accident Data. CONSENT - Superfund (CERCLA) Consent Decrees. BRS - Biennial Reporting System. INDIAN RESERV - Indian Reservations. UMTRA - Uranium Mill Tailings Sites. LEAD SMELTER 1 - Lead Smelter Sites. LEAD SMELTER 2 - Lead Smelter Sites. US AIRS (AFS) - Aerometric Information Retrieval System Facility Subsystem (AFS). US AIRS MINOR - Air Facility System Data. US MINES - Mines Master Index File. US MINES 2 - Ferrous and Nonferrous Metal Mines Database Listing. US MINES 3 - Active Mines & Mineral Plants Database Listing. FINDS - Facility Index System/Facility Registry System. AIRS - Permitted Air Sources Listing. CPCS - Contaminated or Potentially Contaminated Sites. DRYCLEANERS - Drycleaner Facilities. ENFORCEMENT - Enforcement Case Listing. Financial Assurance 1 - Financial Assurance Information Listing. Financial Assurance 2 - Financial Assurance Information Listing. LWDS - Connecticut Leachate and Wastewater Discharge Sites. CT MANIFEST - Hazardous Waste Manifest Data. NPDES - Wastewater Permit Listing.

EDR Exclusive: EDR MGP 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. EDR MGP - EDR Proprietary Manufactured Gas Plants EDR Hist Auto - EDR Exclusive Historic Gas Stations. EDR Hist Cleaner - EDR Exclusive Historic Dry Cleaners.

Database Sources

NPL: EPA

Updated Quarterly

NPL Delisted: EPA

Updated Quarterly

CERCLIS: Environmental Protection Agency

Varies

NFRAP: EPA

Updated Quarterly

RCRA COR ACT: EPA

Updated Quarterly

RCRA TSD: Environmental Protection Agency

Updated Quarterly

RCRA GEN: Environmental Protection Agency

Updated Quarterly

Federal IC / EC: Department of the Navy

Varies

ERNS: National Response Center, United States Coast Guard

Updated Annually

State/Tribal CERCLIS: Department of Energy & Environmental Protection

No Update Planned

State/Tribal SWL: Department of Energy & Environmental Protection

Updated Annually

State/Tribal LTANKS: Department of Energy & Environmental Protection

Updated Semi-Annually

State/Tribal Tanks: FEMA

Varies

Database Sources

State/Tribal IC / EC: Department of Energy & Environmental Protection

Varies

State/Tribal VCP: EPA, Region 7

Varies

ST/Tribal Brownfields: Department of Energy & Environmental Protection

Varies

US Brownfields: Environmental Protection Agency

Updated Semi-Annually

Other SWF: Department of Energy & Environmental Protection

Varies

Other Haz Sites: Drug Enforcement Administration

No Update Planned

Local Land Records: Department of Energy & Environmental Protection

Updated Semi-Annually

Spills: U.S. Department of Transportation

Updated Annually

Other: Environmental Protection Agency

Varies

EDR Exclusive: EDR, Inc.

No Update Planned

Street Name Report for Streets near the Target Property

Target Property: 481 MASHAMOQUET RD
POMFRET CENTER, CT 06259

JOB: 1308-02

Street Name	Dist/Dir	Street Name	Dist/Dir
Cheney Rd	0.11 SE		
Krazy Ln	0.15 South		
US-44 W	0.14 SSW		

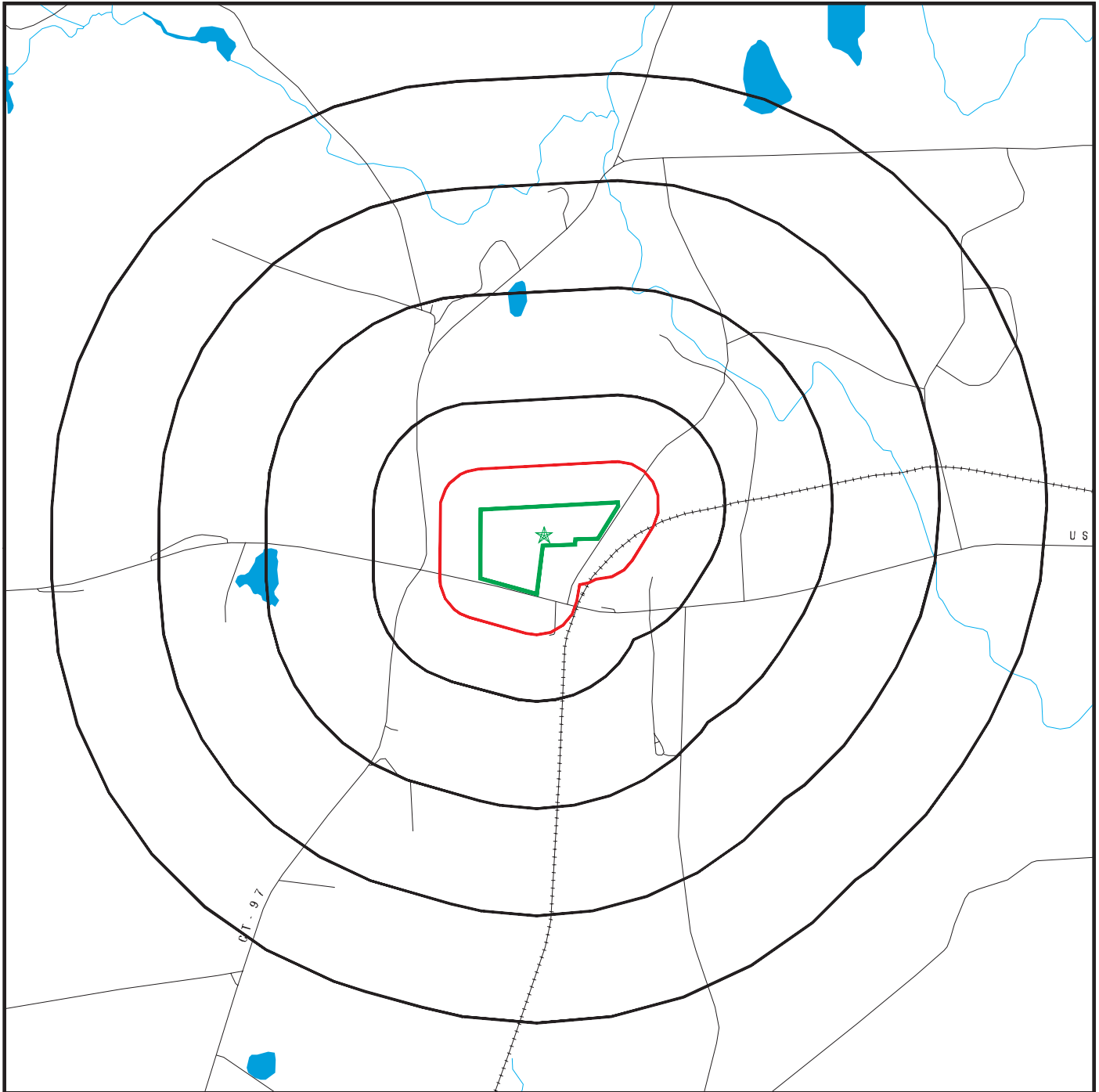
Environmental FirstSearch

1.000 Mile Radius

ASTM MAP: NPL, RCRACOR, STATES Sites



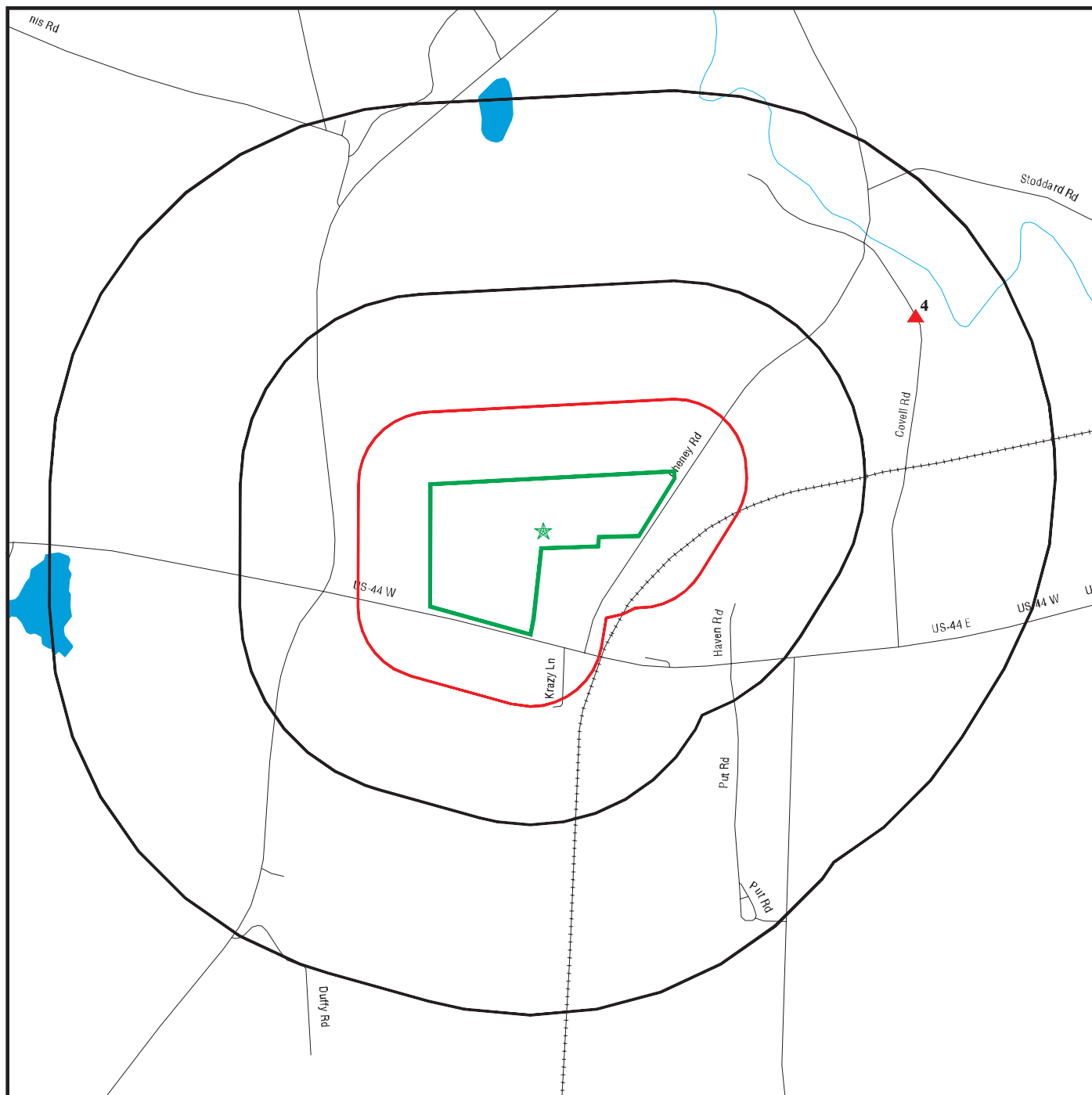
481 MASHAMOQUET RD POMFRET CENTER, CT 06259



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

- ★ Target Property (Latitude: 41.861664 Longitude: 72.001142)
- ▲ Identified Sites
- Indian Reservations BIA
- National Priority List Sites
- Dept. Defense Sites

481 MASHAMOQUET RD POMFRET CENTER, CT 06259



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

- ★ Target Property (Latitude: 41.861664 Longitude: 72.001142)
- ▲ Identified Sites
- Indian Reservations BIA
- National Priority List Sites
- Dept. Defense Sites

