Stormwater Pollution Control Plan (SWPCP)
Registrant's Certification

The SWPCP for the Site listed below was prepared for Gehrlicher Solar America Corporation by Kleinfelder.

Site: Fusion Solar Center

I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by _____ for an activity located at Potash Hill Road, in Sprague CT, and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.

SWPCP Preparer's Signature: _____

Printed Name: _____

Date: _____

KLEINFELDER
Bright People. Right Solutions.

APPENDIX B
CONSERVATION DISTRICT PLAN REVIEW CERTIFICATION

(TO BE INCLUDED UPON RECEIPT)

KLEINFELDER
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APPENDIX C

CONTRACTOR'S AND SUBCONTRACTORS CERTIFICATION FORM

Stormwater Pollution Control Plan (SWPCP)
Contractor and Subcontractor Certification Form

All contractors and subcontractors that will perform actions on the site that have the potential to cause pollution of the waters of the State or are responsible for implementing the measures identified in this SWPCP must sign this certification statement. All certifications must be added to and maintained with this SWPCP. (COPY FORM TEMPLATE SO THAT EACH CONTRACTOR CAN FILL OUT AND SIGN.)

Site: _____

Company Name: _____

Company Address: _____

_____

_____

Business Phone: _____

I certify under penalty of the law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor or subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site.

Contractor's Signature: _____

Printed Name: _____

Title: _____

Date: _____

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APPENDIX D

STORMWATER CONSTRUCTION SITE INSPECTION REPORT

Stormwater Construction Site Inspection Report

Purpose
This Stormwater Construction Site Inspection Report is designed to assist you in preparing inspection reports in accordance with Section 5 of the SWPCP.

Overview of Inspection Requirements

Areas That Need to Be Inspected
During each inspection, you must inspect the following areas of your site:

- Cleared, graded, or excavated areas of the site;
- Stormwater controls (e.g., perimeter controls, sediment basins, inlets, exit points etc.) and pollution prevention practices (e.g., pollution prevention practices for vehicle fueling/maintenance and washing, construction product storage, handling, and disposal, etc.) at the site;
- Material, waste, or borrow areas covered by the permit, and equipment storage and maintenance areas;
- Areas where stormwater flows within the site;
- Stormwater discharge points; and
- Areas where stabilization has been implemented.

What to Check For During Your Inspection
During your site inspection, you are required to check:

- Whether stormwater controls or pollution prevention practices require maintenance or corrective action, or whether new or modified controls are required;
- For the presence of conditions that could lead to spills, leaks, or other pollutant accumulations and discharges;
- Whether there are visible signs of erosion and sediment accumulation at points of discharge and to the channels and streambanks that are in the immediate vicinity of the discharge;
- If a stormwater discharge is occurring at the time of the inspection, whether there are obvious, visual signs of pollutant discharges; and
- If any permit violations have occurred on the site.

Instructions for Using This Template

The following tips for using this template will help you ensure that the minimum permit requirements are met:

- **Complete all required text fields.** Fill out all text fields. (Note: Where you do not need the number of rows provided in the template form for your inspection, you may leave those rows blank. Or, if you need more space to document your findings, you may add an additional sheet.)
- **Use your site map to document inspection findings.** Where you are asked for location information, reference the point on your SWPCP site map that corresponds to the requested location on the inspection form. Using the site map as a tool in this way will help you conduct efficient inspections, will assist you in evaluating problems found, and will ensure proper documentation.
- **Sign and certify each inspection report.** Each inspection report must be signed and certified by the inspector and permittee to be considered complete.
- **Include the inspection form with your SWPCP.** Once your form is complete, include a copy of the inspection form in your SWPCP.
- **Retain copies of all inspection reports with your records.** You must also retain in your records copies of all inspection reports. These reports must be retained for at least 5 years from the date of inspection.

Section-by-Section Instructions
You will find specific instructions corresponding to each section of the report form.

General Information					
Name of Project	Fusion Solar Center Project			**Inspection Date**	
Inspector Name, Title & Contact Information					
Inspector Qualifications					
Present Phase of Construction					
Inspection Location (if multiple inspections are required, specify location where this inspection is being conducted)					

Inspection Frequency *(Note: you may be subject to different inspection frequencies in different areas of the site. Check all that apply.)*

Standard Frequency: ☐ Weekly ☐ Within 24 hours of the end of a storm that generates a discharge

Reduced Frequency:

- ☐ Once per month (for stabilized areas)

Date of last rainfall:

Total rainfall amount:

Current Weather Conditions:

Condition and Effectiveness of Erosion and Sediment (E&S) Controls (see reverse for instructions)			
Type/Location of E&S Control [Add an additional sheet if necessary]	**Repairs or Other Maintenance Needed?***	**Corrective Action Required?***	**Notes**
1.	☐Yes ☐No	☐Yes ☐No	
2.	☐Yes ☐No	☐Yes ☐No	
3.	☐Yes ☐No	☐Yes ☐No	
4.	☐Yes ☐No	☐Yes ☐No	
5.	☐Yes ☐No	☐Yes ☐No	
6.	☐Yes ☐No	☐Yes ☐No	
7.	☐Yes ☐No	☐Yes ☐No	
8.	☐Yes ☐No	☐Yes ☐No	

*** Note:** The permit differentiates between conditions requiring repairs and maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition and requires repairs if controls are not operating as intended. Corrective actions are triggered only for specific, more serious conditions, which include: 1) A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in the Guidelines; 2) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements; 3) A prohibited discharge is occurring or has occurred; or 4) Corrective actions are required as a result of a permit violation found during an inspection. If a condition on your site requires a corrective action, engineered corrective actions shall be implemented within 7 days of the inspection.

Instructions for Filling Out the "Erosion and Sediment Control" Table

Type and Location of E&S Controls
Provide a list of all erosion and sediment (E&S) controls that your SWPCP indicates will be or are otherwise installed and implemented at your site. You may group your E&S controls on your form if you have several of the same type of controls (e.g., you may group "Inlet Protection Measures", "Perimeter Controls", and "Stockpile Controls" together on one line), but if there are any problems with a specific control, you must separately identify the location of the control, whether repairs or maintenance or corrective action are necessary, and in the notes section you must describe the specifics about the problem you observed.

Repairs or Other Maintenance Needed?
Answer "yes" if the E&S control requires a repair of any kind (due to normal wear and tear, or as a result of damage) or requires maintenance in order for the control to continue operating effectively. At a minimum, maintenance is required in the following specific instances: (1) for perimeter controls, whenever sediment has accumulated to ½ or more the above-ground height of the control; (2) where sediment has been tracked-out onto the surface of off-site streets or other paved areas; (3) for inlet protection measures, when sediment accumulates, the filter becomes clogged, and/or performance is compromised; and (4) for sediment basins, as necessary to maintain at least ½ of the design capacity of the basin. Note: In many cases, "yes" answers are expected and indicate a project with an active operation and maintenance program. You should also answer "yes" if work to fix the problem is still ongoing from the previous inspection.

Corrective Action Needed?
Answer "yes" if during your inspection you found any of the following conditions to be present: (1) a required E&S control was never installed, was installed incorrectly, or not in accordance with the Guidelines; (2) you become aware that the inadequacy of the E&S control has led to an exceedance of an applicable water quality standard; or (3) Corrective action for an E&S control is required as a result of a permit violation found during an inspection. If you answer "yes", you must implement the corrective action on site within seven (7) days and incorporate it into the SWPCP within ten (10) days of the inspection. Note: You should answer "yes" if work to fix the problem from a previous inspection is still ongoing.

Notes
For each E&S control and the area immediately surrounding it, note whether the control is properly installed and whether it appears to be working to minimize sediment discharge. Describe any problem conditions you observed such as the following, and why you think they occurred as well as actions (e.g., repairs, maintenance, or corrective action) you will take or have taken to fix the problem:

1. Failure to install or to properly install a required E&S control
2. Damage or destruction to an E&S control caused by vehicles, equipment, or personnel, a storm event, or other event
3. Mud or sediment deposits found downslope from E&S controls
4. Sediment tracked out onto paved areas by vehicles leaving construction site
5. Noticeable erosion at discharge outlets or at adjacent streambanks or channels
6. Erosion of the site's sloped areas (e.g., formation of rills or gullies)
7. E&S control is no longer working due to lack of maintenance

If repairs, maintenance, or corrective action is required, briefly note the reason. If repairs, maintenance, or corrective action have been completed, make a note of the date it was completed and what was done.

Condition and Effectiveness of Pollution Prevention (Good Housekeeping) Practices (see reverse for instructions)			
Type/Location of PP Practices [Add an additional sheet if necessary]	**Repairs or Other Maintenance Needed?***	**Corrective Action Required?***	**Notes**
1.	☐Yes ☐No	☐Yes ☐No	
2.	☐Yes ☐No	☐Yes ☐No	
3.	☐Yes ☐No	☐Yes ☐No	
4.	☐Yes ☐No	☐Yes ☐No	
5.	☐Yes ☐No	☐Yes ☐No	
6.	☐Yes ☐No	☐Yes ☐No	
7.	☐Yes ☐No	☐Yes ☐No	
8.	☐Yes ☐No	☐Yes ☐No	

*** Note:** The permit differentiates between conditions requiring repairs and maintenance, and those requiring corrective action. The permit requires maintenance in order to keep controls in effective operating condition and requires repairs if controls are not operating as intended. Corrective actions are triggered only for specific, more serious conditions, which include: 1) A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in the Guidelines; 2) You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements; 3) A prohibited discharge is occurring or has occurred; or 4) Corrective actions are required as a result of a permit violation found during an inspection. If a condition on your site requires a corrective action, engineered corrective actions shall be implemented within 7 days of the inspection.

Instructions for Filling Out the "Pollution Prevention (Good Housekeeping) Practice" Table

Type and Location of PP Controls
Provide a list of all pollution prevention (PP, or Good Housekeeping) practices that are implemented at your site. This list must include all PP practices described in your SWPCP.

Repairs or Other Maintenance Needed?
Answer "yes" if the PP practice requires a repair of any kind (due to normal wear and tear, or as a result of damage) or requires maintenance in order for the control to continue operating effectively. Note: In many cases, "yes" answers are expected and indicate a project with an active operation and maintenance program.

Corrective Action Needed?
Answer "yes" if during your inspection you found any of the following conditions to be present: (1) a required PP practice was never installed, was installed incorrectly, or not in accordance with the Guidelines; (2) you become aware that the inadequacy of the PP practice has led to an exceedance of an applicable water quality standard; (3) a "prohibited discharge" is occurring or has occurred, or (4) corrective action for a PP practice is required as a result of a permit violation found during an inspection. If you answer "yes", you must implement the corrective action on site within seven (7) days and incorporate it into the SWPCP within ten (10) days of the inspection. Note: You should answer "yes" if work to fix the problem from a previous inspection is still ongoing.

Notes
For each PP control and the area immediately surrounding it, note whether the control is properly installed, whether it appears to be working to minimize or eliminate pollutant discharges, and whether maintenance or corrective action is required. Describe problem conditions you observed such as the following, and why you think they occurred, as well as actions you will take or have taken to fix the problem:

1. Failure to install or to properly install a required PP control
2. Damage or destruction to a PP control caused by vehicles, equipment, or personnel, or a storm event
3. Evidence of a spill, leak, or other type of pollutant discharge, or failure to have properly cleaned up a previous spill, leak, or other type of pollutant discharge
4. Spill response supplies are absent, insufficient, or not where they are supposed to be located
5. Improper storage, handling, or disposal of chemicals, building materials or products, fuels, or wastes
6. PP practice is no longer working due to lack of maintenance

If repairs, maintenance, or corrective action is required, briefly note the reason. If repairs, maintenance, or corrective action have been completed, make a note of the date it was completed and what was done.

