

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

April 24, 2020

Megan B. Raymond Milone and MacBroom Inc. 195 Church Street, 7th floor New Haven, CT 06510 <u>mraymond@mminc.com</u>

Project: Elmridge Golf Course PV Solar Facility, 229 Elmridge Road in Stonington, Connecticut NDDB Final Determination No.: 201913016

Dear Ms. Raymond,

I have reviewed Natural Diversity Database maps and files regarding the area delineated on the map provided for a proposed PV Solar Facility at the Elmridge Golf Course located at 229 Elmridge Road in Stonington, Connecticut. According to our records we have the only known extant location of State Special Concern Nine-spotted lady beetle (*Coccinella novemnotata*) and potential habitat for State Endangered Eastern spadefoot (*Scaphiopus holbrookii*) from the vicinity of the proposed project.

I received a letter dated March 17, 2020 by Megan B. Raymond of Milone & MacBroom providing additional information on site conditions at Elmridge Golf Course with respect to the PV solar facility. The letter mostly focused on the wetland delineations and wetland systems. The species protection guidelines focused on minimizing wildlife mortality during construction.

The report states that the preferred habitat for these species is not present at the golf course. I do not entirely concur with this statement. According to our records the only known extant location of State Special Concern Nine-spotted lady beetle (*Coccinella novemnotata*) is from the vicinity of the proposed project.

Nine-spotted lady beetle: The nine-spotted lady beetle was once the most common lady beetle species in the northeastern United States. Populations declined precipitously in the 1980's, possibly due to competition with the non-native C7 (seven-spotted) lady beetle (*Coccinella septempunctata*) which was introduced as a biological control for aphids. The nine-spotted lady beetle is associated with agricultural fields, wooded habitats, and grasslands. It is associated with alfalfa (*Medicago sativa*), clover (*Trifolium spp.*), corn (*Zea mays*), cotton (*Gossypium spp.*), potato (*Solanum tuberosum*), and soybean (*Glycine max*).

All across North America certain species of native ladybugs are disappearing. In just the last 20 years some of these beneficial predators of farm and garden pests have become extremely rare. This rapid decline is of great concern to biologists.

To protect this lady beetle form long-term impacts of this PV solar facility:

- Pesticide use should be avoided when possible. If pesticide use cannot be avoided, use chemicals that target only the pest, treat only infested areas, and select chemicals that do not persist.
- Only use native grass and herbaceous plants to re-establish any ground disturbance. Use seed mixes, if necessary for native pollinators.

Eastern spadefoot: Limited information is known about the state endangered eastern spadefoot toad. It is a very secretive species and has irregular breeding periods. It is most active from June through August. It is an expert burrower, reaching depths of 6-feet in sandy well-drained soil. They are very rarely observed outside of the breeding period. Its habitat is described as arid to semi-arid areas, such as fields, farmland, dunes and woodlands with sandy or loose soils. This toad breeds in temporary bodies of water, flooded fields and forested wetlands. <u>Since we only have potential habitat for the eastern spadefoot from this area and after reviewing the site conditions in the March 17, 2020 letter no further conservation action is required for this species.</u>

This determination is good for two years. Please re-submit an NDDB Request for Review if the scope of work changes or if work has not begun on this project by April 24, 2022.

Natural Diversity Database information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for onsite surveys necessary for a thorough environmental impact assessment. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3011, or <u>deep.nddbrequest@ct.gov</u>. Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Dawn M. Mckay

Dawn M. McKay Environmental Analyst 3/Biologist 3



79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

November 8, 2019

Megan B. Raymond Milone and MacBroom Inc. 195 Church Street, 7th floor New Haven, CT 06510 <u>mraymond@mminc.com</u>

Project: Preliminary Assessment for Elmridge Golf Course PV Solar Facility, 229 Elmridge Road in Stonington, Connecticut NDDB Preliminary Assessment No.: 201913016

Dear Ms. Raymond,

I have reviewed Natural Diversity Database maps and files regarding the area delineated on the map provided for a proposed PV Solar Facility at the Elmridge Golf Course located at 229 Elmridge Road in Stonington, Connecticut. According to our records we have the only known extant location of State Special Concern Nine-spotted lady beetle (*Coccinella novemnotata*) and potential habitat for State Endangered Eastern spadefoot (*Scaphiopus holbrookii*) from the vicinity of the proposed project.