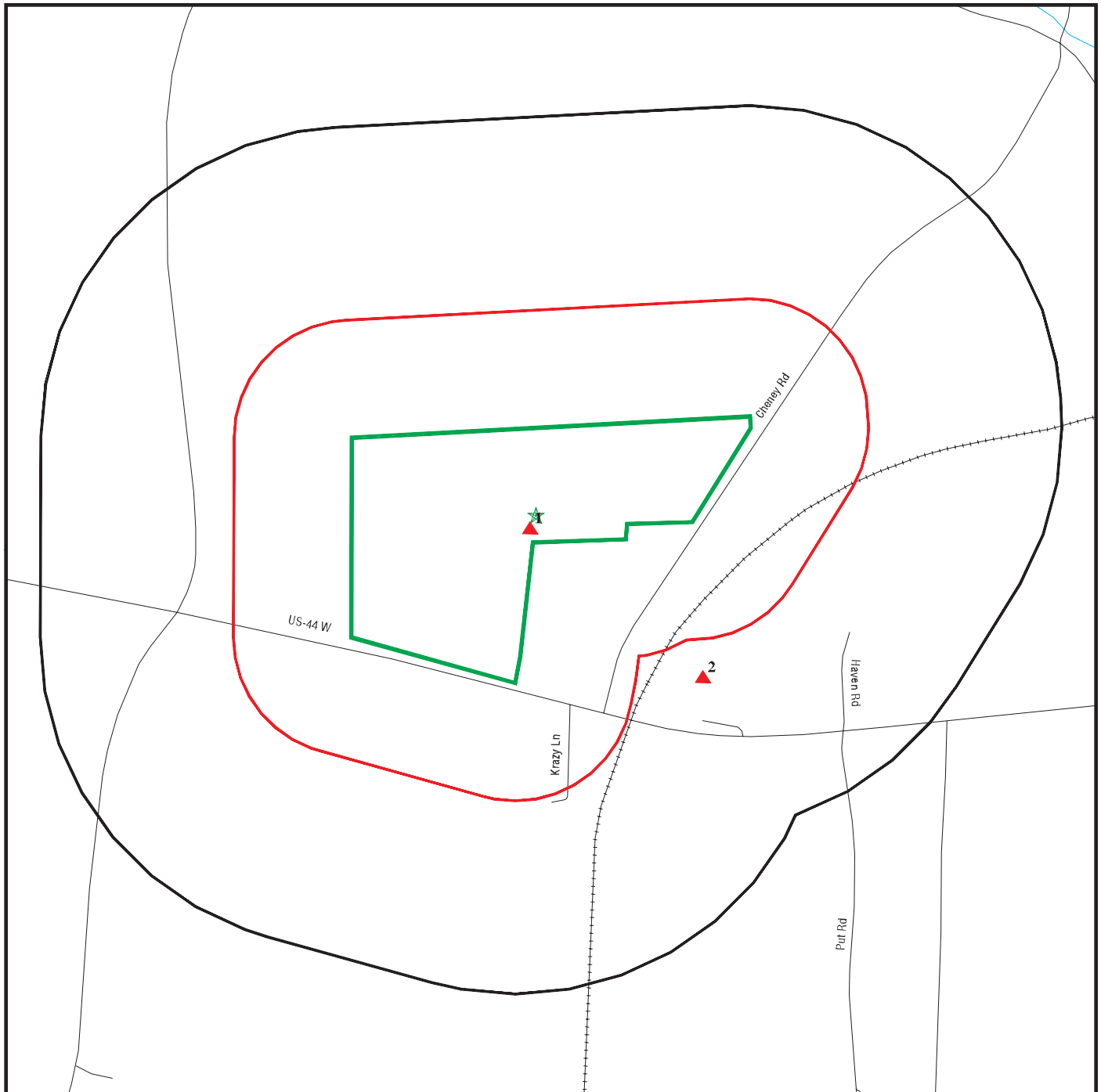
Environmental FirstSearch

0.25 Mile Radius

ASTM MAP: RCRAGEN, ERNS, UST, FED IC/EC, METH LABS



481 MASHAMOQUET RD POMFRET CENTER, CT 06259



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

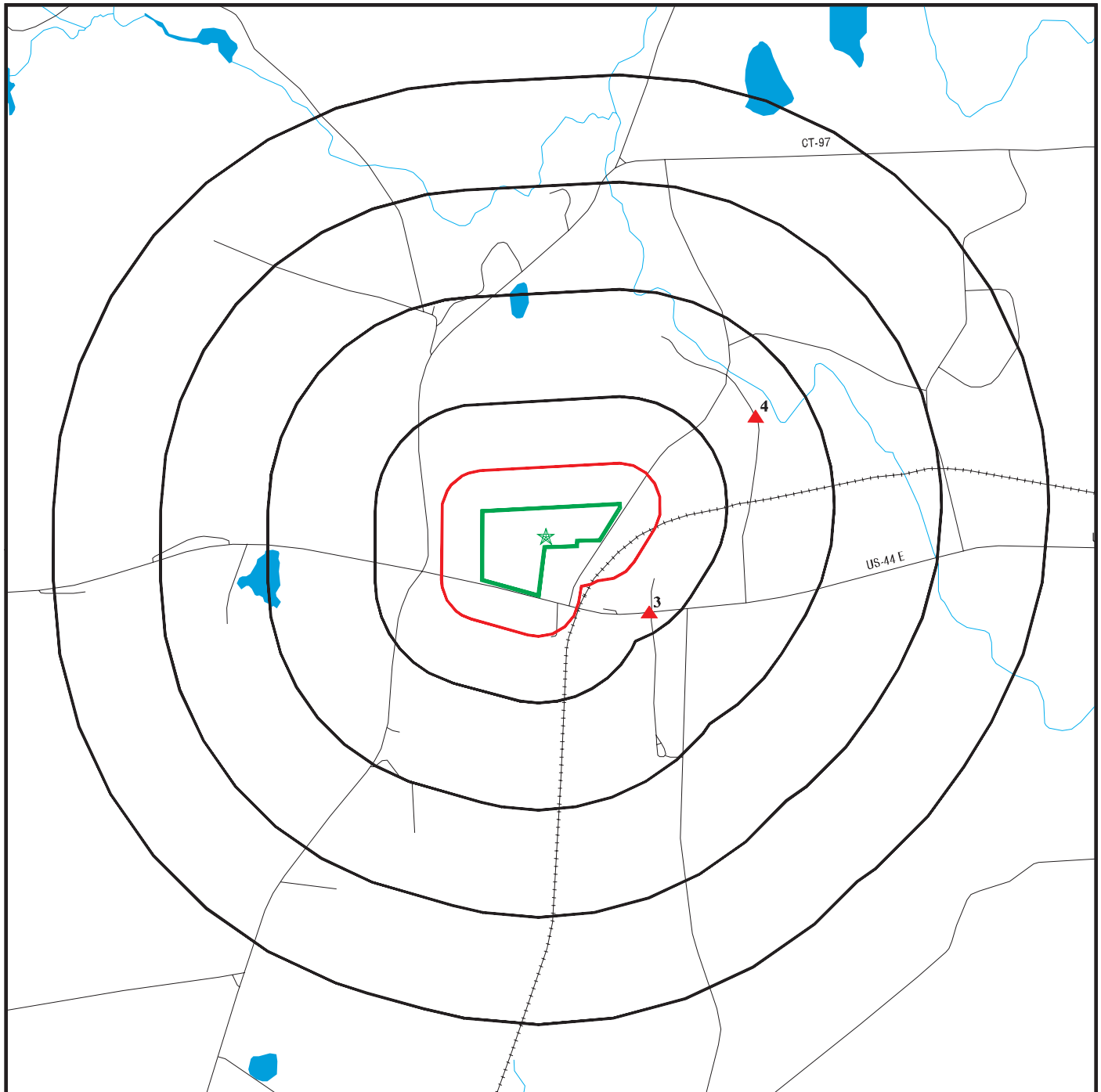
- ★ Target Property (Latitude: 41.861664 Longitude: 72.001142)
- ▲ Identified Sites
- Indian Reservations BIA
- National Priority List Sites
- Dept. Defense Sites

Environmental FirstSearch

1,000 Mile Radius
Non ASTM Map, Spills, FINDS



481 MASHAMOQUET RD POMFRET CENTER, CT 06259



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

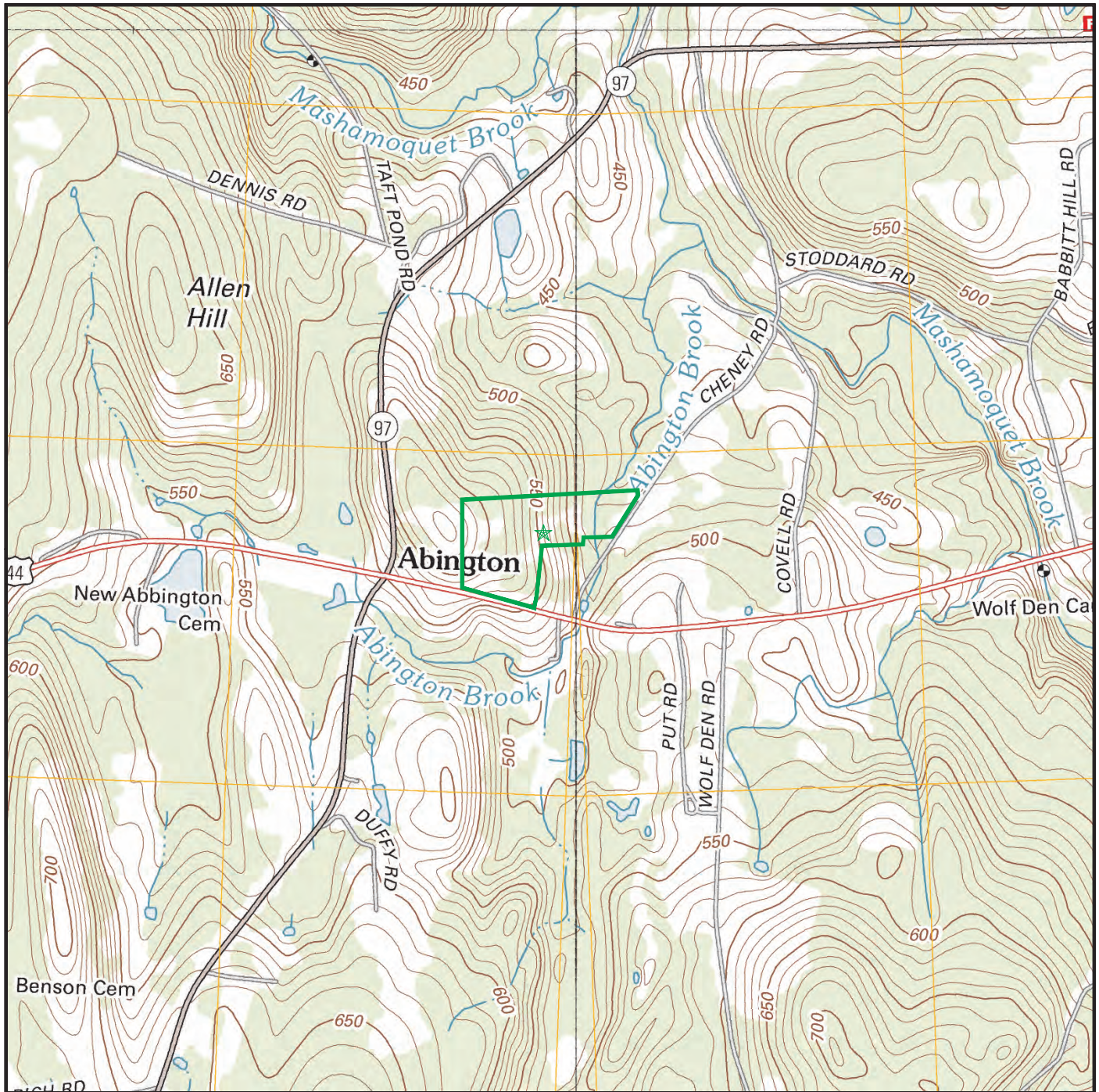
- ★ Target Property (Latitude: 41.861664 Longitude: 72.001142)
- ▲ Identified Sites
- 🏠 Sensitive Receptors
- 🏠 National Priority List Sites
- 🏠 Dept. Defense Sites
- 🏠 Indian Reservations BIA

Site location Map

Topo: 0.75 Mile Radius



481 MASHAMOQUET RD POMFRET CENTER, CT 06259



Map Image Position: TP
Map Reference Code & Name: 5642425 Hampton
Map State(s): CT
Version Date: 2012
Map Image Position: NE
Map Reference Code & Name: 5641060 Putnam
Map State(s): CT
Version Date: 2012

Map Image Position: SE
Map Reference Code & Name: 5642109 Danielson
Map State(s): CT
Version Date: 2012
Map Image Position: NW
Map Reference Code & Name: 5642415 Eastford
Map State(s): CT
Version Date: 2012

APPENDIX C

LEAKING UNDERGROUND STORAGE TANK TABLE

**LEAKING UNDERGROUND STORAGE TANKS within 0.5 MILE RADIUS
481 & 505 Mashamoquet, Pomfret, CT**

DATE OF INCIDENT	ADDRESS	APPROX. DIST./DIR.	CONTENTS	REMEDICATION	CASE STATUS
2/27/1996	138 Covell Rd.	0.377 ENE	Private Heating oil	Not Reported	Investigation

APPENDIX D

SITE PHOTOGRAPHS



Photo #1: A view of the site, photograph taken facing northeast.