Stabilization of Exposed Soil			
Stabilization Area [Add an additional sheet if necessary]	**Stabilization Method**	**Have You Initiated Stabilization?**	**Notes**
1.		☐ YES ☐ NO If yes, provide date:	
2.		☐ YES ☐ NO If yes, provide date:	
3.		☐ YES ☐ NO If yes, provide date:	
4.		☐ YES ☐ NO If yes, provide date:	
5.		☐ YES ☐ NO If yes, provide date:	

Instructions for Filling Out the "Stabilization of Exposed Soil" Table

Stabilization Area
List all areas where soil stabilization is required to begin because construction work in that area has permanently stopped or temporarily stopped, and all areas where stabilization has been implemented.

Stabilization Method
For each area, specify the method of stabilization (e.g., hydroseed, sod, planted vegetation, erosion control blanket, mulch, rock).

Have You Initiated Stabilization
For each area, indicate whether stabilization has been initiated.

Notes
For each area where stabilization has been initiated, describe the progress that has been made, and what additional actions are necessary to complete stabilization. Note the effectiveness of stabilization in preventing erosion. If stabilization has been initiated but not completed, make a note of the date it is to be completed. If stabilization has been completed, make a note of the date it was completed. If stabilization has not yet been initiated, make a note of the date it is to be initiated, and the date it is to be completed.

Description of Discharges	
Was a stormwater discharge or other discharge occurring from any part of your site at the time of the inspection? ☐ Yes ☐ No **If "yes", provide the following information for each point of discharge:**	
Discharge Location [Add an additional sheet if necessary]	**Observations**
1.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? ☐ Yes ☐ No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
2.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? ☐ Yes ☐ No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
3.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? ☐ Yes ☐ No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
4.	Describe the discharge:
	At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? ☐ Yes ☐ No
	If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:

Instructions for Filling Out the "Description of Discharges" Table

You are only required to complete this section if a discharge is occurring at the time of the inspection.

Was a Stormwater Discharge Occurring From Any Part of Your Site At The Time of the Inspection?
During your inspection, examine all points of discharge from your site, and determine whether a discharge is occurring. If there is a discharge, answer "yes" and complete the questions below regarding the specific discharge. If there is not a discharge, answer "no" and skip to the next page.

Discharge Location (repeat as necessary if there are multiple points of discharge)
Location of discharge. Specify the location on your site where the discharge is occurring. The location may be an outlet from a stormwater control or constructed stormwater channel, a discharge into a storm sewer inlet, or a specific point on the site. Be as specific as possible; it is recommended that you refer to a precise point on your site map.

Describe the discharge. Include a specific description of any noteworthy characteristics of the discharge such as color; odor; floating, settled, or suspended solids; foam; oil sheen; and other obvious pollution indicators.
Are there visible signs of erosion or sediment accumulation? At each point of discharge and the channel and streambank in the immediate vicinity, visually assess whether there are any obvious signs of erosion and/or sediment accumulation that can be attributed to your discharge. If you answer "yes", include a description in the space provided of the erosion and sediment deposition that you have found, specify where on the site or in the surface water it is found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue.

Summary
The Site is: ☐ In Compliance ☐ Out of Compliance **with the terms and conditions of the SWPCP and General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.**
Describe remedial actions required to bring the Site back into compliance (Refer to Corrective Action Log Form):
Describe interim measures required to minimize the potential for the discharge of pollutants from the Site:
Notes: Non-engineered corrective actions (as identified in the Guidelines) shall be implemented on site within 24 hours and incorporated into a revised SWPCP within three (3) calendar days of the date of inspection unless another schedule is specified in the Guidelines. Engineered corrective actions (as identified in the Guidelines) shall be implemented on site within seven (7) days and incorporated into a revised SWPCP within ten (10) days of the date of inspection unless another schedule is specified in the Guidelines or is approved by DEEP.

Corrective Action Log Form

Purpose
This Corrective Action Log Form is designed to assist you in preparing corrective action reports.

Instructions for Using This Log Form

- **Complete a separate report for each condition that triggers corrective action.** For each triggering condition on your site, you will need to fill out a separate corrective action report form.
- **Complete all required text fields.** Fill out all text fields. (Note: Where you do not need the number of rows provided in the corrective action report form, you leave those rows blank. Or, if you need more space to document your findings, you may add an additional sheet.)
- **Include the corrective action report form with your SWPCP.** Once your form is complete, make sure to include a copy of the corrective action report form in your SWPCP.
- **Retain copies of all corrective action reports with your records.** You must retain copies of your corrective action reports in your records. These reports must be retained for at least 5 years from the date construction is completed.

Instructions for Filling Out the Initial Report (Section A)

You must complete Section A of the report form as soon as possible of discovering the condition that triggered corrective action

Name of Project
Enter the name for the project.

Today's Date
Enter the date you completed this form.

Date/Time Problem First Discovered
Specify the date on which the triggering condition was first discovered. Also specify the time of the discovery.

Name/Contact Information
Provide the individual's name, title, and contact information as directed in the form.

Description of the Site Condition
Provide a summary description of the condition you found that triggered corrective action and the specific location where it was found. Be as specific as possible about the location; it is recommended that you refer to a precise point on your site map. If you have already provided this explanation in an inspection report, you can refer to that report.

Deadline for Completing Corrective Action
This deadline is fixed in CGP Section 5.(b)(4)(B)(iii). For all projects, the deadline is either: (1) within 24 hours from the date you discovered the problem for non-engineered corrective actions, or (2) within seven (7) days for engineered corrective actions. Non-engineered and engineered corrective actions are defined within the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and are noted in Section A of the Corrective Action Log Form.

Instructions for Filling Out the Corrective Action Progress Table (Section B)

You must complete Section B of the report form no later than 7 calendar days after discovering the condition that triggered corrective action.

Section B.2 – Stormwater Control Modifications to be Implemented
Provide a list of modifications you plan to make to your stormwater controls to correct the problem and the date you completed such work. Keep in mind that your work must be completed within the timeline specified in Section A for the completion of corrective action work.

Also, if a SWPCP modification is necessary in order to reflect changes implemented at your site, indicate the date you modified your SWPCP.

Corrective Action Log Form

Section A – Initial Report
(Complete this section as soon as possible after discovering the condition that triggered corrective action)

Name of Project	FUSION SOLAR CENTER PROJECT			**Today's Date**	
Date Problem First Discovered		**Time Problem First Discovered**			
Name and Contact Information of Individual Completing this Form					

Provide a brief description of the problem:

Select control(s) needed to correct problem and list in Section B below:

Engineered controls	**Non-engineered controls**
☐ Land Grading	☐ Topsoiling
☐ Permanent TRM	☐ Surface Roughening
☐ Retaining Walls	☐ Dust Control
☐ Riprap	☐ Temporary Seeding
☐ Gabions	☐ Permanent Seeding
☐ Permanent Slope Drain	☐ Sodding
☐ Channel Grade Stabilization Structure	☐ Landscape Planting
☐ Temporary Lined Chute	☐ Temporary Soil Protection
☐ Temporary Pipe Slope Drain	☐ Mulching
☐ Vegetated Waterway	☐ Temporary Erosion Control Blanket
☐ Temporary Lined Channel	☐ Stone Slope Protection
☐ Permanent Lined Waterway	☐ Temporary Fill Berm
☐ Temporary Stream Crossing	☐ Water Bar
☐ Temporary Diversion	☐ Temporary Sediment Trap
☐ Permanent Diversion	☐ Hay Bale Barrier
☐ Subsurface Drain	☐ Silt Fence
☐ Detention Basin	☐ Turbidity Curtain
☐ Level Spreader	☐ Vegetative Filter
☐ Outlet Protection	☐ Construction Entrance
☐ Stone Check Dam	☐ Pump Intake and Outlet Protection
☐ Temporary Sediment Basin	☐ Pumping Settling Basin
☐ Dewatering of Earth Materials	☐ Portable Sediment Tank

Deadline for completing corrective action: (*Non-engineered corrective actions shall be implemented on site within 24 hours and incorporated into a revised SWPCP within three (3) calendar days of the inspection date. Engineered corrective actions shall be implemented on site within seven (7) days and incorporated into a revised SWPCP within ten (10) calendar days of the inspection date)*:

Section B – Corrective Action Progress (Complete this section no later than 7 calendar days after discovering the condition that triggered corrective action)			
Stormwater Control Modifications to be Implemented to Correct the Problem			
List of Stormwater Control Modification(s) Needed to Correct Problem (Add an additional sheet if necessary)	**Date of Completion**	**SWPCP Update Necessary?**	**Notes**
1.		☐Yes ☐No If yes, provide date SWPCP modified:	
2.		☐Yes ☐No If yes, provide date SWPCP modified:	
3.		☐Yes ☐No If yes, provide date SWPCP modified:	
4.		☐Yes ☐No If yes, provide date SWPCP modified:	
5.		☐Yes ☐No If yes, provide date SWPCP modified:	
6.		☐Yes ☐No If yes, provide date SWPCP modified:	
7.			

Stormwater Construction Site Inspection Report

CERTIFICATION STATEMENT

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Inspector:

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

AFFILIATION: _____

ADDRESS: _____

_____

PHONE: _____

DATE: _____

Permittee or his/her authorized representative:

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

AFFILIATION: _____

ADDRESS: _____

_____

PHONE: _____

DATE: _____

Turbidity Monitoring Report (*attach additional sheets as necessary*)					
Name of Project		**Normal Working Hours**		**Monitoring Date**	
Personnel		**Rainfall start time**			

Snow or Ice Melt

Does the sample contain or have the potential to contain snow or ice melt?: ☐ Yes ☐ No

Note that sampling of snow or ice melt in the absence of a storm event is not a valid sample.

Sample Location:										
Identify Substantially Identical Outfalls:										
	Time of Sample	**Turbidity Value**	**Time of Sample**	**Turbidity Value**	**Time of Sample**	**Turbidity Value**	**Time of Sample**	**Turbidity Value**	**Time of Sample**	**Turbidity Value**
1.										
2.										
3.										
Stormwater Discharge Turbidity Value = Average Turbidity Value =										

Turbidity Monitoring Report

CERTIFICATION STATEMENT

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Inspector:

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

AFFILIATION: _____

ADDRESS: _____

_____

PHONE: _____

DATE: _____

Permittee or his/her authorized representative:

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

AFFILIATION: _____

ADDRESS: _____

_____

PHONE: _____

DATE: _____

APPENDIX E
CONSTRUCTION SEQUENCE LOG

Construction Sequence Log

Contractors and subcontractors shall be listed in the table below, with the sequencing, intended timing and actual timing of major activities, and the area of the site each contractor/subcontractor shall be responsible for indicated (this table to be amended/ additional sheets appended as needed). The proposed sequencing of major activities is provided in Section 2.1. Activities listed on this table must include implementation of all stabilization practices and pollution control measures (BMPs), and major grading activities.