Nine-spotted lady beetle: The nine-spotted lady beetle was once the most common lady beetle species in the northeastern United States. Populations declined precipitously in the 1980's, possibly due to competition with the non-native C7 (seven-spotted) lady beetle (*Coccinella septempunctata*) which was introduced as a biological control for aphids. The nine-spotted lady beetle is associated with agricultural fields, wooded habitats, and grasslands. It is associated with alfalfa (*Medicago sativa*), clover (*Trifolium spp.*), corn (*Zea mays*), cotton (*Gossypium spp.*), potato (*Solanum tuberosum*), and soybean (*Glycine max*).

Eastern spadefoot: Limited information is known about the state endangered eastern spadefoot toad. It is a very secretive species and has irregular breeding periods. It is most active from June through August. It is an expert burrower, reaching depths of 6-feet in sandy well-drained soil. They are very rarely observed outside of the breeding period. Its habitat is described as arid to semi-arid areas, such as fields, farmland, dunes and woodlands with sandy or loose soils. This toad breeds in temporary bodies of water, flooded fields and forested wetlands.

Please be advised that this is a preliminary review and not a final determination. A more detailed review will be necessary to move forward with any environmental permit applications submitted to DEEP for the proposed project. This preliminary assessment letter cannot be used or submitted with permit applications at DEEP. This letter is valid for one year.

To prevent impacts to State-listed species, field surveys of the site should be performed by a qualified biologist with the appropriate scientific collecting permits at a time when these target species are identifiable. A report summarizing the results of such surveys should include:

- 1. Survey date(s) and duration
- 2. Site descriptions and photographs
- 3. List of component vascular plant and animal species within the survey area

(including scientific binomials)

4. Data regarding population numbers and/or area occupied by State-listed species

5. Detailed maps of the area surveyed including the survey route and locations of State listed species

6. Conservation strategies or protection plans that indicate how impacts may be avoided for all state listed species present on the site

7. Statement/résumé indicating the biologist's qualifications. Please be sure when you hire a consulting qualified biologist to help conduct this site survey that they have the proper experience with target taxon and have a CT scientific collectors permit to work with state listed species for this specific project.

The site surveys report should be sent to our CT DEEP-NDDB Program (deep.nddbrequest@ct.gov) for further review by our program biologists along with an updated request for another NDDB review. Incomplete reports may not be accepted.

If you do not intend to do site surveys to determine the presence or absence of state-listed species, then you should presume species are present and let us know how you will protect the state-listed species from being impacted by this project. You may submit these best management practices or protection plans with your new request for an NDDB review. After reviewing your new NDDB request form and the documents describing how you will protect this species from project impacts we will make a final determination and provide you with a letter from our program to use with DEEP-Permits.

Natural Diversity Database information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for onsite surveys necessary for a thorough environmental impact assessment. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3011, or <u>deep.nddbrequest@ct.gov</u>. Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Dawn M. Mokay

Dawn M. McKay Environmental Analyst 3/Biologist 3

CPPU USE ONLY



Connecticut Department of Energy & Environmental Protection Bureau of Natural Resources Wildlife Division

App #:		
Doc #:		
Check #: No fee required		
Program: Natural Diversity Database Endangered Species		
Hardcopy	Electronic	

Request for Natural Diversity Data Base (NDDB) State Listed Species Review

Please complete this form in accordance with the instructions (DEEP-INST-007) to ensure proper handling of your request.

There are no fees associated with NDDB Reviews.