Photo #2: Remainder of foundation of demolished house on site.



Photo #3: Remainder of foundation of demolished barn on site.



Photo #4: View of the interior (northwest section) of the site.



Photo #5: Forested area on the northeastern portion of the site.

APPENDIX E
ASTM ENVIRONMENTAL QUESTIONNAIRE

process, including, in particular, the *site visit* and the government records/historical sources inquiry. If the *user* decides no further inquiry is warranted after receiving no response, an answer of unknown, or an affirmative answer, the *user* must document the reasons for any such conclusion.

5.6.1 Upon obtaining an affirmative answer, an answer of unknown or no response, the *user* should first refer to the guide. The guide may provide sufficient explanation to allow a *user* to conclude that no further inquiry is appropriate with respect to the particular question.

5.6.2 If the guide to a particular question does not, in itself, permit a *user* to conclude that no further inquiry is appropriate, then the *user* should consider other information obtained from the *transaction screen process* relating to this question. For example, while on the *site* performing a *site visit*, a person may find a storage tank on the *property* and therefore answer Question 10 of the *transaction screen questionnaire* in the affirmative. However, during or subsequent to the *owner/occupant* inquiry, the *owner* may establish that substances now or historically contained in the tank (for example, water) are not likely to cause contamination.

5.6.3 If either the guide to the question or other information obtained during the *transaction screen process* does not permit a *user* to conclude no further inquiry is appropriate with respect to such question, then the *user* must determine, in the exercise of the *user's* reasonable business judgment, based upon the totality of unresolved affirmative answers or answers of unknown received during the *transaction screen process*, whether further inquiry may be limited to those specific issues identified as of concern.

5.7 *Presumption*—A presumption exists that further inquiry is necessary if an affirmative answer is given to a question or because the answer was unknown or no response was given. In rebutting this presumption, the *user* should evaluate information obtained from each component of the *transaction screen process* and consider whether sufficient information has been obtained to conclude that no further inquiry is necessary. The *user* must determine, in the exercise of the *user's* reasonable business judgment, the scope of such further inquiry.

5.8 *Further Inquiry*—Upon completing the *transaction screen questionnaire*, if the *user* concludes that further inquiry or action is needed (for example, consult with an environmental consultant, contractor, governmental authority, or perform additional governmental and/or historical records review), the *user* should proceed with such inquiry. (Note that if the *user* determines to proceed with a Phase I Environment Site Assessment, the *user* may apply the current Practice E1527, Practice E2247, or alternatively the provisions of EPA's regulation "Standards and Practices for All Appropriate Inquiries," 40 C.F.R. Part 312.)

5.9 *Signature*—The *user* and the *preparer* of the *transaction screen questionnaire* must complete and sign the questionnaire as provided at the end of the questionnaire.

6. Transaction Screen Questionnaire

6.1 *Persons to Be Questioned*—The following questions should be asked of (1) the current *owner* of the *property*, (2) any major *occupant* of the *property* or, if the *property* does not have any major *occupants*, at least 10 % of the *occupants* of the *property*, and (3) in addition to the current *owner* and the *occupants* identified in (2), any *occupant* likely to be using, treating, generating, storing, or disposing of *hazardous substances* or *petroleum products* on or from the *property*. A major *occupant* is any *occupant* using at least 40 % of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center. In a multifamily *property* containing both residential and commercial uses, the *preparer* does not need to ask questions of the residential *occupants*. The *preparer* should ask each person to answer all questions to the best of the respondent's *actual knowledge* and in good faith. When completing the *site visit* column, the *preparer* should be sure to observe the *property* and any buildings and other structures on the *property*. The guide to this *transaction screen questionnaire* (see Sections 7 – 10) provides further details on the appropriate use of this questionnaire. (See Note 1.)

NOTE 1—Unk = "unknown" or "no response."

Description of Site/Address:

481-505 NASHA MEQUET RD
ODDFRET, CT.
06130

Question	Owner			Occupants (if applicable)			Observed During Site Visit		If yes, provide description
1a. Is the property used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No	
1b. Is any adjoining property used for an industrial use?	Yes	No	Unk	Yes	No	Unk	Yes	No	
2a. Did you observe evidence or do you have any prior knowledge that the property has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	

Question		Owner	Occupants (if applicable)			Observed During Site Visit	If yes, provide description
2b. Did you observe evidence or do you have any prior knowledge that any <i>adjoining property</i> has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes No
3a. Is the <i>property</i> used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes No
3b. Is any <i>adjoining property</i> used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes No
4a. Did you observe evidence or do you have any prior knowledge that the <i>property</i> has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes No
4b. Did you observe evidence or do you have any prior knowledge that any <i>adjoining property</i> has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes No
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the <i>property</i> or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes No
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the <i>property</i> or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes No
6a. Are there currently any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the <i>property</i> or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes No

Question		Owner		Occupants (if applicable)			Observed During Site Visit	If yes, provide description
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No
7a. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?	Yes	No	Unk	Yes	No	Unk	Yes	No
7b. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that is of an unknown origin?	Yes	No	Unk	Yes	No	Unk	Yes	No
8a. Are there currently any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No
9a. Is there currently any stained soil on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
9b. Did you observe evidence or do you have any prior knowledge that there has been previously, any stained soil on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
11a. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
11b. Did you observe evidence or do you have any prior knowledge that there have been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
12a. Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No

Question		Owner		Occupants (if applicable)			Observed During Site Visit	If yes, provide description
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring drains, walls, ceilings or exposed grounds on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	<input checked="" type="radio"/> No
13a. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	<input checked="" type="radio"/> No
13b. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	<input checked="" type="radio"/> No
14. Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk		
15a. Has the owner or occupant of the property been informed of the past existence of hazardous substances or petroleum products with respect to the property or any facility located on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk		
15b. Has the owner or occupant of the property been informed of the current existence of hazardous substances or petroleum products with respect to the property or any facility located on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk		
15c. Has the owner or occupant of the property been informed of the past existence of environmental violations with respect to the property or any facility located on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk		
15d. Has the owner or occupant of the property been informed of the current existence of environmental violations with respect to the property or any facility located on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk		
16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk		

Question	Owner	Occupants (if applicable)	Observed During Site Visit	If yes, provide description
17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Unk <input type="radio"/>		
18a. Does the property discharge waste-water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a storm water system?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input checked="" type="radio"/> No <input type="radio"/>	
18b. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a sanitary sewer system?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input checked="" type="radio"/> No <input type="radio"/>	
19. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the property?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input checked="" type="radio"/> No <input type="radio"/>	
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Unk <input type="radio"/>	Yes <input checked="" type="radio"/> No <input type="radio"/>	

Government Records/Historical Sources Inquiry
(See guide, Section 10, and Practice E1527)

21. Do any of the following federal, state, or tribal government record systems list the property or any property within the search distance noted below (where available):

	Approximate Minimum Search Distance, miles (kilometres)	Yes	No
Federal NPL site list	1.0 (1.6)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal Delisted NPL site list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal CERCLIS list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal CERCLIS NFRAP site list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal RCRA CORRACTS facilities list	1.0 (1.6)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal RCRA non-CORRACTS TSD Facilities list	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal RCRA generators list	property and adjoining properties	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal institutional control/engineering control registries	property only	Yes	<input checked="" type="radio"/> No <input type="radio"/>
Federal ERNS list	property only	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal lists of hazardous waste sites identified for investigation or remediation:			
State and tribal equivalent NPL	1.0 (1.6)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal equivalent CERCLIS	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal landfill and/or solid waste disposal site lists	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal leaking storage tank lists	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal registered storage tank lists	property and adjoining properties	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal institutional control/engineering control registries	property only	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal voluntary cleanup sites	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>
State and tribal Brownfield sites	0.5 (0.8)	Yes	<input checked="" type="radio"/> No <input type="radio"/>

22. Based upon a review of fire insurance maps, local street directories, or aerial photographs, all as specified in the guide (10.2.1), are any buildings or other improvements on the property or on an adjoining property identified as having been used for an industrial use or that could possibly lead to contamination of the property?

Yes ☐ No ☒ Unavailable ☐

Result: _____

The Owner questionnaire answers were provided was completed by:

Name Robert Rietz

Title *REALTOR*
Firm *2424 Dinnard Hill Rd*
Address *Wormsloe Rd, #202695*

Phone number *800 928 0526*

Date *3-5-17*

Role(s) at the site *SELLER*

Number of years at the site *1*

Relationship to user (for example, principal, employee, agent, consultant) *REALTOR*

The Occupant questionnaire answers were provided by:

Name
Title
Firm
Address

Phone number

Date

Role(s) at the site

Number of years at the site

Relationship to user (for example, principal, employee, agent, consultant)

The Site Visit questionnaire was completed by:

Name *Solomon A. Gibson*
Title *Environmental Scientist*
Firm *Anchor Engineering Services*
Address *41 Sequin Drive, Eastonburg, CT, 06033*

Phone number *860 - 633 - 8990*

Date *4/18/17*

Relationship to site *Environmental Investigator*

Relationship to user (for example, principal, employee, agent, consultant)

Consultant

The Government Records and Historical Sources Inquiry questionnaire was completed by:

Name
Title
Firm
Address

Phone number

Date

Relationship to site

Relationship to user (for example, principal, employee, agent, consultant)

User's relationship to the site (for example, owner, prospective purchaser, lender, etc.)

If the preparer(s) is different from the user, complete the following:

Name of User

User's address

User's phone number

Copies of the completed questionnaires have been filed at:

Copies of the completed questionnaires have been mailed or delivered to:

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 actual knowledge no material facts have been suppressed or misstated.

Signature *Patrick McKay* Date *3-5-17*
Signature _____ Date _____
Signature _____ Date _____

If the user is different from the preparer(s), the user shall sign below affirming that the completed questionnaire has been received. It is the user's responsibility to draw conclusions regarding affirmative or unknown answers.

Signature _____ Date _____

APPENDIX F
RESUMES



PAUL W. MARTELL, JR., L.E.P. SENIOR ENVIRONMENTAL GEOLOGIST

PROFESSIONAL PROFILE

Mr. Martell is a Licensed Environmental Professional (LEP) with over 25 years of environmental consulting experience in Connecticut and throughout the Northeast. He is experienced in hydrogeologic and environmental investigations relating to soil and groundwater contamination at a variety of commercial and industrial properties, hazardous waste sites, and landfills. He is experienced in all aspects of groundwater monitoring and familiar with air monitoring for lead and asbestos and is responsible for the presentation, analysis and reporting of data. Mr. Martell's project experience ranges from over 100 Phase I environmental site assessments to the design and oversight of large scale remediation projects. He is familiar with the Property Transfer Act, Voluntary Remediation Program, and with Connecticut's Remediation Standard Regulations (RSRs).