Contractor/ Subcontractor	Activity	Location on Site	Intended Timing		Actual Timing	
			Start Date	End Date	Start Date	End Date
Example	*Install silt fence*	*Site perimeter*	*3/4/10*	*3/7/10*	*3/5/10*	*3/9/10*

Construction Sequence Log (Continued)

Contractor/ Subcontractor	Activity	Location on Site	Intended Timing		Actual Timing	
			Start Date	End Date	Start Date	End Date
Example	*Install silt fence*	*Site perimeter*	*3/4/10*	*3/7/10*	*3/5/10*	*3/9/10*

APPENDIX F
CT DEEP IMPAIRED WATERS TABLE

Impaired Waters Table for Construction Stormwater Discharges
General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, issued August 21, 2013, effective October 1, 2013

Waterbody ID or 305B ID	Waterbody Name	Impaired Designated Use	Pollutant	Approved TMDL?
CT4500-00-3-L3_01	Union Pond (Manchester)	Habitat for Fish, Other Aquatic Life and Wildlife	Sedimentation/ Siltation	No
CT4601-00-1-L2_01	Silver Lake (Berlin/ Meriden)	Habitat for Fish, Other Aquatic Life and Wildlife	Turbidity	No
CT5111-09-2-L3_01	Branford Supply Pond, Northwest (Branford)	Habitat for Fish, Other Aquatic Life and Wildlife	Sedimentation/ Siltation	No
CT5111-09-2-L3_01	Branford Supply Pond, Northwest (Branford)	Habitat for Fish, Other Aquatic Life and Wildlife	Total Suspended Solids (TSS)	No
CT5111-09-2-L3_01	Branford Supply Pond, Northwest (Branford)	Habitat for Fish, Other Aquatic Life and Wildlife	Turbidity	No
CT5112-10_01	Burrs Brook-01	Habitat for Fish, Other Aquatic Life and Wildlife	Turbidity	No
CT5200-00-4-L2_01	Hanover Pond (Meriden)	Habitat for Fish, Other Aquatic Life and Wildlife	Sedimentation/ Siltation	No
CT6016-00-1-L3_01	Hatch Pond (Kent)	Habitat for Fish, Other Aquatic Life and Wildlife	Sedimentation/ Siltation	No
CT6016-00-1-L3_01	Hatch Pond (Kent)	Recreation	Sedimentation/ Siltation	No
CT7300-00_01	Norwalk River-01	Habitat for Fish, Other Aquatic Life and Wildlife	Sedimentation/ Siltation	No

APPENDIX G

NATION RESOURCES CONSERVATION SERVICE SOILS REPORT & MAP

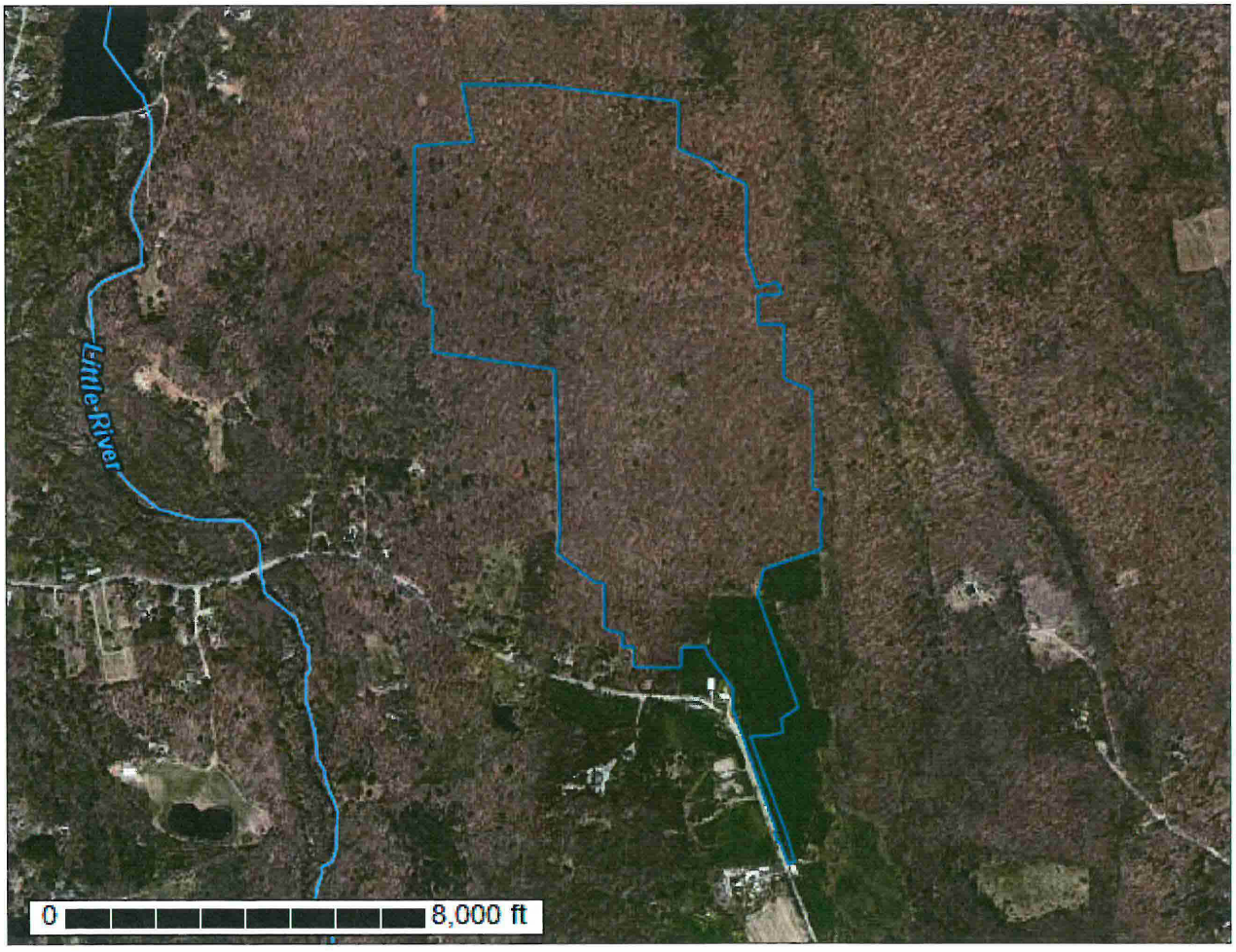
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for State of Connecticut



June 22, 2016

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

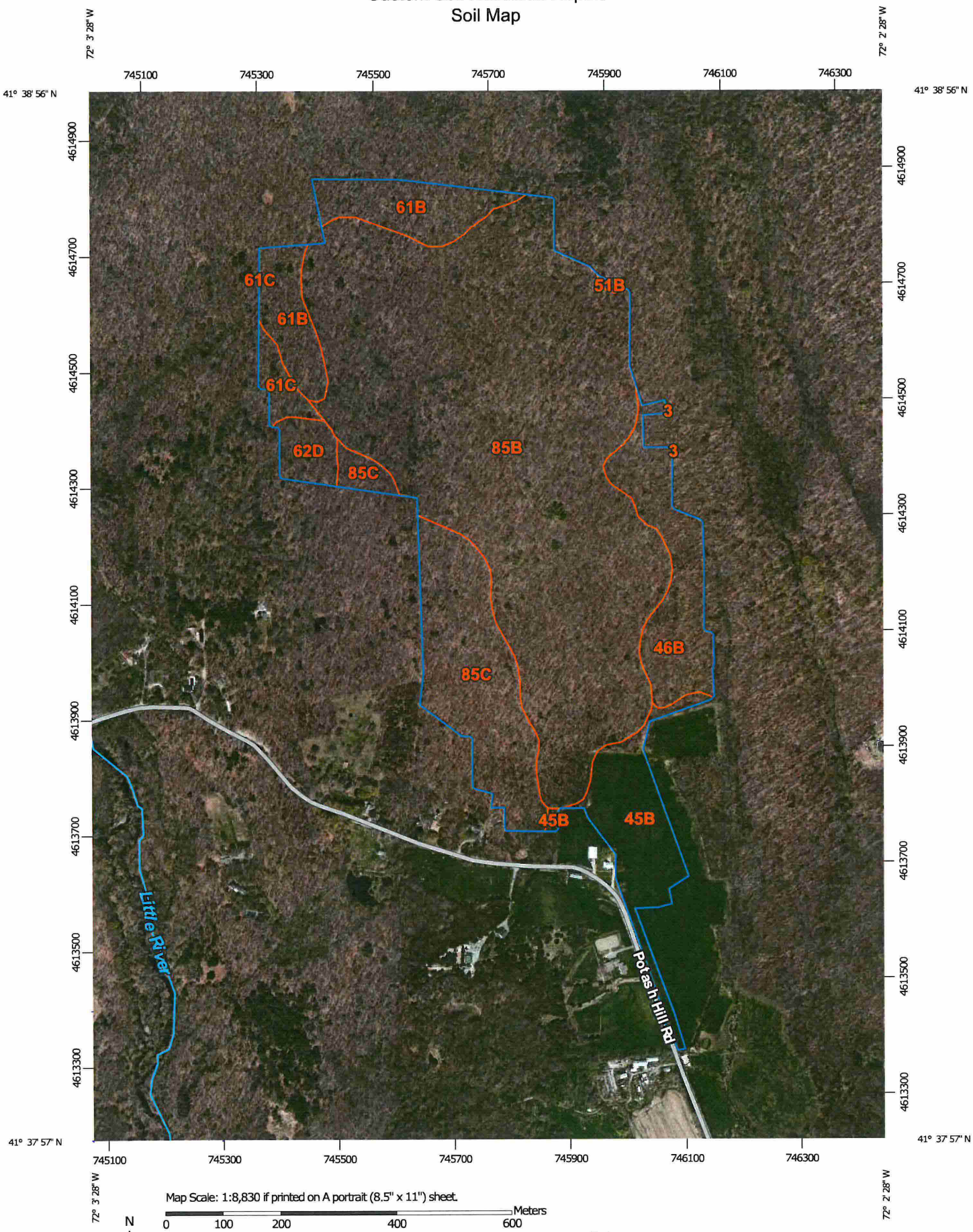
for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
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 14, Sep 22, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—May 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	0.0	0.0%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	9.8	6.8%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	10.5	7.3%
51B	Sutton fine sandy loam, 2 to 8 percent slopes, very stony	0.2	0.1%
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	11.2	7.8%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	2.0	1.4%
62D	Canton and Charlton soils, 15 to 35 percent slopes, extremely stony	2.6	1.8%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	89.0	62.2%
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	17.8	12.4%
Totals for Area of Interest		**143.1**	**100.0%**