WORK EXPERIENCE

2011 – Present: **Anchor Engineering**, Environmental Project Manager
2009 – 2011: **Energy Solutions**, Hydrogeologist
2003 – 2009: **Loureiro Engineering Associates**, Senior Project Hydrogeologist
1991 – 2003: **Fuss & O'Neill**, Field Scientist to Senior Project Hydrogeologist
1990 – 1991: **IT Corporation**, Hydrogeologist

SELECTED PROJECT EXPERIENCE

Mastercraft Auto Body, Windsor Locks, CT

Environmental Project Manager for an auto body shop which is subject to Connecticut's Property Transfer Program. Managed Phase II and III site assessments to identify and determine the degree and extent of releases at the site. Developed a remediation plan for soil removal at two areas of the site and the installation of additional groundwater monitoring wells for subsequent post-remediation groundwater monitoring. Work was conducted to satisfy a Form III filing and in support of eventual LEP Verification of the site.

ReEnergy Holding, LLC, Sterling, CT

Environmental Project Manager for the investigation of groundwater with zinc concentrations above Groundwater Protection Criteria. Site had very low pH due to an acid release which mobilized zinc in groundwater. Applied to the DEEP for a Temporary Authorization to conduct injection of lime as a remedial strategy. Researched and developed remediation strategy for injecting lime slurry in a grid pattern to raise the groundwater pH and precipitate and stabilize zinc. Several rounds of injections were conducted under the Temporary Authorization over the course of several months. Groundwater sampled to assess effectiveness of the injections and reductions in pH and zinc concentrations.

Winters Brothers, Shelton, CT

Environmental Project Manager for Phase I & II site assessments for two parcels in support of a property transfer. One site was operated as a transfer station for solid waste and the other operated as a sorting facility for recyclables. Both sites had previously contained manufacturing facilities and chlorinated solvent use was identified at one of the parcels. Developed investigation plan for soil borings, including interior borings through the building floor, to assess potential release areas. Directed monitoring well installations and groundwater sampling to assess groundwater quality. Worked with Client Manager to advise client and their attorney for a successful property purchase.

Ensign Bickford, Simsbury, CT

Principal hydrogeologist for environmental investigations to determine degree and extent of VOCs, metals, and explosive compounds. Conducted extensive hydrogeological investigation for both vertical and lateral contaminant migration in groundwater and investigated extent of aquitard separating upper and lower aquifers at the site. Remediation included phytoremediation of shallow soil in a field for lead. Implemented soil sampling program in the field to assess the effectiveness of the phytoremediation. Designed and implemented groundwater monitoring program.

EDUCATION

M.S., Geology
Texas Tech University, Lubbock, TX
B.S., Geology
Rensselaer Polytechnic Institute
Troy, NY

REGISTRATION

Licensed Environmental Professional
40 Hour HAZWOPER Training
EPOC Member

YEARS EXPERIENCE

6 with Anchor
27 in Industry



SOLOMON A. GIBSON, IV

ENVIRONMENTAL SCIENTIST

PROFESSIONAL PROFILE

Mr. Gibson recently graduated from the University of New Haven with a Master's Degree in Environmental Science, where he also received certification in Geographic Information System (GIS). He also carries a Bachelor's of Science degree in Biochemistry from Oakwood University in Huntsville, Alabama. He has extensive experience in water sampling and testing, surveying, wetland delineation, soil sampling, GIS work, report writing, and Environmental Health Services. He has worked extensively in both the United States and Caribbean Nations.

WORK EXPERIENCE

2016 – Present: **Anchor Engineering**, Environmental Scientist
2014 – 2015: **Graduate Masters Research Project**, San Salvador Isl., Bahamas
2009 – 2009: **University of Cincinnati**, Summer Researcher

SELECTED PROJECT EXPERIENCE

Town of Manchester, CT

Environmental Scientist responsible for permit assistance/compliance and environmental monitoring. Activities include groundwater, surface water, leachate, industrial stormwater and landfill gas monitoring and reporting.

Quality Control, Putnam, CT

Monitoring and quality control (field stress testing) of new phase of landfill construction; conducted construction quality assurance services including inspections of construction materials and installation procedures. Reported and maintained the necessary records and technical data for evaluation and inclusion during the development of the construction certification report.

Waste Management, Putnam, CT

Environmental scientist responsible for groundwater, surface water, and leachate monitoring for ash disposal area.

Willimantic Waste Paper Company, Inc., Willimantic, CT

Environmental scientist responsible for assisting with environmental permit modifications for the Willimantic Waste Paper Company.

Town of Southington, CT

Environmental scientist responsible for permit assistance/compliance and monitoring for the Town's MS4 general permit.

Town of East Hartford, CT

Environmental scientist for the Phase I at the site located at Silver Street in East Hartford, Connecticut.

The Nature Conservancy, New Providence, Bahamas

Mr. Gibson assisted in the collection of Staghorn and Elkhorn coral growth data on the New Providence Island in the Bahamas in order to facilitate a coral reef restoration project.

Researcher, Graduate Masters Research Project, San Salvador, Bahamas

Supervised a team of three field assistants for data collection, processing and analysis. Used historical data and benchmarks from a previous study. Project was a follow-up to measure the affects of rising sea levels on mangrove succession on the island from 1994 to the present.

Researcher, University of Cincinnati, Ohio

Conducted research on the effects of chemical treatments on the proliferation and migration of corneal epithelial cells. Primarily conducted the experiment and data collection, as well as presentation of findings.

Atlantis Aquarium, Blue Aquarist, Bahamas

Conducted in-water sampling and animal feedings as well as performing guided snorkeling tours through live exhibits. Additional work for the Atlantis Aquarium included general aquarium maintenance.

EDUCATION

M.S., Environmental Science,
University of New Haven

B.S., Biochemistry, Oakwood
University

REGISTRATION

GIS Certification from University of
New Haven

YEARS EXPERIENCE

1 with Anchor
9 in Industry

Exhibit F

Wetland Report

HIGHLAND SOILS, LLC

WETLAND REPORT

**ABINGTON SOLAR
POMFRET CENTER, CONNECTICUT**

PREPARED FOR

**ECOS ENERGY
MINNEAPOLIS, MINNESOTA**

BY

**JOHN P. IANNI
PROFESSIONAL SOIL SCIENTIST**

SEPTEMBER 15, 2017

HIGHLAND SOILS, LLC

INTRODUCTION

In April of 2017 a series of site walks were made to the subject property. The property is located on the north side of Route 44, and westerly of Cheney Road in Pomfret Center.

As part of the site work the inland wetland boundaries were field delineated and located by survey.

The inland wetland boundaries on the subject property were field delineated in April 2017. The wetlands were field delineated in accordance with the standards of the National Cooperative Soil Survey and the definition of wetlands as found in the Connecticut General Statutes, Chapter 440, Section 22A-38. The prepared plans have been reviewed and the representation of the field delineated wetlands is substantially correct.

In addition to the wetlands being identified by State standards, the delineation also conforms to the Federal definition of wetlands as found in:

The jurisdictional wetlands (Federal or Army Corps wetlands) were defined as based on:

Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

The property is within the watershed of Abington Brook which flows along the eastern side of the property. Abington Brook drains to the Mashamoquet Brook which is part of the Quinebaug River Drainage Basin.

EXISTING CONDITIONS

The property generally slopes from west to east and there is approximately 100 feet of grade change. The property was historically used for agriculture and was recently used for hay production. A series of open fields of varying stages of succession were noted on the site. It appears that the area along Route 44 was occupied as the homestead and evidence of occupation exists in this area. Stonewalls delineate multiple fields and woody vegetation dominates the areas around the walls.

The eastern portion of the property that is subject to the application contains abandoned hay fields dominated by Rye grass and Clover. These fields are in early

HIGHLAND SOILS, LLC

succession and annual weed species such as Goldenrod, Milkweed and Sensitive fern are beginning to colonize the open areas.

The lower fields, which are not part of this application, were abandoned and not mowed for at least ten years and are thickly colonized with a virtual impenetrable wall of Autumn olive, Multiflora rose, Wild grape, Barberry and Bittersweet. The land slopes consistently to the east and at the bottom of the slope, Abington Brook and its extensive floodplain were noted.

The floodplain is well defined by a steep and sharp topographic break. The floodplain is wooded along the Brook and is more open between the Brook and Cheney Lane and appears to have used for pasture.

Along the stone walls that demarcate the hayfields, woody growth dominated by Green ash, Black cherry and Sugar maple trees were found. In addition to saplings of the mention species, brambles of Raspberry and Blackberry are also colonizing the areas around the stone walls. Multiflora rose and Poison ivy are also prevalent near the field breaks.

In the area of the frontage of the property remnants of the former homestead were noted. Ornamental trees and evidence of old foundations were noted. The vegetation in this area also contains mature tree species and disturbance tolerant species such as Sumac.

The upland soils on the property were identified as belong to the well-drained Paxton Series and the moderately well drained Woodbridge Series. Both of these soils developed over a compact glacial till commonly referred to as hardpan. The compact glacial till gives rise to a seasonally perched water table approximately two to three feet below the soil surface.

The soils within the wetland were identified as belonging to the moderately well drained Pootatuck Series and the poorly drained Rippowam Series. Both of these soil types developed in alluvial sediments associated with the floodplain of Abington Brook. A small area of poorly drained soils of the Ridgebury and Leicester Series were found where a small seep area extended uphill of the floodplain.

HIGHLAND SOILS, LLC

PROPOSED ACTIVITY AND WETLAND IMPACTS

As proposed, the western portion of the site will be utilized for the placement of solar panels and supporting infrastructure. The proposed activity is over 700 feet to the wetland resources. Based on the proposed layout no activity is proposed within wetlands or the upland review area and the activity is so far removed from the on-site wetland resources that no impact to the wetlands is anticipated.

A series of site walks were made on the property in April and May of 2017. No vernal pools or areas of breeding amphibians were found on the property.

Exhibit G
DEEP NDDDB Species Review Response
Letter

March 1, 2017

Blake Nicholson
Windham Solar LLC
222 South 9th St, Suite 1600
Minneapolis, MN 55402
blake.nicholson@ecosrenewable.com

Project: Construction of solar energy facility, Abington Solar, 481 Mashamoquet Rd, Pomfret
NDDB Determination No.: 201701803

Dear Blake Nicholson,

I have reviewed Natural Diversity Database (NDDB) maps and files regarding the area of work provided for the proposed solar energy facility, Abington Solar at 481 Mashamoquet Road in Pomfret, Connecticut. I do not anticipate negative impacts to State-listed species (RCSA Sec. 26-306) resulting from your proposed activity at the site based upon the information contained within the NDDB. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits. This determination is good for two years. Please re-submit a new NDDB Request for Review if the scope of work changes or if work has not begun on this project by March 1, 2019.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for on-site surveys necessary for a thorough environmental impact assessment. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the database as it becomes available.

Please contact me if you have further questions at (860) 424-3378, or karen.zyko@ct.gov . Thank you for consulting the Natural Diversity Database.

Sincerely,



Karen Zyko
Environmental Analyst

Exhibit H

SHPO Historic Review Response Letter



Department of Economic and
Community Development

Connecticut
still revolutionary

April 27, 2017

Mr. Blake Nicholson
Ecos Energy
222 S 9th Street, Suite 1600
Minneapolis, MN 55402

Subject: Proposed solar photovoltaic facility
481 Mashamoquet Road
Pomfret, CT

Dear Mr. Nicholson:

The State Historic Preservation Office is in receipt of the proposal for the above-referenced project, submitted for review and comment pursuant to the National Historic Preservation Act and in accordance with Federal Communications Commission regulations.

After completing review of 481 Mashamoquet Road, SHPO has determined that there will be no historic properties affected by the proposed ground-mounted tilt array and associated equipment/access. Based on the information provided to this office, no historic properties will be affected by this undertaking.

The State Historic Preservation Office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act. For further information please contact Todd Levine, Environmental Reviewer, at (860) 256-2759 or todd.levine@ct.gov.