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

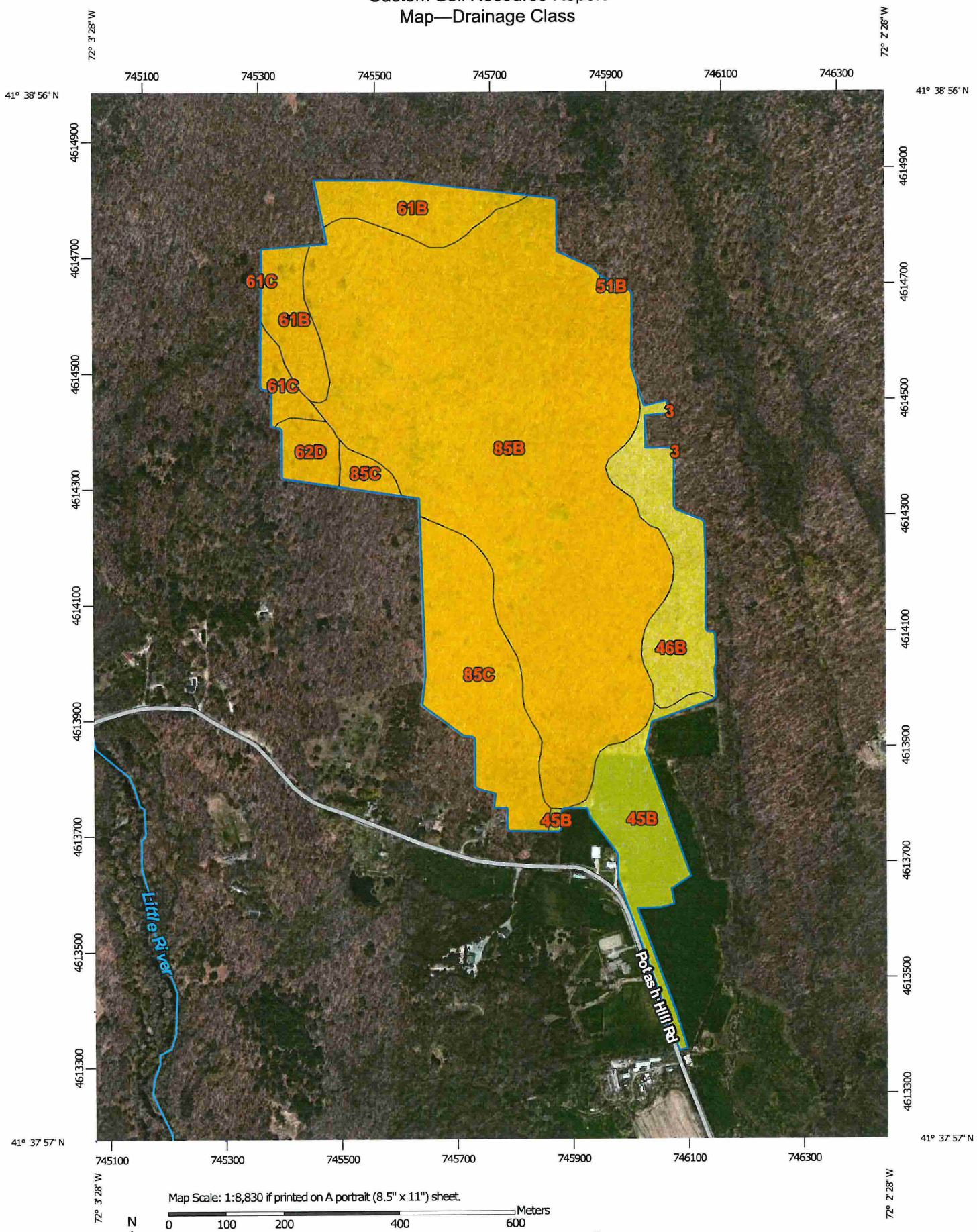
Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Drainage Class

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Custom Soil Resource Report
Map—Drainage Class



Map Scale: 1:8,830 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Lines

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Points

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- 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.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

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Table—Drainage Class

Drainage Class— Summary by Map Unit — State of Connecticut (CT600)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	Poorly drained	0.0	0.0%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	Moderately well drained	9.8	6.8%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	Moderately well drained	10.5	7.3%
51B	Sutton fine sandy loam, 2 to 8 percent slopes, very stony	Moderately well drained	0.2	0.1%
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	Well drained	11.2	7.8%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	Well drained	2.0	1.4%
62D	Canton and Charlton soils, 15 to 35 percent slopes, extremely stony	Well drained	2.6	1.8%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	Well drained	89.0	62.2%
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	Well drained	17.8	12.4%
Totals for Area of Interest			**143.1**	**100.0%**

Rating Options—Drainage Class

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Water Features

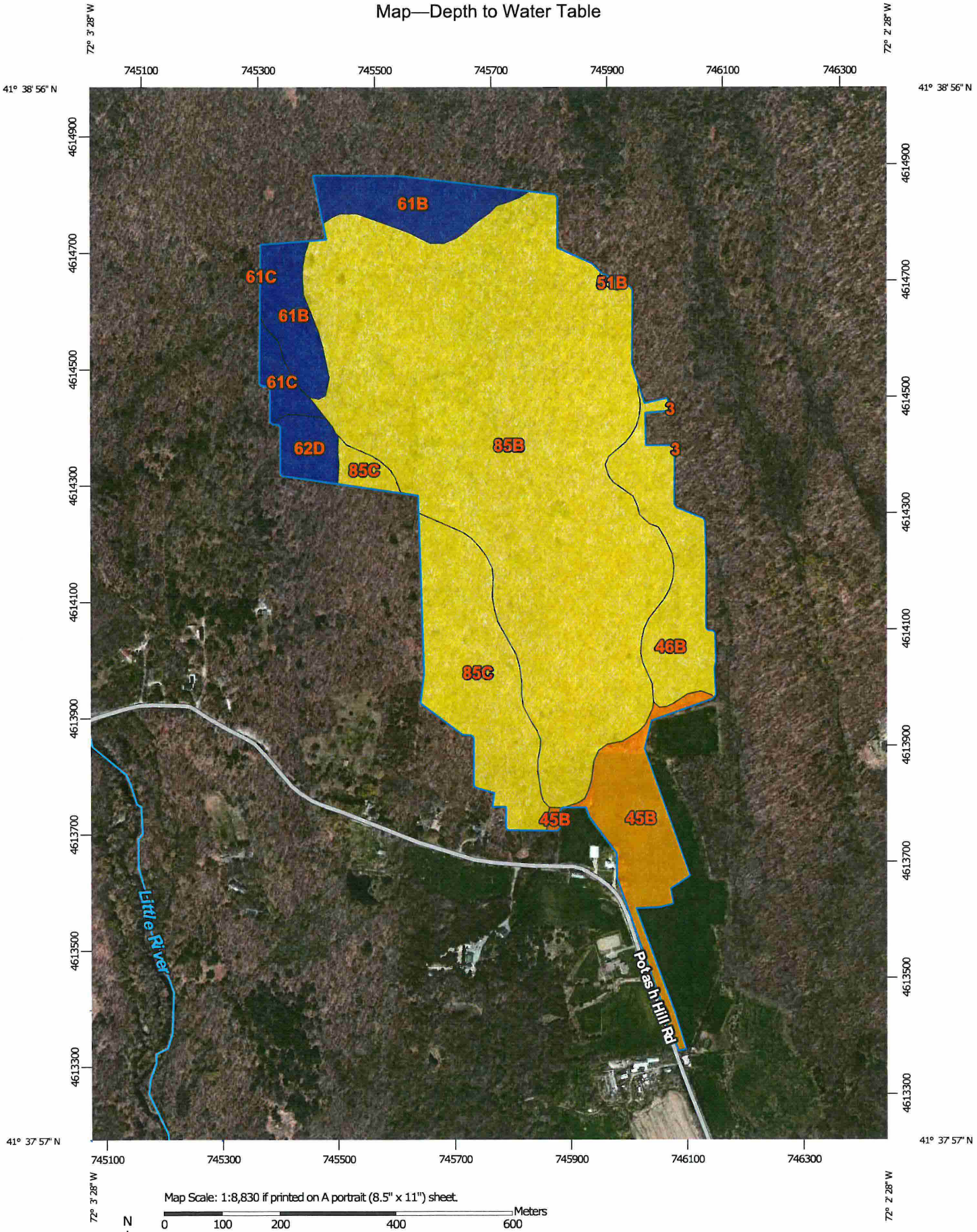
Water Features include ponding frequency, flooding frequency, and depth to water table.

Depth to Water Table

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report
Map—Depth to Water Table



Map Scale: 1:8,830 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- 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.

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Date(s) aerial images were photographed: Mar 28, 2011—May 12, 2011

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.

Table—Depth to Water Table

Depth to Water Table— Summary by Map Unit — State of Connecticut (CT600)				
Map unit symbol	**Map unit name**	**Rating (centimeters)**	**Acres in AOI**	**Percent of AOI**
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	8	0.0	0.0%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	46	9.8	6.8%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	51	10.5	7.3%
51B	Sutton fine sandy loam, 2 to 8 percent slopes, very stony	61	0.2	0.1%
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	>200	11.2	7.8%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	>200	2.0	1.4%
62D	Canton and Charlton soils, 15 to 35 percent slopes, extremely stony	>200	2.6	1.8%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	66	89.0	62.2%
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	66	17.8	12.4%
Totals for Area of Interest			**143.1**	**100.0%**

Rating Options—Depth to Water Table

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

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APPENDIX H
CT DEEP AQUIFER PROTECTION AREA MAP

AQUIFER PROTECTION AREAS

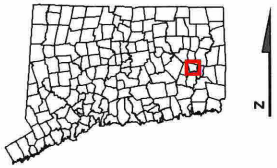
Sprague, CT

December 28, 2015

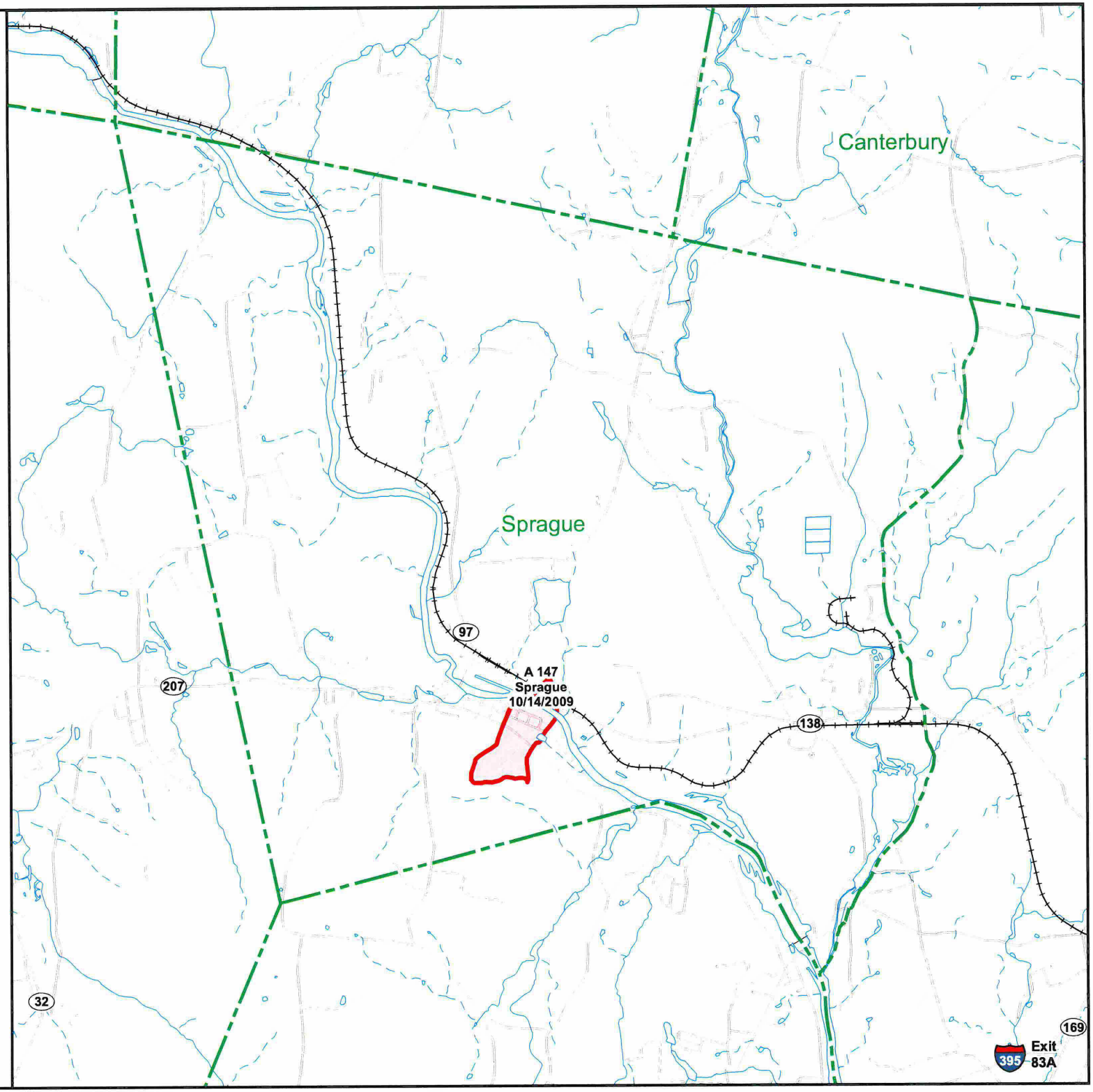
- Level A APA (Final Adopted)
- Level A APA (Final)
- Level B APA (Preliminary)
- Town Boundary