Sincerely,

Catherine Labadia
Deputy State Historic Preservation Officer

State Historic Preservation Office

One Constitution Plaza | Hartford, CT 06103 | P: 860.256.2800 | Cultureandtourism.org

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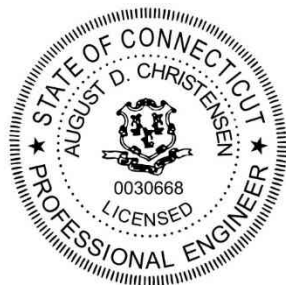
Exhibit I

Hydrology Report

Westwood

HYDROLOGY REPORT
ABINGTON SOLAR PROJECT

Abington, CT
September , 2017



Prepared For:



HYDROLOGY REPORT

Date: September 11, 2017

Re: **Abington Solar Project – Hydrology Report for Areas A1 and A2**
File 0013151

To: Steve Broyer, Ecos Energy

From: Joe Fox, Water Resources Engineer

The memo summarizes stormwater modeling completed for the Abington Solar Project Areas A1 and A2. The site is located on Mashamoquet Road just east of Hampton Road in Abington, Windham County, Connecticut. 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. There is a natural high point just west of the proposed arrays. Runoff from a small off-site area drains through the site in existing and proposed conditions.

Existing Conditions

The site is within a FEMA Zone C (Area of minimal flooding) which is outside the 100-year flood zone. The site is currently a mixture of forest and grass. Site soils are predominantly classified C/D. Attachment 2 shows soils data. The analysis uses Atlas 14 precipitation data (Attachment 3).

Proposed Conditions

The proposed design has solar panels installed in two contiguous sections for a total of 3.28 acres of panels. Two sections (A1 and A2) will stand within one fenced area with a gravel access road (0.36 acres). Inverters and other associated electrical components are proposed for each array area. (Electrical components total area is 0.022 acres). The proposed ground cover beneath and around the panels is native grass. Stormwater generally runs off to the south and east. Two stormwater basins are proposed. The basins will act as sedimentation basins during construction and as permanent water quality treatment basins after construction.

Drainage area E1/A1 drains east; drainage area E2/A2 drains south to existing culverts under Mashamoquet Road.

Modeling Results

The site was modeled in HydroCAD using the proposed basin drainage areas to configure the watershed boundaries. Site conditions are shown in Table 1. Curve Numbers (CN) were determined based on land cover and soil type. The CNs are only slightly different in existing than they are in proposed conditions. With D soils, changing from grass and woods in existing conditions to the proposed meadow ground cover, the CN only gets slightly larger.

Table 1. Site Conditions

Total Drainage Areas [ac]	12.56	
Project Area [ac]	7.86	Area within fence
Solar Array [ac]	3.28	
Proposed Impervious Improvements [ac]	0.38	Gravel access roads and equipment pads

In existing conditions the site is split into two drainage areas. In the southern part of the project, water drains to a low spot and into culverts under Mashamoquet Road. In the other part of the site water drains downhill to the east to the Abington Brook.

In proposed conditions, there are two proposed basins that act as temporary sedimentation basins during construction and as permanent rate control and water quality ponds after construction. The planting of meadow grasses under and around the solar array also helps to mitigate discharge rates and to improve water quality.

According to the HydroCAD model (Attachment 4), constructing these basins reduces the peak discharge rates (Table 3). A spreadsheet with pond sizing calculations is in Attachment 5. In the 2-year, 10-year and 100-year events the proposed conditions discharge rate is lower than in existing conditions. The discharge rates in Table 3 take into account drainage to the east and to the south.

Table 3. Comparison of Discharge Rates

Event	Rainfall depth [in]	Existing [cfs]	Proposed [cfs]
2-year	3.35	18.8	1.3
10-year	5.01	36.5	18.6
100-year	7.65	66.0	57.9

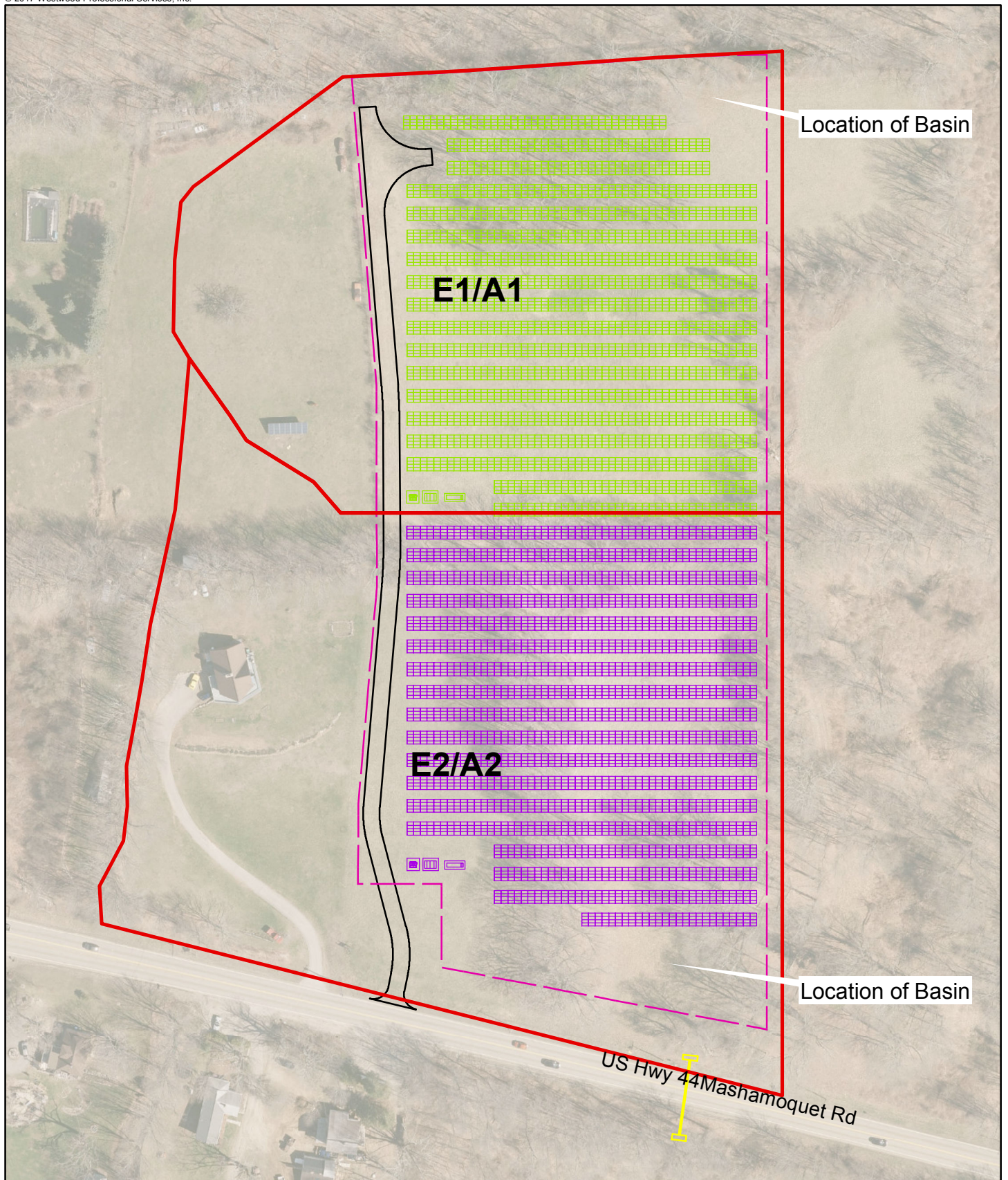
September 11, 2017

Page 3

The basins provide water quality treatment as well as reduce peak discharge rates. The proposed solar installation will not affect downstream properties negatively.

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

Abington Solar - ECOS Energy

Windham County, Connecticut

Westwood

Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

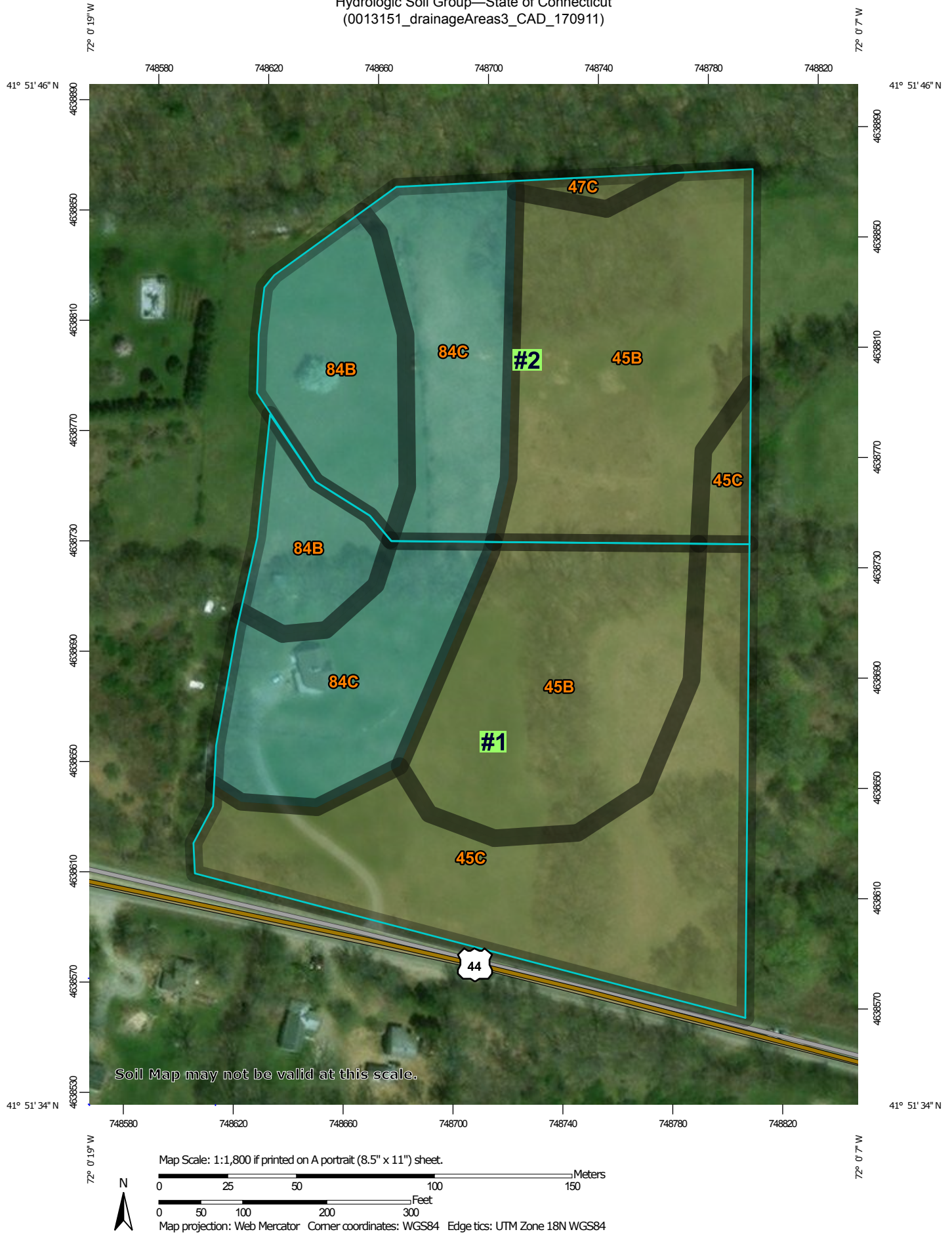
- Drainage Areas
- Access Road
- Fence
- Existing Storm Sewer
- A1 Array
- A2 Array



Drainage Map


0 100 Feet

Hydrologic Soil Group—State of Connecticut
(0013151_drainageAreas3_CAD_170911)



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: Apr 14, 2011—Aug 27, 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 — #1, State of Connecticut (CT600)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	C/D	2.2	17.5%
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	C/D	3.0	24.2%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	C	0.6	4.7%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	C	1.4	11.2%
Subtotals for #1			7.2	57.6%
Totals for Area of Interest			12.6	100.0%

Hydrologic Soil Group— Summary by Map Unit — #2, State of Connecticut (CT600)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	C/D	2.6	20.7%
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	C/D	0.2	1.6%
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	C/D	0.1	0.8%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	C	1.1	8.8%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	C	1.3	10.5%
Subtotals for #2			5.3	42.4%
Totals for Area of Interest			12.6	100.0%

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: Pomfret, Town of, Connecticut,
USA*

Latitude: 41.8613°, Longitude: -72.0025°

Elevation: 589.59 ft**

* source: ESRI Maps

** source: USGS



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 & aeriels](#)