NOTE: The Aquifer Protection Areas were delineated through Connecitcut's Level A and Level B Mapping Processes. Aquifer Protection Areas are delineated for active public water supply wells in stratified drift that serve more than 1000 people, in accordance with Sections 22a-354c and 22a-354z of the Connecticut General Statutes. Level B Mapping delineates a preliminary aquifer protection area, providing an estimate of the land area from which the well draws its water. Level A Mapping delineates the final Aquifer Protection Area, which becomes the regulatory boundary for land use controls designed to protect the well from contamination. As Level A Mapping is completed for each well field and approved by DEEP, it replaces the Level B Mapping. Final Adopted Level A Areas are those where towns have land use regulations for them.
Masschusetts and Rhode Island Wellhead Protection Areas may be shown for informational purposes.

QUESTIONS:
Bureau of Water Protection and Land Reuse
Planning and Standards Division
Phone: (860) 424-3020
www.ct.gov/deep/aquiferprotection



STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127



APPENDIX I
STATE HISTORIC PRESERVATION OFFICE LETTER

Department of Economic and
Community Development

Connecticut
still revolutionary

May 21, 2015

Mr. Ben Combs
Coronal Development Services
117 4th Street SE
Charlottesville, VA 22902

Subject: Phase I Archaeological Assessment and Reconnaissance Survey Report
Fusion Solar Center
Potash Hill Road
Sprague, Connecticut

Dear Mr. Combs:

The State Historic Preservation Office (SHPO) has reviewed the Phase I Archaeological Reconnaissance Survey Interim Report prepared by Archaeological Consulting Services (ACS) for the referenced project. The assessment survey described much of the project area as rocky, sloping, or lacking sources of fresh water. As a result, subsurface testing was completed only in those areas thought to have the highest probability for containing intact archeological deposits. Although shovel testing revealed mostly intact soil horizons, only small scatters of pre and post contact materials were identified. It is the opinion of this office that these artifact scatters do not merit archeological site status and they do not possess the qualities of significance for listing on the National Register of Historic Places.

An architectural review resulted in the consideration of two structures. The property located at 85 Potash Hill is a center-chimney Colonial structure that may be eligible for listing on the National Register of Historic Places. SHPO concurs with ACS that the proposed project is not likely to cause visual impacts to this historic property. Without additional architectural and historic analysis, it is difficult to evaluate the potential for listing 111 Potash Hill Road, but it is likely eligible for listing to the State Register of Historic Places. SHPO concurs with ACS that the proposed project will alter the neighboring setting of this structure. SHPO prefers vegetative screening, but if this is not possible, SHPO requests that Historic Resources Inventory Forms are completed for both 85 and 111 Potash Hill Road with sufficient historic information and photo-documentation. Finally, SHPO recommends avoidance of all fieldstone walls and stone wall segments to the greatest extent possible. The investigation appears to meet the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources* and SHPO concurs with the findings of the report that no historic properties will be affected by the proposed undertaking. This comment is conditional upon ACS, submitting two bound copies of the final report to our office.

This office appreciates the opportunity to review and comment upon this project and we appreciate your cooperation in preserving Connecticut's cultural heritage. For additional information, please contact Catherine Labadia, Staff Archeologist, at (860) 256-2764 or catherine.labadia@ct.gov.

Sincerely,

Mary B. Dunne
Deputy State Historic Preservation Officer

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APPENDIX J

STORMWATER POLLUTION CONTROL PLAN REVIEW CHECKLIST

Project # _____ Reviewer: _____

Review Fee $ _____ Payment Received: ☐ Full _____

Site Visit(s) Date: _____ Date: _____ Date: _____

Tracking and Milestones:

_____

_____

_____

_____

_____

_____

_____

STORMWATER POLLUTION CONTROL PLAN (SWPCP) REVIEW

GENERAL PERMIT FOR DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES

(DEEP-WPED-GP-015)

Registrant Information

Registered Business Name:
Contact person: Phone:

Site Information

Site Name:
Project Type:
Number of lots/acres:
Address:
City/Town: State: Zip Code:

List Plans, Calculations and Reports Provided by the Registrant

Registration Information

Part I: Registration Type

- ☐ Type of registration (i.e. locally approvable, locally exempt, re-registration, new registration)

Part II: Fee information

- ☐ Indication of fee payment

Part III: Registrant information

- ☐ Name, address, phone and contact person for registrant
- ☐ Registrant's Secretary of State ID # (if applicable)
- ☐ Billing contact name, address and phone (if different from registrant)
- ☐ Primary contact person (if different from registrant) with all contact information
- ☐ Property owner and contact information (if different from registrant)
- ☐ Developer's name and contact information (if different from registrant)
- ☐ General contractor and contact information (if different from registrant)
- ☐ Name of consultant(s) who assisted in registration and/or SWPCP and contact information
- ☐ Signatures of contractors/subcontractors

Part IV: Site information

- ☐ Site name and location
- ☐ Description of the project
- ☐ Duration of construction activities
- ☐ Normal working hours on-site
- ☐ Mining operation determination
- ☐ Sanitary or combined sewer discharge determination
- ☐ Federally recognized Indian lands determination
- ☐ Coastal Boundary determination
- ☐ Endangered or Threatened Species determination
- ☐ Wild and Scenic Rivers determination
- ☐ Aquifer Protection Area determination
- ☐ Identified that construction activities are in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (the Guidelines)
- ☐ Historic and/or Archeological Resource determination
- ☐ Conservation or Preservation restriction determination

Part V: Stormwater Discharge information

- ☐ Stormwater Discharge Information Table 1 completed
- ☐ Stormwater Discharge Information Table 2 completed
- ☐ Impaired waters provisions (if applicable)

Part VI: Pollution Control Plan information

- ☐ SWPCP submission status

Part VII: Registrant Certification

- ☐ Certification signed by registrant or re-registrant

Part VIII: PE/LA Certification

- ☐ Design certification signed by licensed PE or LA (where appropriate)

Part IX: Third Party Qualified Professional Certification

- ☐ Review certification by Conservation District or Qualified Professional

Part X: Supporting Documents

- ☐ Attachment A: USGS Quad map (if submitting paper registration)
- ☐ Attachment B: Documentation related to Coastal Consistency Review (if applicable)
- ☐ Attachment C: Threatened and Endangered Species form (if applicable) and additional information (such as a copy of a NDDB map)
- ☐ Attachment D: Conservation or Preservation Restriction Information (if applicable)
- ☐ Attachment E: Non-electronic SWPCP (if applicable)

CONTENTS OF THE STORMWATER POLLUTION CONTROL PLAN (SWPCP)

Soil Erosion and Sediment (E&S) Controls

Site description narrative:

- ☐ Described the nature of the construction activities
- ☐ Provided total site acreage
- ☐ Provided disturbed acreage
- ☐ Estimated average runoff coefficient after construction
- ☐ Identified immediate and ultimate receiving water(s) of all discharges authorized by Permit
- ☐ Identified other permits and/or plans required
- ☐ Identified extent of inland, tidal, and fresh-tidal wetlands

Site map:

- ☐ Existing and planned drainage patterns
- ☐ Existing and planned elevations and slopes
- ☐ Location of structural and non-structural controls
- ☐ Description and map of existing soils
- ☐ Location of outfall(s) proposed for monitoring
- ☐ Limits of soil disturbance
- ☐ Location of surface waters, impaired waters, waters with TMDL's
- ☐ Existing vegetation
- ☐ Locations of E&S controls
- ☐ Location of stabilization practices
- ☐ Location of post-construction re-vegetation
- ☐ Location of utilities, roads and structures
- ☐ Location of surface water, including inland wetlands, fresh-tidal wetlands and tidal wetlands
- ☐ Locations of discharges to surface waters (pre-, during, and post-construction)
- ☐ Locations and provisions for waste disposal
- ☐ Locations and provisions for washout areas
- ☐ Locations and provisions for impaired waters
- ☐ Limits of FEMA floodplains and floodways
- ☐ CT coastal resource limits
- ☐ CT stream encroachment lines
- ☐ Location of any public drinking water supply areas or watersheds

Construction sequencing:

- ☐ Identified sequence of major construction activities and # of days for each sequence
- ☐ Estimated start and completion times for each phase
- ☐ Avoidance of disturbances over 5 acres at one time, where possible
- ☐ Identified limits of disturbance including each phase

Control Measures:

- ☐ Erosion and sediment control measures
- ☐ Provided drawings and specifications for each measure
- ☐ Identified stabilization practices for disturbed areas
- ☐ Identified stabilization practices for stockpiles
- ☐ Identified measures to preserve existing vegetation
- ☐ Provided details of planned vegetation, seed mixes and planting dates
- ☐ Provided details for short-term and long-term stabilization and/or vegetation of disturbed areas
- ☐ Identified practices for non-vegetative long-term and winter stabilization
- ☐ Provided for slope benches for all slopes exceeding 15 feet height and slopes >3:1 or
- ☐ Provided slope stability analysis for engineered slope stabilization measures
- ☐ Provided narrative and drawings for structural diversion and storage measures
- ☐ Sediment traps provided for drainage areas of 2 to 5 acres
- ☐ Temporary sediment basin provided for drainage areas >5 acres
- ☐ Described maintenance for E&S control and stabilization measures
- ☐ Narrative, drawings and calculations of control measures for dewatering wastewaters
- ☐ Description of emergency procedures (for flooding, etc.)
- ☐ Runoff Reduction and Low Impact Development (LID) Information (specific measures for run-off reduction and LID measures):

Control Measures: (continued)

- ☐ The location of the streams, floodplains, all wetlands, riparian buffers, slopes 3:1 and steeper, and vegetation identified for preservation
- ☐ Natural drainage patterns and man-made drainage features
- ☐ Location of areas with soils suitable for infiltration and areas appropriate for LID measures
- ☐ Location of all areas unsuitable or least suitable for infiltration for the siting of development
- ☐ Location of all post-construction stormwater management measures, runoff reduction practices, and LID design measures developed pursuant to subsection 5(b)(2)(C)(i)
- ☐ Identification of areas inappropriate for the infiltration due to potential for groundwater pollution
- ☐ A narrative describing the nature, purpose, implementation, and long-term maintenance of post-construction measures, runoff reduction practices and LID design measures
- ☐ Calculations for measures developed pursuant to Section 5(b)(2)(C)(i), illustrating the retention of the water quality volume or half the water quality volume
- ☐ A narrative describing any site constraints that prevent retention of the appropriate volume specified in Section 5(b)(2)(C)(i)
- ☐ Calculations showing the proposed effective impervious cover for the site and, where necessary or appropriate for measures developed for linear projects pursuant to Section 5(b)(2)(C)(i), each outfall drainage area

Other measures:

- ☐ Description of measures to manage construction waste materials
- ☐ Description of off-site sediment tracking and dust control
- ☐ Narrative, location, and drawings of washout areas
- ☐ Description of maintenance practices for washout areas
- ☐ Indicated cleaning of post-construction stormwater structures prior to termination inspection
- ☐ Indicated removal of silt fence prior to filing termination notice
- ☐ Description and location of chemical and petroleum product storage containment and controls
- ☐ Narrative describing routine inspection procedures
- ☐ Description of qualifications of inspection personnel of the Permittee
- ☐ Narrative describing monitoring procedures, including frequency and methodology
- ☐ List of all contractor and subcontractors
- ☐ Description of Endangered Species measures, if necessary
- ☐ Description of Aquifer Protection provisions, if necessary
- ☐ Description of provisions of Coastal Site Plan approval, if necessary
- ☐ Discussion of archeological or historic preservation issues on site, if necessary
- ☐ Description of activities subject to the Wild & Scenic Rivers Act, if necessary

Impaired waters controls (where applicable):

- ☐ Narrative and plan sequencing to ensure no more than 3 acres concurrent disturbance

AND

- ☐ Identified stabilization practices within 3 days for temporary suspension of activity, **OR**
- ☐ Description and calculations showing retention of 2-year, 24-hour storm, **OR**
- ☐ Compliance with WLA and/or other measures of an existing TMDL

Additional E&S Information:

- ☐ See attached reviewer's comments page
- ☐ Reviewer provided additional information to Registrant: reports, photographs, designs, etc.

Post-construction Stormwater Controls

Show on site map:

- ☐ Indicated retention standards for redevelopment or other development
- ☐ Drainage patterns and slopes after grading
- ☐ Location of LID and runoff reduction measures
- ☐ Location of other structural sedimentation/floatables treatment measures
- ☐ Location of velocity dissipation measures
- ☐ Provided drawings and specifications of each stormwater structure/measure

Narrative of post-construction controls:

- ☐ Description of control measures for post-construction stormwater discharge
- ☐ Long-term maintenance plan for cleaning of post-construction stormwater structures

Additional Stormwater Management Information:

- ☐ See attached reviewer's comments page
- ☐ Reviewer provided additional information to Registrant: reports, photographs, designs, etc.

Supporting Documents (as needed):

- ☐ Calculations supporting the design of sediment and floatables removal controls pursuant to Section 5(b)(2)(C)(ii)(b)
- ☐ Calculations supporting the design of velocity dissipation controls pursuant to Section 5(b)(2)(C)(ii)(c)
- ☐ Provided boring logs, test pit logs, soil reports, etc.
- ☐ Provided hydraulic calculations for existing and planned hydrology
- ☐ Provided calculations for LID and runoff reduction measures (WQV or ½ WQV retention)
- ☐ Provided engineering calculations for any engineered control measures
- ☐ Pre- and post-construction peak flow calculations
- ☐ 1 inch of rainfall retained onsite if within 500 feet of a non-fresh tidal wetland
- ☐ Provide a post-construction average runoff coefficient
- ☐ Off-site effect of flow and volume
- ☐ Groundwater flow estimates
- ☐ Inspection forms and checklist
- ☐ Contractor Certification Statement (including individual lot developers)
- ☐ Demonstration of compliance with TMDL, where applicable
- ☐ Plan Signature

IDENTIFIED SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SITE PLANS

Function	Measure	Phase/Sheet	Engineered Design	Calculations Provided	Reviewer Comments
Protect Vegetation	Tree Protection		No		
Preserve & conserve soil	Topsoiling		No		
	Land Grading		Possibly		
	Surface Roughening		No		
	Dust Control		No		
Vegetative soil cover	Temporary Seeding		No		
	Permanent Seeding		No		
	Sodding		No		
	Landscape Planting		No		
Non-living soil protection	Temporary Soil Protection		No		
	Mulch for Seed		No		
	Landscape Mulch		No		
	Temporary Erosion Control Blanket		No		
	Permanent Turf Reinf. Mats		Yes		
	Stone Slope Protection		No		
Stabilization structures	Retaining Walls		Yes		
	Riprap		Yes		
	Gabions		Yes		
	Permanent Slope Drain		Yes		
	Channel Grade Stabilization Structure		Yes		
	Temporary Lined Chute		Yes		
	Temporary Pipe Slope Drain		Yes		
Drainageways & watercourses	Vegetated Waterway		Possibly		
	Temporary Lined Channel		No		
	Permanent Lined Waterway		Yes		
	Temporary Stream Crossing		No		
Diversions	Temporary Fill Berm		No		
	Water Bar		No		
	Temporary Diversion		Possibly		
	Permanent Diversion		Yes		
Subsurface drain	Subsurface Drain		Yes		

IDENTIFIED SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SITE PLANS (CONTINUED)

Detention structures	Detention Basin		Yes		
Energy dissipators	Level Spreader		Yes		
	Outlet Protection		Yes		
	Stone Check Dam		Possibly		
Sediment impoundments, barriers & filters	Temporary Sediment Basin		Yes		
	Temporary Sediment Trap		No		
	Hay Bale Barrier		No		
	Geotextile Silt Fence		No		
	Turbidity Curtain		No		
	Vegetative Filter		No		
Tire tracked soils	Construction Entrance		No		
Dewatering	Pump Intake and Outlet Protection		No		
	Pump Settling Basin		No		
	Portable Sediment Tank		No		
	Dewatering of Earth Materials		Possibly		

ADDITIONAL COMMENTS FOR E&S CONTROL MEASURES:

IDENTIFIED STORMWATER CONTROL MEASURES IN SITE PLANS

Primary Treatment Practices	Phase/Sheet	Engineered Design	Calculations Provided	Low Impact Development
Micropool extended detention				
Wet pond				
Wet extended detention pond				
Multiple pond system				
Pocket pond				
Shallow wetland				
Extended detention wetland				
Pond/wetland system				
Gravel wetland				
Infiltration Trench				
Infiltration Basin				
Infiltration Parking Island				
Surface sand filter				
Underground sand filter				
Perimeter sand filter				
Organic filter				
Tree box filter				
Bioretention/raingarden				
Green Roof				
Dry swales				
Wet swales				
Secondary Treatment Practices				
Dry detention pond				
Underground detention facilities				
Deep sump catch basins				
Oil/particle separators				
Dry wells				
Permeable pavement/pavers				
Vegetated filter strips				
Grass drainage channels				
Other/Innovative/Emerging Technology				
Catch basin inserts				
Hydrodynamic separators				
Media filters				
Underground filtration systems				
Alum injections				
Rainfall harvesting/cisterns				

STORMWATER MANAGEMENT AND TREATMENT PRACTICES

The General Permit provides goals for the post-construction stormwater management to control discharges of stormwater pollutants. Some measures may not require all of the following information.

Stormwater Control Measure: _____

Name in Plans _____ Practice _____ Location _____

(Complete this sheet for each post-construction stormwater measure)

Discharge Calculations provided:

1. Water Quality Volume (WQV) = (ac-ft)
2. Water Quality Flow (WQF) = (cfs)
3. Groundwater Recharge Volume (GRV) = (ac-ft)
4. Runoff Capture Volume (RCV) = (ac-ft)
   (only required for non-fresh tidal discharges)
5. Provided Peak Discharge Rates for the following storm events:

Storm Event	Pre-Development (cfs)	Post-Development (cfs)	Change (+/- cfs)
24 hr			
2-year			
10-year			
25-year			
100-year			
500-year			

This stormwater measure (or as part of a discharge treatment train) meets the goals of the General Permit: ☐ Yes ☐ No

Comments:

ADDITIONAL COMMENTS FOR STORMWATER TREATMENT PRACTICES:

Site Inspection Worksheet for E&S and Stormwater Control Measures

Project #: _____ Plans Dated _____ Last Revised _____

District: _____ Reviewer: _____

Location: _____

Project Description: _____

Contact Person for the Site:

Name: _____ _____

Company: _____ Phone: _____

Site Visit Date: _____

Weather conditions: _____

Photographs taken	☐ Yes	☐ No
Contacted Responsible Party	☐ Yes	☐ No
Inspection submitted to CT DEP	☐ Yes	☐ No
Inspection submitted to Permittee	☐ Yes	☐ No

Comments:

APPENDIX K

USFWS AND DEEP RARE SPECIES COMPLIANCE

ALL-POINTS TECHNOLOGY CORPORATION

USFWS & NDDB Consultations

December 28, 2015 **APT Project No.: CT472100**

U.S. Fish and Wildlife Service
70 Commercial Street, Suite 300
Concord, NH 03301-5087
Attn: Susi von Oettingen (via Email: susi_vonoettingen@fws.gov)

Connecticut Department of Energy & Environmental Protection
Wildlife Division
79 Elm Street
Hartford, CT 06106-5127
Attn: Jenny Dickson (via Email: Jenny.Dickson@ct.gov)

Re: Proposed Fusion Solar Facility
20 megawatt AC Solar Facility
Potash Hill Road
Sprague, New London County, CT
Lat: 41.641661 Long: -72.044518

On behalf of Fusion Solar Center, LLC ("Fusion"), All-Points Technology Corporation, P.C. ("APT") performed an evaluation with respect to possible Federally- and State-listed, Threatened, Endangered or Special Concern (State only) species in order to determine if the proposed referenced solar facility would result in a likely adverse effect to Federally- or State-listed species. This consultation was completed in accordance with Section 10 of the Endangered Species Act through the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation System ("IPaC")[1] and Natural Diversity Data Base ("NDDB") State Listed Species Review to the Connecticut Department of Energy & Environmental Protection ("CTDEEP") for a proposed installation of a 20 megawatt AC ("MWac") facility at the referenced Site. A copy of the IPaC report and NDDB letter are provided in Attachment 1.

The following rare species were identified through these initial agency consultations in the vicinity of the Project Area:

- Federal and State listed Threatened species long-eared bat (*Myotis septentrionalis*);
- State listed Threatened species clustered sedge (*Carex cumulata*); and,
- State listed species of Special Concern wood turtle (*Glyptemys insculpta*).

CTDEEP also noted records of State-listed Threatened species Bald eagle (*Haliaeetus leucocephalus*) nesting at the nearby Quinebaug River.

[1] IPaC Consultation Tracking Number: 05E1NE00-2016-SLI-0401, dated December 3, 2015

As a result of this preliminary finding, habitat supported by the Project Area and an evaluation of whether it is suitable for these rare species is described below.