PF tabular

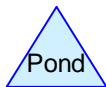
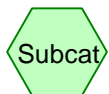
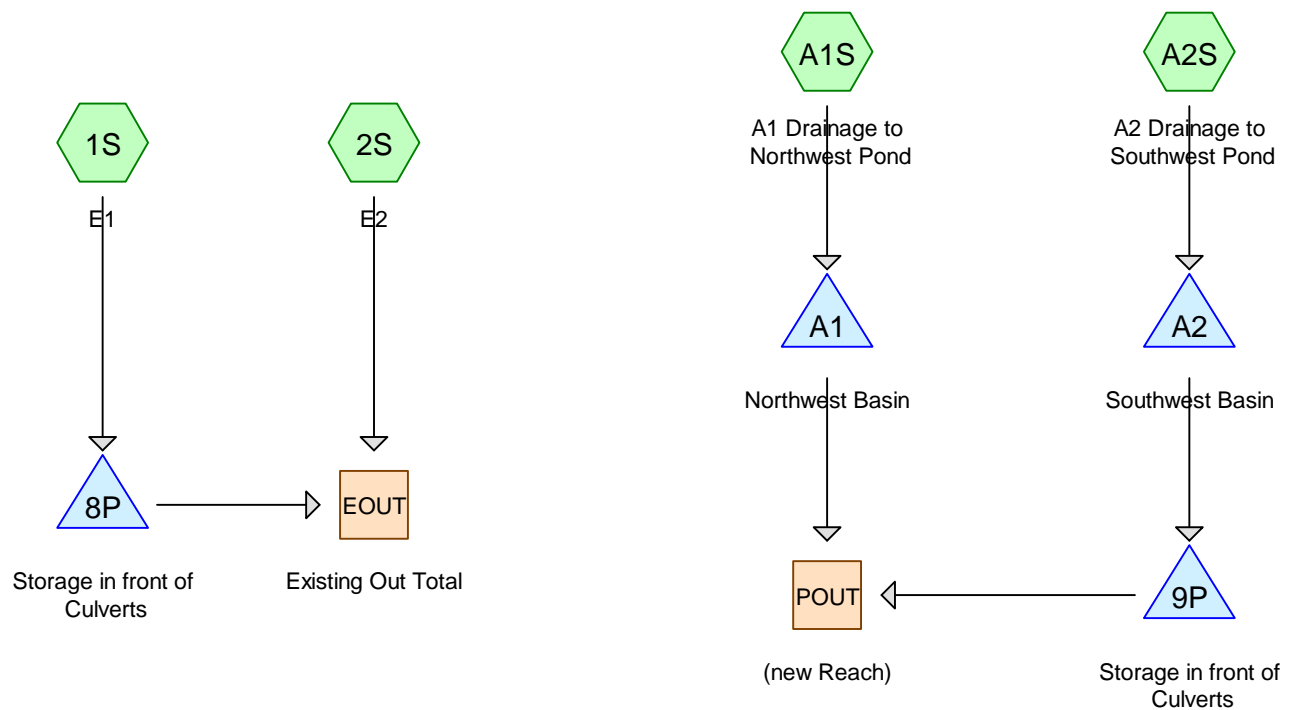
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.338 (0.259-0.442)	0.401 (0.306-0.523)	0.503 (0.383-0.658)	0.587 (0.445-0.773)	0.703 (0.517-0.962)	0.793 (0.572-1.10)	0.882 (0.619-1.27)	0.985 (0.660-1.45)	1.12 (0.725-1.71)	1.22 (0.774-1.90)
10-min	0.479 (0.367-0.626)	0.568 (0.434-0.742)	0.712 (0.542-0.933)	0.832 (0.630-1.10)	0.996 (0.733-1.36)	1.12 (0.810-1.57)	1.25 (0.876-1.80)	1.40 (0.935-2.06)	1.59 (1.03-2.42)	1.73 (1.10-2.69)
15-min	0.564 (0.432-0.736)	0.668 (0.510-0.872)	0.838 (0.638-1.10)	0.978 (0.742-1.29)	1.17 (0.862-1.60)	1.32 (0.953-1.84)	1.47 (1.03-2.11)	1.64 (1.10-2.42)	1.87 (1.21-2.84)	2.04 (1.29-3.16)
30-min	0.773 (0.591-1.01)	0.915 (0.699-1.20)	1.15 (0.874-1.50)	1.34 (1.02-1.77)	1.61 (1.18-2.19)	1.81 (1.31-2.52)	2.01 (1.41-2.90)	2.25 (1.51-3.31)	2.55 (1.65-3.89)	2.79 (1.76-4.33)
60-min	0.982 (0.751-1.28)	1.16 (0.888-1.52)	1.46 (1.11-1.91)	1.70 (1.29-2.24)	2.04 (1.50-2.79)	2.30 (1.66-3.20)	2.56 (1.79-3.68)	2.85 (1.91-4.21)	3.24 (2.10-4.94)	3.54 (2.24-5.49)
2-hr	1.26 (0.970-1.64)	1.49 (1.15-1.94)	1.87 (1.43-2.43)	2.18 (1.66-2.85)	2.60 (1.93-3.56)	2.93 (2.14-4.10)	3.26 (2.33-4.74)	3.73 (2.51-5.48)	4.36 (2.83-6.60)	4.83 (3.07-7.45)
3-hr	1.46 (1.12-1.89)	1.72 (1.33-2.23)	2.15 (1.65-2.80)	2.51 (1.92-3.28)	3.01 (2.24-4.11)	3.39 (2.48-4.73)	3.77 (2.71-5.48)	4.36 (2.93-6.37)	5.13 (3.33-7.75)	5.72 (3.64-8.79)
6-hr	1.86 (1.44-2.40)	2.20 (1.70-2.84)	2.76 (2.13-3.57)	3.23 (2.47-4.19)	3.86 (2.89-5.25)	4.35 (3.21-6.06)	4.85 (3.50-7.02)	5.63 (3.80-8.18)	6.66 (4.34-9.98)	7.44 (4.74-11.3)
12-hr	2.34 (1.82-3.00)	2.79 (2.16-3.57)	3.51 (2.72-4.51)	4.11 (3.16-5.30)	4.93 (3.70-6.65)	5.57 (4.11-7.68)	6.20 (4.48-8.89)	7.15 (4.84-10.3)	8.40 (5.49-12.5)	9.34 (5.98-14.2)
24-hr	2.79 (2.18-3.55)	3.35 (2.61-4.26)	4.25 (3.31-5.44)	5.01 (3.87-6.43)	6.05 (4.55-8.10)	6.85 (5.06-9.36)	7.65 (5.52-10.8)	8.76 (5.96-12.6)	10.2 (6.72-15.1)	11.4 (7.29-17.1)
2-day	3.15 (2.47-3.98)	3.82 (2.99-4.84)	4.91 (3.84-6.24)	5.82 (4.52-7.43)	7.07 (5.34-9.42)	8.03 (5.96-10.9)	9.00 (6.52-12.7)	10.3 (7.05-14.7)	12.1 (7.96-17.8)	13.4 (8.65-20.1)
3-day	3.41 (2.68-4.30)	4.14 (3.26-5.23)	5.34 (4.18-6.76)	6.34 (4.94-8.06)	7.70 (5.84-10.2)	8.76 (6.52-11.9)	9.81 (7.13-13.8)	11.3 (7.72-16.0)	13.3 (8.74-19.4)	14.7 (9.50-21.9)
4-day	3.65 (2.88-4.59)	4.43 (3.49-5.58)	5.70 (4.48-7.20)	6.76 (5.28-8.58)	8.22 (6.24-10.9)	9.34 (6.97-12.6)	10.5 (7.62-14.7)	12.1 (8.26-17.1)	14.2 (9.36-20.7)	15.8 (10.2-23.4)
7-day	4.30 (3.40-5.39)	5.18 (4.10-6.50)	6.62 (5.22-8.33)	7.82 (6.13-9.88)	9.47 (7.21-12.5)	10.7 (8.04-14.5)	12.0 (8.78-16.8)	13.8 (9.51-19.5)	16.3 (10.8-23.6)	18.1 (11.7-26.8)
10-day	4.96 (3.94-6.20)	5.90 (4.67-7.38)	7.44 (5.87-9.32)	8.71 (6.84-11.0)	10.5 (7.99-13.7)	11.8 (8.85-15.8)	13.2 (9.63-18.3)	15.1 (10.4-21.2)	17.6 (11.7-25.5)	19.5 (12.7-28.7)
20-day	7.08 (5.64-8.79)	8.08 (6.43-10.0)	9.72 (7.71-12.1)	11.1 (8.74-13.9)	13.0 (9.90-16.8)	14.4 (10.8-19.0)	15.8 (11.5-21.6)	17.5 (12.1-24.4)	19.8 (13.2-28.4)	21.5 (14.0-31.4)
30-day	8.88 (7.10-11.0)	9.91 (7.91-12.3)	11.6 (9.21-14.4)	13.0 (10.3-16.2)	14.9 (11.4-19.1)	16.4 (12.2-21.4)	17.8 (12.9-23.9)	19.3 (13.4-26.7)	21.2 (14.2-30.3)	22.7 (14.8-33.0)
45-day	11.1 (8.92-13.7)	12.2 (9.74-15.0)	13.9 (11.1-17.2)	15.3 (12.1-19.0)	17.2 (13.2-22.0)	18.7 (14.0-24.3)	20.3 (14.6-26.9)	21.5 (14.9-29.6)	23.0 (15.4-32.7)	24.2 (15.8-35.1)
60-day	13.0 (10.4-16.0)	14.1 (11.3-17.3)	15.8 (12.6-19.5)	17.3 (13.7-21.4)	19.2 (14.8-24.5)	20.8 (15.5-26.8)	22.3 (16.0-29.4)	23.4 (16.3-32.1)	24.7 (16.6-35.0)	25.8 (16.9-37.3)

¹ 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.

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Summary for Subcatchment 1S: E1

Runoff = 9.02 cfs @ 12.06 hrs, Volume= 0.644 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 2-yr Rainfall=3.35"

Area (ac)	CN	Description
5.330	79	Woods/grass comb., Good, HSG D
5.330	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	600	0.0760	1.27		Lag/CN Method,

Summary for Subcatchment 2S: E2

Runoff = 10.46 cfs @ 12.11 hrs, Volume= 0.874 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 2-yr Rainfall=3.35"

Area (ac)	CN	Description
7.230	79	Woods/grass comb., Good, HSG D
7.230	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	925	0.0750	1.37		Lag/CN Method,

Summary for Subcatchment A1S: A1 Drainage to Northwest Pond

Runoff = 8.86 cfs @ 12.06 hrs, Volume= 0.641 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 2-yr Rainfall=3.35"

Area (ac)	CN	Description
5.150	78	Meadow, non-grazed, HSG D
* 0.180	98	Gravel access road
5.330	79	Weighted Average
5.150	78	96.62% Pervious Area
0.180	98	3.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	600	0.0760	1.27		Lag/CN Method,

Summary for Subcatchment A2S: A2 Drainage to Southwest Pond

Runoff = 9.96 cfs @ 12.11 hrs, Volume= 0.860 af, Depth= 1.43"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 2-yr Rainfall=3.35"

Area (ac)	CN	Description
7.050	78	Meadow, non-grazed, HSG D
* 0.180	98	Gravel access road
7.230	78	Weighted Average
7.050	78	97.51% Pervious Area
0.180	98	2.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.6	925	0.0750	1.33		Lag/CN Method,

Summary for Reach EOUT: Existing Out Total

Inflow Area = 12.560 ac, 0.00% Impervious, Inflow Depth = 1.45" for 2-yr event
Inflow = 18.83 cfs @ 12.08 hrs, Volume= 1.517 af
Outflow = 18.83 cfs @ 12.08 hrs, Volume= 1.517 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Summary for Reach POUT: (new Reach)

Inflow Area = 12.560 ac, 2.87% Impervious, Inflow Depth = 0.60" for 2-yr event
Inflow = 1.28 cfs @ 14.22 hrs, Volume= 0.627 af
Outflow = 1.28 cfs @ 14.22 hrs, Volume= 0.627 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Summary for Pond 8P: Storage in front of Culverts