Rare Species Descriptions

Northern Long-eared Bat The northern long-eared bat is a medium-sized bat with a body length of 3 to 3.7 inches but a wingspan of 9 to 10 inches. Their fur color can be medium to dark brown on the back and tawny to pale-brown on the underside. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, *Myotis*. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats are a forest interior species that require adequate canopy closure for both roost and foraging habitat.[2] Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. Suitable northern long-eared bat roosts are trees (live, dying, dead, or snag) with a diameter at breast height ("DBH") of three inches or greater that exhibits any of the following characteristics: exfoliating bark, crevices, cavity, or cracks.[3] In the eastern United States, maternity roost tree species included beech (*Fagus grandifolia*), silver maple (*Acer saccharinum*), red maple (*A. rubrum*), black cherry (*Prunus serotina*), green ash (*Fraxinus pennsylvanica*), black locust (*Robinia pseudoacacia*), elm (*Ulmus spp.*) and artificial roosts.[4,5,6,7,8,3] In New Brunswick, Canada, northern long-eared bat maternity roost trees were 24 times more likely to be found in deciduous trees than conifers[9,8], although preferred tree species seems to vary throughout the species range.[8] Forest stands with a more diverse stocking of tree species recorded a higher abundance of northern long-eared bats.[10] The availability of mid-decay snags is an important feature in the forest structure for northern long-eared bats.[11,10] Although not exclusive to snag trees, one study of northern long-eared bats documented 100 percent of the population used snag trees during some portion of the maternity roost season.[9] Snags that have shed their branches with sloughing bark seem to offer desirable conditions[11], although other features such as canopy closure, proximity to water and limited open spaces seem to be equally as important for roost tree selection.[12,12] Isolated trees are considered suitable habitat when they exhibit the characteristics of a suitable roost tree and are less than 1000 feet from the next nearest suitable roost tree

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[2] Lausen, C. 2009. Status of the Northern Myotis (Myotis septentrionalis) in Alberta, Alberta Wildlife Status Report No. 3 (Update 2009).

[3] US Fish and Wildlife Service. Northern Long-Eared Bat Interim Conference and Planning Guides, USFWS Regions 2, 3, 4, 5, & 6. January 6, 2014. 67 pp.

[4] Foster, R.W., and A. Kurta. 1999. Roosting ecology of the northern bat (Myotis septentonalis) and comparisons with the endangered Indiana bat (Myotis sodalis). Journal of Mammalogy 80:659-672.

[5] Grindal, S.D. and R.M. Brigham. 1999. Impacts of forest harvesting on habitat use by foraging insectivorous bats at different spatial scales. Ecoscience 6:25–34.

[6] Owen, S.F., M.A. Menzel, W.M. Ford, J.W. Edwards, B.R. Chapman, K.V. Miller, P.B. Wood. 2002. Roost tree selection by maternal colonies of northern long-eared myotis in an intensively managed forest. USDA Forest Service, General Technical Report NE-292, Northeastern Research Station, Newtown Square, PA, p. 6.

[7] Thompson, F.R., III, ed. 2006. Conservation assessments for five forest bat species in the Eastern United States. Gen. Tech. Rep. NC-260. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 82 p.

[8] Lacki, M.J., D.R. Cox, and M.B. Dickinson. 2009. Meta-analysis of Summer Roosting Characteristics of Two Species of Myotis Bats. American Midland Naturalist. 162:318–326.

[9] Broders, H.G., and G.J. Forbes. 2004. Interspecific and intersexual variation in roost-site selection of northern long-eared and little brown bats in the Greater Fundy National Park ecosystem. Journal of Wildlife Management 68: 602-610.

[10] Lacki, M.J., and J. Schwierjohann. 2001. Day roost characteristics of northern bats in mixed mesophytic forest. Journal of Wildlife Management 65: 482-488.

[11] Yamasaki, M. 2004. Bats and small mammals in old growth habitats in the White Mountains. In, Bennett, K.P. technical coordinator. 2005. Moving toward sustainable forestry: lessons from old growth forests. University of New Hampshire Cooperative Extension Natural Resource Network Report.

[12] Carter, T.C. and G.A. Feldhamer. 2005. Roost tree use by maternity colonies of Indiana bats and northern long-eared bats in southern Illinois. Forest Ecology and Management 219:259-268.

within a woodlot, or wooded fencerow. This bat has also been found rarely roosting in structures, like barns and sheds.

Loss or degradation of summer (forest) habitat is one of several management concerns for this rare species with the principal concern being loss from white-nose syndrome. Depending on type and timing of forest management activities, the potential exists for mortality and temporarily removal or degradation of roosting and foraging habitat.

To avoid killing or injuring northern long eared bat, the following conservation measures are to be adhered to under Interim 4(d) Rule (April 2, 2015) of the federal Endangered Species Act for this species:

I. No activities are to occur within 0.25 mile of a known, occupied hibernacula[13]

II. Avoid cutting or destroying of known, occupied roost trees during the pup season of June 1st to July 31st

III. Avoid clear-cutting (or similar harvesting methods) within 0.25 mile of known, occupied roost trees during the pup season of June 1st to July 31st

However, under the "Project Resulting in Minimal Tree Removal[14]" subsection of Interim 4(d) Rule, incidental take of northern long eared bat resulting from a project where the cumulative acreage of trees to be removed is less than 1 acre and will not significantly change the overall nature and function of the local forest habitat may not be prohibited under Interim 4(d) Rule.

In its July 7, 2015 policy memorandum, the USFWS New England Field Office ("NEFO") recommends for projects that have Federal involvement (not applicable to the proposed project) the following time-of-year restrictions to avoid likely adverse effects to northern long-eared bat that may be roosting in trees that could be cleared (assuming presence). The time-of-year restrictions described below are predicated on the conclusion that if surveys are not conducted to determine whether northern long-eared bats are present, presence is assumed as long as suitable habitat is present.

April 15 - October 31 - project is located within 1 mile or less from known hibernaculum

April 15 - September 30 - Known site[15] - acoustic and/or mist-net confirmation

April 15 - August 31 - Unknown site/no data (with the exception of coastal towns)

Although the proposed project does not have Federal involvement, based on information collected as part of this assessment, APT anticipates that the April 15 – August 31 restrictive period would apply to the proposed project. However, these time-of-year restrictions do not address a minimum acreage below which NEFO does not anticipate habitat impacts to northern long-eared bats. NEFO still needs to review the proposed acreage of tree cutting to ensure that there are no impacts as a result of significant roosting or foraging habitat loss (assuming presence). Information is enclosed herein to assess potential northern long-eared bat impact as a result of the acreage of tree cutting proposed.

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[13] locations of hibernacula are identified by Connecticut Department of Energy and Environmental Protection's ("DEEP") Wildlife Division

[14] Interim 4(d) Rule defines "minimal tree removal" as follows: many activities that involve cutting or removal of individual or limited numbers of trees do not significantly change the overall nature and function of the local forested habitat. Some of these activities include firewood cutting, shelterbelt renovation, removal of diseased trees, tree removal for other small projects (i.e., culvert replacement), habitat restoration for fish and wildlife conservation, and backyard landscaping.
With respect to the term "minimal," USFWS limits the effect to an impact of one acre of contiguous habitat or one acre in total within a larger tract, whether that larger tract is entirely forested or a mixture of forested and non-forested cover types. Tract may be further defined as the property under the control of the project proponent or ownership.

[15] "known site" as determined in consultation between NEFO and the State Natural Resource agency OR projects located in "Coastal New England"

Clustered Sedge This sedge is an uncommon medium-sized sedge species typical of dry and sandy soils. This plant is identified by its spikes aggregated into a dense seed head with broad, obovate and nearly beakless perigynia. The habitat it typically colonizes consists of open dry habitats with sandy or gravelly soils, occasionally reported from bogs and saturated sandy substrates.[16] Habitat also consists of open rocky areas, particularly in damp areas on acidic bedrock or shallow soil, recently burned areas with shallow soils and exposed bedrock, powerline corridors, open oak or woodlands, heathlands, and various successional habitats.[17] Additional literature habitat references for this sedge includes sandy, usually well-drained, soils of fields, woodlands, cliff bases, and eroding slopes, sometimes also along railroads.[18]

Wood Turtle Wood turtles require wooded riparian habitats bordered by floodplain, woodland, or meadows, requiring rivers or large streams with deeply undercut banks for hibernation.[19] These turtles disperse from water sources during the summer months to terrestrial meadows and woods.[20]

Bald Eagle Natural year-round habitat of bald eagles includes large bodies of water containing abundant fish resources, large trees for nesting, perching, and roosting, and minimal human disturbance.[21] Although bald eagles feed primarily on fish, they also are opportunistic predators and scavengers that will eat anything that can be caught easily or scavenged.[22] Preferred feeding habitat includes lakes, rivers, coastal bays, and inlets. Nesting typically occurs in a tall living tree, frequently white pine, near the water's edge.

Project Area and Project Descriptions

Fusion proposes to install a 20 megawatt AC ("MWac") solar-based electric generating facility in Town of Sprague, Connecticut (the "Project"). The Project Area consists of two separate and abutting parcels north of Potash Hill Road, totaling 225± acres (identified in Sprague Assessor records as Map 16, Block 6, Lot 18 and Map 21, Block 2, Lot 2). The Site is bounded by undeveloped woods to the north, east and west; and a cleared agricultural field, residence and Potash Hill Road to the south. Of the 225 acres, Fusion has approximately 170 acres under control for development of the Project.

The proposed solar facility will include the following:

- Approximately 97,000 polycrystalline silicon solar modules or similar photovoltaic ("PV") technology.
- Approximately 10 to 12 utility scale inverters and transformers mounted on concrete equipment pads measuring approximately 20 feet by 40 feet.
- Ground screw or pile-driven foundations and aluminum or steel fixed–tilt racking for solar module mounting.

In totality, the "Project Area" would encompass approximately 144 acres to accommodate the solar arrays, associated equipment, access and tree-free zones (to mitigate shading effects). This will require clearing of approximately 134 acres of existing upland forest. A portion of an adjacent, cleared hayfield (approximately 10 acres in size) is also to be utilized. Upon completion, the solar field will be surrounded by a fence enclosure (comprising approximately 118 acres).

Additional details regarding existing environmental conditions of the Project Area, the proposed project and its potential effect on the environment is provided in the Environmental Assessment report, dated July

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[16] Field Guide to Carex of New England, Lisa A. Stanley, Number 71, Page 68, Copyright 2011.

[17] Clustered Sedge (Carex cumulate) fact sheet, New York Natural Heritage Program, March 14, 2013.

[18] Haines, A. (2011). New England Wild Flower Society's Flora Novae Angliae. New Haven, CT: Yale University Press.

[19] Klemens, M. W. (1993). Amphibians and Reptiles of Connecticut and Adjacent Regions. State Geological and Natural History Survey of Connecticut, Bulletin 112.

[20] DeGraff, R.M. and Yamasaki, M. (2000) New England Wildlife. Hanover, NH: University Press of New England.

[21] DeGraff, R.M. and Yamasaki, M. (2000) New England Wildlife. Hanover, NH: University Press of New England.

[22] Bald Eagle (Haliaeetus leucocephalus) fact sheet, Connecticut Department of Energy & Environmental Protection

2015, provided in Attachment 2. Project Site Plans are provided in Attachment 3. Representative photographs of the Project Area are provided in Attachment 4.

Other Agency Consultations

The Connecticut Siting Council ("Council") authorized the proposed project (Petition No. 1178) by ruling on September 17, 2015 that the project "would not have a substantial adverse environmental effect". A copy of the Council's approval is provided in Attachment 5. Special conditions associated with the Council's approval include a wood turtle protection plan and a plan to mitigate impacts to the northern long-eared bat.

Habitat Impact Analysis

Northern Long-eared Bat Available literature suggests that the most probable areas of northern long-eared bat habitat will be in hardwood or mixed forests with primarily closed canopies and mid-decay stage, large-diameter snags. In addition, activities proposed within 1 mile of known northern long-eared bat hibernacula could result in an adverse impact to this species. The following discussion provides an assessment of the loss of forest habitat resulting from the proposed activity in the context of the surrounding forested habitat.

Based on buffered northern long-eared bat hibernacula data provided by the CTDEEP Wildlife Division, the proposed Facility is located ±40 miles northeast from the nearest hibernaculum. Due to the sensitive nature of this data, no mapping is provided depicting the location of this hibernaculum. The proposed project would not result in a likely adverse effect to northern long-eared bat hibernacula since the nearest hibernaculum is located greater than one (1) mile from the project.

A forest fragmentation model has been developed by the University of Connecticut Center for Land Use Education and Research ("CLEAR") to classify forest cover into four main categories of increasing disturbance – *core, perforated, edge and patch* – based on a key metric called edge width.[23] Core forest areas are sub-classified into three categories – *small core, medium core, and large core* – based on the area of a given core patch: large core forest = >500 acres; medium core = 500 – 250 acres; small core = <250 acres. Based on this forest block analysis tool, the subject property forest is classified as a large core forest (±887 acres) with a portion of the core forest classified as edge (±230 acres; 300 foot buffer from cleared/developed areas). Refer to the Forest Fragmentation Map provided in the Attachment 6. The proposed Fusion project would result in ±134 acres of forest removal; ±123 acres to the core forest block and ±11 acres to edge forest. This equates to relatively small percent impacts to the respective forest types: ±14 percent of the large core forest and ±5 percent of the edge forest. Table 1 below summarizes the forest impact analysis for the proposed project.

Table 1: Forest Impact Summary

Forest Type	Core Forest			Perforated	Edge	Patch
	Small	Medium	Large			
Subject Forest	☐	☐	☒	☐	☒	☐
Forest Size (±Ac.)	---	---	887	---	230	---
Forest Removal (±Ac.)	---	---	123	---	11	---
% Forest Removal	0	---	±14	---	±5	---

The proposed forest impact will not result in a change in the core forest classification since the remaining forest would still exceed 500 acres (755 acres of the core forest will remain). The proposed development will also not result in a significant area of tree removal when compared to the overall size of the core forest

[23] Forest Fragmentation Assessment Model. UCONN Center for Land Use Education and Research. 2007. http://clear.uconn.edu/Projects/landscape/forestfrag/index.htm

(only a ±14 percent reduction). Within a 2.5-mile radius of the subject forest there are five (5) other large core forest blocks of greater size, 10 medium core forest blocks and 16 small core forest blocks. Refer to the Surrounding Core Forests Map provided in the Attachment 6. Collectively, this represents a significant area of core forest habitat in close proximity to the subject forest that potentially supports northern long-eared bat habitat.

Considering the relatively small amount of forest clearing (±14 percent loss to the large core forest block), the significant amount of remaining large core forest block (755 acres) and amount of large, medium and small core forest blocks located in the vicinity of the subject forest, the proposed Fusion project would not result in a significant change the overall nature and function of the local forest habitat. Because the project will result in a small amount of forest clearing relative to the available habitat in the immediately surrounding area, habitat removal is unlikely to result in significant impacts to the species. Therefore, it is anticipated that removing potential roost trees is not likely to cause indirect adverse effects to northern long-eared bat.

Protection Plan: Despite the findings of this analysis, a time-of-year restriction for tree clearing activities is recommended in accordance with USFWS guidance to avoid direct "take" of northern long-eared bat. Typically, tree clearing activities would be restricted from April 15 through August 31 to avoid likely adverse effects to northern long-eared bat that may be roosting in trees (assuming presence) in accordance with the NEFO's July 7, 2015 policy memorandum. However, the currently anticipated schedule required to complete tree clearing at the proposed Fusion project would be from February 15 through May 15. Considering tree clearing activities may not be completed by April 15, the following approach is proposed to avoid direct take to northern long-eared bat. Tree clearing activities will commence in February with work starting along the perimeter of the project. Not only will this allow installation of perimeter erosion controls, it will segregate the project from surrounding core forest habitat. Tree clearing activities will continue generally in concentric rings working from the project perimeter inward so that a smaller and smaller forest patch remains, disconnected from the larger surrounding core forest. Using this approach, by April 15 if all tree clearing work has not been completed only a small patch forest will remain with a significant buffer created to nearby core forest habitat. Therefore, since this remaining small patch forest would provide suboptimal habitat to northern long-eared bat, no likely adverse effect to this listed species or direct take would be anticipated even if tree clearing work needs to continue until May 15.

This protection plan, which will be incorporated onto the Council's Development & Management Plans (construction drawings), satisfies a special condition of the Council's approval.

Clustered Sedge This sedge typically habitats consists of open and dry habitats with sand or gravelly soils and occasionally in bogs and saturated sandy substrates.

Soils encompassing the Project Area were field classified predominantly as dense to firm loamy glacial till upland soil units consisting of the following: Canton and Charlton soils, Sutton fine sandy loam, Paxton and Montauk fine sandy loams, and Woodbridge fine sandy loam. Wetland soils identified within the wetland resources consist of dense to firm loamy glacial till Ridgebury, Leicester, and Whitman soils. Field identified soils are generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS")[24]. The proposed Fusion project is predominately located within dense terrestrial forest habitat (with the exception of recently logged areas) with a small portion located within a cool season grass hayfield.

As a result, no open, dry sandy or gravelly habitats are supported by the Project Area. In addition, no wetland habitats will be directly impacted by the proposed development. To avoid potential indirect impact to nearby wetland habitats, a wetland protection plan will be implemented during construction. A copy of the wetland protection plan is provided in Attachment 7. Therefore, since ideal habitat for clustered sedge

[24] NRCS Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/, accessed on July 6, 2015.

is not supported by the Project Area, the proposed Fusion project would not result in a likely adverse impact to this species.

Wood Turtle Wood turtle is known to be associated with both aquatic and terrestrial habitats depending on the time of year. During warm weather, turtles will become active migrating from aquatic habitats in search of food and mates into terrestrial habitat typically within ±1,000 feet of suitable aquatic habitat. Wood turtle are known to occur in the Little River riparian corridor, located approximately 2,200 feet west of the Fusion project. Although not explicitly stated in the CTDEEP's letter, the potential exists for wood turtle to use portions of Wetland 1 and the unnamed brook particularly during the summer dispersal period.

Protection Plan: Although it is unlikely dispersing wood turtles would be utilizing the Project Area, protective measures will be implemented during construction to avoid unintentional injury or mortality to this species. The proposed turtle protection program consists of several components: isolation of the project perimeter; periodic inspection and maintenance of isolation structures; education of all contractors and sub-contractors prior to initiation of work on the Project Area; protective measures; and, reporting. A copy of the wood turtle protection plan, along with the turtle caution poster, are provided in Attachment 7. This protection plan, which will be incorporated onto the Council's Development & Management Plans (construction drawings), satisfies a special condition of the Council's approval.

Bald Eagle CTDEEP noted records of bald eagle nesting at the Quinebaug River. The Quinebaug River is located ±2.86 miles east of the Fusion project area. Bald eagle inland habitat is typically associated with lakes, rivers and marshes, where there is plentiful food sources (primarily fish) and tall trees nearby for nesting and roosting. The Project Area does not provide preferred bald eagle habitat. Considering the significant distance to documented bald eagle nesting, roosting and perching habitat at the Quinebaug River, the proposed Fusion project would not result in a likely adverse impact to this State-listed species.

Conclusion

Therefore, the proposed Fusion development would not result in a likely adverse effect to any Federal Threatened or Endangered species, State-listed Threatened, Endangered or Special Concern species provided the referenced protection plans are properly implemented during construction. Based on the information contained in this document, Fusion respectfully requests a determination from NEFO and CTDEEP that it concurs with these findings that the proposed project would is not likely to adversely affect northern long-eared bat, clustered sedge, wood turtle and bald eagle.

Sincerely,

Dean Gustafson

Dean Gustafson
Senior Environmental Scientist

Enclosures

cc: Ben Combs, Fusion Solar Center, LLC
Dawn McKay, CTDEEP

Attachment 1
Agency Correspondence

- USFWS IPaC report, dated December 3, 2015
- NDDB letter, July 8, 2015

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Code: 05E1NE00-2016-SLI-0401 December 03, 2015
Event Code: 05E1NE00-2016-E-00578
Project Name: Fusion Solar Sprague Facility

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Fusion Solar Sprague Facility

Official Species List

Provided by:

New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
(603) 223-2541
http://www.fws.gov/newengland

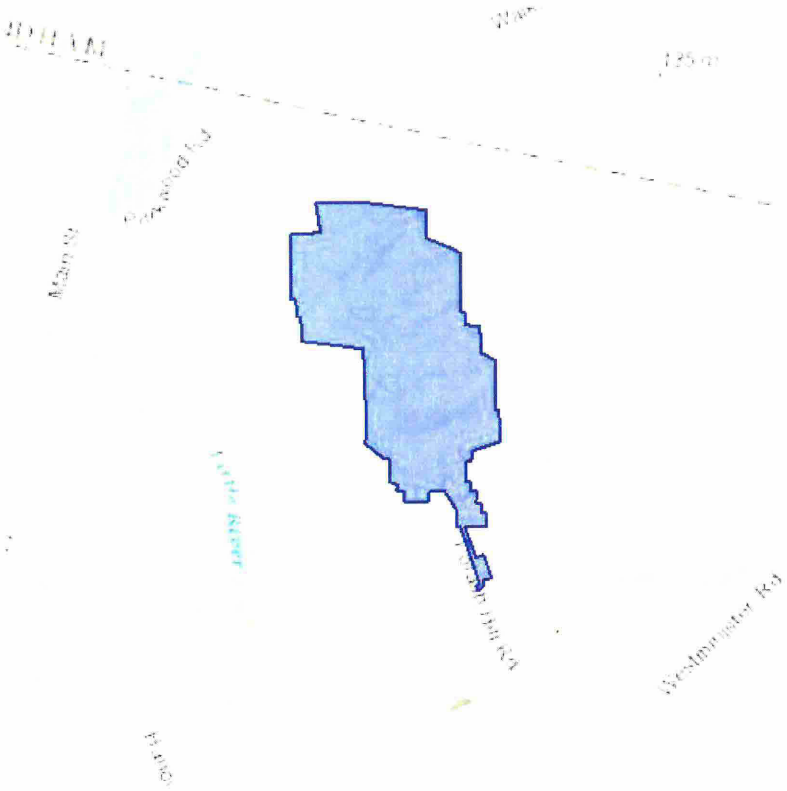
Consultation Code: 05E1NE00-2016-SLI-0401
Event Code: 05E1NE00-2016-E-00578

Project Type: POWER GENERATION

Project Name: Fusion Solar Sprague Facility
Project Description: Fusion proposes to install a 20 megawatt AC solar-based electric generating facility in Town of Sprague, Connecticut . The subject property consists of two separate and abutting parcels north of Potash Hill Road, totaling 225Â± acres. The Site is bounded by undeveloped woods to the north, east and west; and a cleared agricultural field, residence and Potash Hill Road to the south.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: New London, CT

United States Department of Interior
Fish and Wildlife Service

Project name: Fusion Solar Sprague Facility

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		