Inflow Area = 5.330 ac, 0.00% Impervious, Inflow Depth = 1.45" for 2-yr event
Inflow = 9.02 cfs @ 12.06 hrs, Volume= 0.644 af
Outflow = 9.00 cfs @ 12.06 hrs, Volume= 0.643 af, Atten= 0%, Lag= 0.1 min
Primary = 9.00 cfs @ 12.06 hrs, Volume= 0.643 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 563.28' @ 12.06 hrs Surf.Area= 0.009 ac Storage= 0.006 af

Plug-Flow detention time= 4.4 min calculated for 0.643 af (100% of inflow)
Center-of-Mass det. time= 3.0 min (874.8 - 871.8)

Volume	Invert	Avail.Storage	Storage Description
#1	562.20'	0.014 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
562.20	0.000	0.000	0.000
562.50	0.002	0.000	0.000
563.00	0.009	0.003	0.003
564.20	0.009	0.011	0.014

Device	Routing	Invert	Outlet Devices
#1	Primary	562.80'	24.0" Round RCP_Round 24" L= 154.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 562.80' / 560.66' S= 0.0139 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Primary	563.00'	20.0' long x 2.0' breadth Broad-Crested Rectangular Weir 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=8.97 cfs @ 12.06 hrs HW=563.28' (Free Discharge)

1=RCP_Round 24" (Inlet Controls 1.37 cfs @ 2.36 fps)

2=Broad-Crested Rectangular Weir (Weir Controls 7.60 cfs @ 1.36 fps)

Summary for Pond 9P: Storage in front of Culverts

Inflow Area = 7.230 ac, 2.49% Impervious, Inflow Depth = 0.61" for 2-yr event
 Inflow = 0.76 cfs @ 14.10 hrs, Volume= 0.370 af
 Outflow = 0.76 cfs @ 14.11 hrs, Volume= 0.368 af, Atten= 0%, Lag= 0.4 min
 Primary = 0.76 cfs @ 14.11 hrs, Volume= 0.368 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 563.04' @ 14.11 hrs Surf.Area= 0.009 ac Storage= 0.003 af

Plug-Flow detention time= 5.9 min calculated for 0.368 af (100% of inflow)
 Center-of-Mass det. time= 4.1 min (1,087.7 - 1,083.5)

Volume	Invert	Avail.Storage	Storage Description
#1	562.20'	0.014 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
562.20	0.000	0.000	0.000
562.50	0.002	0.000	0.000
563.00	0.009	0.003	0.003
564.20	0.009	0.011	0.014

Device	Routing	Invert	Outlet Devices
#1	Primary	562.80'	24.0" Round RCP_Round 24" L= 154.0' RCP, square edge headwall, Ke= 0.500

Inlet / Outlet Invert= 562.80' / 560.66' S= 0.0139 '/' Cc= 0.900
 n= 0.013, Flow Area= 3.14 sf
 #2 Primary 563.00' **20.0' long x 2.0' breadth Broad-Crested Rectangular Weir**
 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=0.75 cfs @ 14.11 hrs HW=563.04' (Free Discharge)

↑ **1=RCP_Round 24"** (Inlet Controls 0.35 cfs @ 1.67 fps)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 0.40 cfs @ 0.50 fps)

Summary for Pond A1: Northwest Basin

Inflow Area = 5.330 ac, 3.38% Impervious, Inflow Depth = 1.44" for 2-yr event
 Inflow = 8.86 cfs @ 12.06 hrs, Volume= 0.641 af
 Outflow = 0.53 cfs @ 14.30 hrs, Volume= 0.259 af, Atten= 94%, Lag= 134.1 min
 Primary = 0.53 cfs @ 14.30 hrs, Volume= 0.259 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 590.07' @ 14.30 hrs Surf.Area= 6,152 sf Storage= 17,060 cf

Plug-Flow detention time= 389.8 min calculated for 0.259 af (40% of inflow)

Center-of-Mass det. time= 225.3 min (1,092.6 - 867.3)

Volume	Invert	Avail.Storage	Storage Description
#1	586.00'	23,130 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
586.00	2,178	0	0
587.00	3,267	2,723	2,723
588.00	4,138	3,703	6,425
589.00	5,097	4,617	11,042
590.00	6,098	5,597	16,640
591.00	6,882	6,490	23,130

Device	Routing	Invert	Outlet Devices
#1	Primary	590.00'	10.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.50 cfs @ 14.30 hrs HW=590.07' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 0.50 cfs @ 0.73 fps)

Summary for Pond A2: Southwest Basin

Inflow Area = 7.230 ac, 2.49% Impervious, Inflow Depth = 1.43" for 2-yr event
 Inflow = 9.96 cfs @ 12.11 hrs, Volume= 0.860 af
 Outflow = 0.76 cfs @ 14.10 hrs, Volume= 0.370 af, Atten= 92%, Lag= 119.3 min
 Primary = 0.76 cfs @ 14.10 hrs, Volume= 0.370 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 568.09' @ 14.10 hrs Surf.Area= 7,214 sf Storage= 22,008 cf

Plug-Flow detention time= 372.2 min calculated for 0.369 af (43% of inflow)
 Center-of-Mass det. time= 210.6 min (1,083.5 - 872.9)

Volume	Invert	Avail.Storage	Storage Description
#1	564.00'	28,902 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
564.00	3,354	0	0
565.00	4,312	3,833	3,833
566.00	5,314	4,813	8,647
567.00	6,490	5,902	14,549
568.00	7,144	6,817	21,366
569.00	7,928	7,536	28,902

Device	Routing	Invert	Outlet Devices
#1	Primary	568.00'	10.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.75 cfs @ 14.10 hrs HW=568.09' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 0.75 cfs @ 0.84 fps)

Summary for Subcatchment 1S: E1

Runoff = 17.47 cfs @ 12.06 hrs, Volume= 1.248 af, Depth= 2.81"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 10-yr Rainfall=5.01"

Area (ac)	CN	Description
5.330	79	Woods/grass comb., Good, HSG D
5.330	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	600	0.0760	1.27		Lag/CN Method,

Summary for Subcatchment 2S: E2

Runoff = 20.28 cfs @ 12.10 hrs, Volume= 1.693 af, Depth= 2.81"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 10-yr Rainfall=5.01"

Area (ac)	CN	Description
7.230	79	Woods/grass comb., Good, HSG D
7.230	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	925	0.0750	1.37		Lag/CN Method,

Summary for Subcatchment A1S: A1 Drainage to Northwest Pond

Runoff = 17.21 cfs @ 12.06 hrs, Volume= 1.239 af, Depth= 2.79"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 10-yr Rainfall=5.01"

Area (ac)	CN	Description
5.150	78	Meadow, non-grazed, HSG D
* 0.180	98	Gravel access road
5.330	79	Weighted Average
5.150	78	96.62% Pervious Area
0.180	98	3.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	600	0.0760	1.27		Lag/CN Method,

Summary for Subcatchment A2S: A2 Drainage to Southwest Pond

Runoff = 19.45 cfs @ 12.11 hrs, Volume= 1.670 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 10-yr Rainfall=5.01"

Area (ac)	CN	Description
7.050	78	Meadow, non-grazed, HSG D
* 0.180	98	Gravel access road
7.230	78	Weighted Average
7.050	78	97.51% Pervious Area
0.180	98	2.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.6	925	0.0750	1.33		Lag/CN Method,

Summary for Reach EOUT: Existing Out Total

Inflow Area = 12.560 ac, 0.00% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 36.52 cfs @ 12.08 hrs, Volume= 2.940 af
Outflow = 36.52 cfs @ 12.08 hrs, Volume= 2.940 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Summary for Reach POUT: (new Reach)

Inflow Area = 12.560 ac, 2.87% Impervious, Inflow Depth = 1.94" for 10-yr event
Inflow = 18.58 cfs @ 12.24 hrs, Volume= 2.035 af
Outflow = 18.58 cfs @ 12.24 hrs, Volume= 2.035 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Summary for Pond 8P: Storage in front of Culverts

Inflow Area = 5.330 ac, 0.00% Impervious, Inflow Depth = 2.81" for 10-yr event
Inflow = 17.47 cfs @ 12.06 hrs, Volume= 1.248 af
Outflow = 17.45 cfs @ 12.06 hrs, Volume= 1.247 af, Atten= 0%, Lag= 0.1 min
Primary = 17.45 cfs @ 12.06 hrs, Volume= 1.247 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 563.44' @ 12.06 hrs Surf.Area= 0.009 ac Storage= 0.007 af

Plug-Flow detention time= 2.8 min calculated for 1.247 af (100% of inflow)
Center-of-Mass det. time= 2.0 min (850.6 - 848.6)

Volume	Invert	Avail.Storage	Storage Description
#1	562.20'	0.014 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
562.20	0.000	0.000	0.000
562.50	0.002	0.000	0.000
563.00	0.009	0.003	0.003
564.20	0.009	0.011	0.014

Device	Routing	Invert	Outlet Devices
#1	Primary	562.80'	24.0" Round RCP_Round 24" L= 154.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 562.80' / 560.66' S= 0.0139 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Primary	563.00'	20.0' long x 2.0' breadth Broad-Crested Rectangular Weir 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=17.41 cfs @ 12.06 hrs HW=563.44' (Free Discharge)

1=RCP_Round 24" (Inlet Controls 2.34 cfs @ 2.72 fps)

2=Broad-Crested Rectangular Weir (Weir Controls 15.07 cfs @ 1.73 fps)

Summary for Pond 9P: Storage in front of Culverts

Inflow Area = 7.230 ac, 2.49% Impervious, Inflow Depth = 1.96" for 10-yr event
 Inflow = 11.07 cfs @ 12.26 hrs, Volume= 1.179 af
 Outflow = 11.06 cfs @ 12.26 hrs, Volume= 1.178 af, Atten= 0%, Lag= 0.1 min
 Primary = 11.06 cfs @ 12.26 hrs, Volume= 1.178 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 563.32' @ 12.26 hrs Surf.Area= 0.009 ac Storage= 0.006 af

Plug-Flow detention time= 2.2 min calculated for 1.177 af (100% of inflow)
 Center-of-Mass det. time= 1.5 min (937.0 - 935.4)

Volume	Invert	Avail.Storage	Storage Description
#1	562.20'	0.014 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
562.20	0.000	0.000	0.000
562.50	0.002	0.000	0.000
563.00	0.009	0.003	0.003
564.20	0.009	0.011	0.014

Device	Routing	Invert	Outlet Devices
#1	Primary	562.80'	24.0" Round RCP_Round 24" L= 154.0' RCP, square edge headwall, Ke= 0.500

Inlet / Outlet Invert= 562.80' / 560.66' S= 0.0139 '/' Cc= 0.900
 n= 0.013, Flow Area= 3.14 sf
 #2 Primary 563.00' **20.0' long x 2.0' breadth Broad-Crested Rectangular Weir**
 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=11.05 cfs @ 12.26 hrs HW=563.32' (Free Discharge)

↑ **1=RCP_Round 24"** (Inlet Controls 1.61 cfs @ 2.46 fps)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 9.44 cfs @ 1.47 fps)

Summary for Pond A1: Northwest Basin

Inflow Area = 5.330 ac, 3.38% Impervious, Inflow Depth = 2.79" for 10-yr event
 Inflow = 17.21 cfs @ 12.06 hrs, Volume= 1.239 af
 Outflow = 8.22 cfs @ 12.20 hrs, Volume= 0.857 af, Atten= 52%, Lag= 8.4 min
 Primary = 8.22 cfs @ 12.20 hrs, Volume= 0.857 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 590.43' @ 12.20 hrs Surf.Area= 6,433 sf Storage= 19,314 cf

Plug-Flow detention time= 209.1 min calculated for 0.857 af (69% of inflow)

Center-of-Mass det. time= 88.3 min (934.5 - 846.2)

Volume	Invert	Avail.Storage	Storage Description
#1	586.00'	23,130 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
586.00	2,178	0	0
587.00	3,267	2,723	2,723
588.00	4,138	3,703	6,425
589.00	5,097	4,617	11,042
590.00	6,098	5,597	16,640
591.00	6,882	6,490	23,130

Device	Routing	Invert	Outlet Devices
#1	Primary	590.00'	10.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=8.20 cfs @ 12.20 hrs HW=590.43' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 8.20 cfs @ 1.92 fps)

Summary for Pond A2: Southwest Basin

Inflow Area = 7.230 ac, 2.49% Impervious, Inflow Depth = 2.77" for 10-yr event
 Inflow = 19.45 cfs @ 12.11 hrs, Volume= 1.670 af
 Outflow = 11.07 cfs @ 12.26 hrs, Volume= 1.179 af, Atten= 43%, Lag= 9.1 min
 Primary = 11.07 cfs @ 12.26 hrs, Volume= 1.179 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 568.51' @ 12.26 hrs Surf.Area= 7,546 sf Storage= 25,133 cf

Plug-Flow detention time= 201.8 min calculated for 1.179 af (71% of inflow)
 Center-of-Mass det. time= 84.3 min (935.4 - 851.1)

Volume	Invert	Avail.Storage	Storage Description
#1	564.00'	28,902 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
564.00	3,354	0	0
565.00	4,312	3,833	3,833
566.00	5,314	4,813	8,647
567.00	6,490	5,902	14,549
568.00	7,144	6,817	21,366
569.00	7,928	7,536	28,902

Device	Routing	Invert	Outlet Devices
#1	Primary	568.00'	10.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=11.06 cfs @ 12.26 hrs HW=568.51' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 11.06 cfs @ 2.16 fps)

Summary for Subcatchment 1S: E1

Runoff = 31.56 cfs @ 12.06 hrs, Volume= 2.302 af, Depth= 5.18"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 100-yr Rainfall=7.65"

Area (ac)	CN	Description
5.330	79	Woods/grass comb., Good, HSG D
5.330	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	600	0.0760	1.27		Lag/CN Method,

Summary for Subcatchment 2S: E2

Runoff = 36.66 cfs @ 12.10 hrs, Volume= 3.123 af, Depth= 5.18"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 100-yr Rainfall=7.65"

Area (ac)	CN	Description
7.230	79	Woods/grass comb., Good, HSG D
7.230	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	925	0.0750	1.37		Lag/CN Method,

Summary for Subcatchment A1S: A1 Drainage to Northwest Pond

Runoff = 31.22 cfs @ 12.06 hrs, Volume= 2.286 af, Depth= 5.15"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 100-yr Rainfall=7.65"

Area (ac)	CN	Description
5.150	78	Meadow, non-grazed, HSG D
* 0.180	98	Gravel access road
5.330	79	Weighted Average
5.150	78	96.62% Pervious Area
0.180	98	3.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	600	0.0760	1.27		Lag/CN Method,

Summary for Subcatchment A2S: A2 Drainage to Southwest Pond

Runoff = 35.40 cfs @ 12.11 hrs, Volume= 3.089 af, Depth= 5.13"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
CT-Abington 24-hr S1 100-yr Rainfall=7.65"

Area (ac)	CN	Description
7.050	78	Meadow, non-grazed, HSG D
* 0.180	98	Gravel access road
7.230	78	Weighted Average
7.050	78	97.51% Pervious Area
0.180	98	2.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.6	925	0.0750	1.33		Lag/CN Method,

Summary for Reach EOUT: Existing Out Total

Inflow Area = 12.560 ac, 0.00% Impervious, Inflow Depth = 5.18" for 100-yr event
Inflow = 65.98 cfs @ 12.08 hrs, Volume= 5.423 af
Outflow = 65.98 cfs @ 12.08 hrs, Volume= 5.423 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Summary for Reach POUT: (new Reach)

Inflow Area = 12.560 ac, 2.87% Impervious, Inflow Depth = 4.30" for 100-yr event
Inflow = 57.86 cfs @ 12.12 hrs, Volume= 4.501 af
Outflow = 57.86 cfs @ 12.12 hrs, Volume= 4.501 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Summary for Pond 8P: Storage in front of Culverts

Inflow Area = 5.330 ac, 0.00% Impervious, Inflow Depth = 5.18" for 100-yr event
Inflow = 31.56 cfs @ 12.06 hrs, Volume= 2.302 af
Outflow = 31.52 cfs @ 12.06 hrs, Volume= 2.301 af, Atten= 0%, Lag= 0.1 min
Primary = 31.52 cfs @ 12.06 hrs, Volume= 2.301 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 563.65' @ 12.06 hrs Surf.Area= 0.009 ac Storage= 0.009 af

Plug-Flow detention time= 1.8 min calculated for 2.300 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (827.6 - 826.2)

Volume	Invert	Avail.Storage	Storage Description
#1	562.20'	0.014 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
562.20	0.000	0.000	0.000
562.50	0.002	0.000	0.000
563.00	0.009	0.003	0.003
564.20	0.009	0.011	0.014

Device	Routing	Invert	Outlet Devices
#1	Primary	562.80'	24.0" Round RCP_Round 24" L= 154.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 562.80' / 560.66' S= 0.0139 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Primary	563.00'	20.0' long x 2.0' breadth Broad-Crested Rectangular Weir 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=31.50 cfs @ 12.06 hrs HW=563.65' (Free Discharge)

1=RCP_Round 24" (Inlet Controls 4.01 cfs @ 3.14 fps)

2=Broad-Crested Rectangular Weir (Weir Controls 27.49 cfs @ 2.11 fps)

Summary for Pond 9P: Storage in front of Culverts

Inflow Area = 7.230 ac, 2.49% Impervious, Inflow Depth = 4.31" for 100-yr event
 Inflow = 32.49 cfs @ 12.15 hrs, Volume= 2.598 af
 Outflow = 32.47 cfs @ 12.15 hrs, Volume= 2.597 af, Atten= 0%, Lag= 0.1 min
 Primary = 32.47 cfs @ 12.15 hrs, Volume= 2.597 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 563.67' @ 12.15 hrs Surf.Area= 0.009 ac Storage= 0.009 af

Plug-Flow detention time= 1.2 min calculated for 2.596 af (100% of inflow)
 Center-of-Mass det. time= 0.8 min (885.0 - 884.2)

Volume	Invert	Avail.Storage	Storage Description
#1	562.20'	0.014 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
562.20	0.000	0.000	0.000
562.50	0.002	0.000	0.000
563.00	0.009	0.003	0.003
564.20	0.009	0.011	0.014

Device	Routing	Invert	Outlet Devices
#1	Primary	562.80'	24.0" Round RCP_Round 24" L= 154.0' RCP, square edge headwall, Ke= 0.500

Inlet / Outlet Invert= 562.80' / 560.66' S= 0.0139 '/' Cc= 0.900
 n= 0.013, Flow Area= 3.14 sf
 #2 Primary 563.00' **20.0' long x 2.0' breadth Broad-Crested Rectangular Weir**
 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=32.45 cfs @ 12.15 hrs HW=563.67' (Free Discharge)

↑ **1=RCP_Round 24"** (Inlet Controls 4.13 cfs @ 3.17 fps)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 28.32 cfs @ 2.13 fps)

Summary for Pond A1: Northwest Basin

Inflow Area = 5.330 ac, 3.38% Impervious, Inflow Depth = 5.15" for 100-yr event
 Inflow = 31.22 cfs @ 12.06 hrs, Volume= 2.286 af
 Outflow = 27.87 cfs @ 12.09 hrs, Volume= 1.904 af, Atten= 11%, Lag= 2.2 min
 Primary = 27.87 cfs @ 12.09 hrs, Volume= 1.904 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 590.89' @ 12.09 hrs Surf.Area= 6,798 sf Storage= 22,389 cf

Plug-Flow detention time= 137.1 min calculated for 1.904 af (83% of inflow)

Center-of-Mass det. time= 56.4 min (881.5 - 825.2)

Volume	Invert	Avail.Storage	Storage Description
#1	586.00'	23,130 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
586.00	2,178	0	0
587.00	3,267	2,723	2,723
588.00	4,138	3,703	6,425
589.00	5,097	4,617	11,042
590.00	6,098	5,597	16,640
591.00	6,882	6,490	23,130

Device	Routing	Invert	Outlet Devices
#1	Primary	590.00'	10.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=27.81 cfs @ 12.09 hrs HW=590.89' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 27.81 cfs @ 3.12 fps)

Summary for Pond A2: Southwest Basin

Inflow Area = 7.230 ac, 2.49% Impervious, Inflow Depth = 5.13" for 100-yr event
 Inflow = 35.40 cfs @ 12.11 hrs, Volume= 3.089 af
 Outflow = 32.49 cfs @ 12.15 hrs, Volume= 2.598 af, Atten= 8%, Lag= 2.7 min
 Primary = 32.49 cfs @ 12.15 hrs, Volume= 2.598 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 568.99' @ 12.15 hrs Surf.Area= 7,917 sf Storage= 28,790 cf

Plug-Flow detention time= 132.1 min calculated for 2.598 af (84% of inflow)
 Center-of-Mass det. time= 54.6 min (884.2 - 829.7)

Volume	Invert	Avail.Storage	Storage Description
#1	564.00'	28,902 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
564.00	3,354	0	0
565.00	4,312	3,833	3,833
566.00	5,314	4,813	8,647
567.00	6,490	5,902	14,549
568.00	7,144	6,817	21,366
569.00	7,928	7,536	28,902

Device	Routing	Invert	Outlet Devices
#1	Primary	568.00'	10.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=32.48 cfs @ 12.15 hrs HW=568.99' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Weir Controls 32.48 cfs @ 3.29 fps)

DRAINAGE AREA NO.	DRAINAGE AREA	REQUIRED TRAP CAPACITY	BOTTOM AREA	BOTTOM ELEVATION	TOTAL DEPTH	OVERFLOW AREA	OVERFLOW ELEVATION	WET STORAGE	WIER LENGTH	TOP AREA	TOP BASIN	DRY STORAGE	TOTAL TRAP STORAGE	EXCESS TRAP STORAGE
(ID#)	AC	CU.YD.	SF	FT	FT	SF	FT	CU.YD.	FT	SF	FT	CU.YD.	CU.YD.	CU.YD.
A1	4.3	572	2180	586	5	6100	590	613	10	6885	591	240	854	282
A2	4.7	632	3350	564	5	7145	568	777	10	7930	569	279	1057	424

Exhibit J

Decommissioning Memo

Abington Road Solar Project - Decommissioning Memo

This memo describes a Decommissioning Plan that establishes the approach to conduct decommissioning activities for the permanent closure of the Facilities at the end of the Facilities' useful life or the permanent cessation of the Facilities' operation, whichever comes first. The Plan describes the approach for removal and/or abandonment of facilities and equipment associated with the Facilities and describes anticipated land-restoration activities.

DECOMMISSIONING ACTIVITIES

Decommissioning will involve removal and disposal or recycling of all above-surface Project components. All recyclable materials will be transported to the appropriate nearby recycling facilities. Any non-recyclable materials will be properly disposed of at a nearby landfill. 95% or greater of the Facilities' components will be recyclable.

Decommissioning Preparation

The first step in the decommissioning process will be to assess existing site conditions and prepare the site for demolition. Site decommissioning and equipment removal can take up to six months to complete for a project of this size. Therefore, access roads, fencing, and electrical power will temporarily remain in place for use by the decommissioning and site restoration workers until no longer needed. Demolition debris will be placed in temporary on-site storage areas pending final transportation and disposal/recycling according to the procedures listed below.

PV Equipment Removal and Recycling

During decommissioning, all Facilities components will be either removed from the site and recycled or abandoned in place 12 inches below grade (for underground conduit and conductors). Equipment removal will include all pad-mounted cabinets, above ground wiring, solar modules, solar module racking, string inverters, and panel boards. Steel h-beams that supported the module racking and inverters/panelboards will be mechanically pulled out of the ground; any resulting holes will be backfilled with locally imported soil to match existing site soil conditions. The concrete transformer and interconnection equipment pads will be broken up and removed.

The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the on-site equipment being used. The majority of glass 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.

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.