Part I: Preliminary Screening & Request Type

Before submitting this request, you must review the most current Natural Diversity Data Base "State and Federal Listed Species and Significant Natural Communities Maps" found on the <u>DEEP website</u> . These maps are updated twice a year, usually in June and December.			
Does your site, including all affected areas, fall in an NDDB Area according to the map instructions: Yes No Enter the date of the map reviewed for pre-screening: June 2019 This form is being submitted for a :			
 New NDDB request Renewal/Extension of a NDDB Request, without modifications and within two years of issued NDDB determination (no attachments required) 	 New Safe Harbor Determination (optional) must be associated with an application for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Renewal/Extension of an existing Safe Harbor Determination With modifications Without modifications (no attachments required) 		
[CPPU Use Only - NDDB-Listed Species Determination # 1736]	[CPPU Use Only - NDDB-Safe Harbor Determination # 1736]		
Enter NDDB Determination Number for Renewal/Extension:	Enter Safe Harbor Determination Number for Renewal/Extension:		

Part II: Requester Information

*If the requester is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, the name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of the State's database CONCORD. (www.concord-sots.ct.gov/CONCORD/index.jsp)

If the requester is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the <u>Request to Change company/Individual Information</u> to the address indicated on the form.

1.	Requester*		
	Company Name: Milone and MacBroom, Inc.		
	Contact Name: Megan B. Raymond		
	Address: 195 Church Street, 7th Floor		
	City/Town: New Haven	State: CT	Zip Code: 06510
	Business Phone: (203) 344-7887	ext.	
	**E-mail: mraymond@mminc.com		
	**By providing this email address you are agreeing to receive this electronic address, concerning this request. Please remen can receive emails from "ct.gov" addresses. Also, please not	e official correspo mber to check yo fy the departmer	ondence from the department, at ur security settings to be sure you nt if your e-mail address changes
a)	Requester can best be described as:		
	Individual Federal Agency State agen	cy 🗌 Munici	pality 🔲 Tribal
	\boxtimes *business entity (* if a business entity complete i through	n iii):	
	i) Check type 🖾 corporation 🗌 limited liability com	pany 🗌 lim	ited partnership
	🗌 limited liability partnership 🗌 statuto	ry trust 🗌 O	ther:
	ii) Provide Secretary of the State Business ID #: 0160851	This information	can be accessed at the
	Secretary of the State's database (CONCORD). (www.secretary.com/www	ww.concord-sots	.ct.gov/CONCORD/index.jsp)
	iii) Check here if your business is NOT registered with t	he Secretary of	State's office.
b)	Acting as (Affiliation), pick one:		_
	Property owner Consultant Engineer	Facility owne	er 🗌 Applicant
	Biologist Pesticide Applicator Other r	epresentative:	
2.	List Primary Contact to receive Natural Diversity Data B different from requester.	ase correspond	dence and inquiries, if
	Company Name:		
	Contact Person:	Title:	
	Mailing Address:		
	City/Town:	State:	Zip Code:
	Business Phone:	ext.	
	**E-mail:		

Part III: Site Information

This request can only be completed for one site. A separate request must be filed for each additional site.

1.	SITE NAME AND LOCATION			
	Site Name or Project Name: Elmridge Gol	f Course PV Solar Facility		
	Town(s): Stonington, Connecticut			
	Street Address or Location Description: 229 Elmridge Road			
	Size in acres, or site dimensions: 131 acres			
	Latitude and longitude of the center of the si	te in decimal degrees (e.g., 41.23456 -71.68574):		
	Latitude: 41.3392727	Longitude: -71.86066		
	Method of coordinate determination (check one):			
	GPS Photo interpolation using	CTECO map viewer 🛛 Other (specify): ArcGIS		
2a.	Describe the current land use and land cove	r of the site.		
	The site consists of the Elmridge Golf Course. The proposed project areas include 17 acres of mowed and maintained turf grass within the existing golf greens in the center of these two properties. The Elmridge clubhouse is located east of the project area within the eastern property, and is accessed to the south from Elmridge Road. The majority of these properties consist of the golf course greens, though undeveloped, forested land exists around the perimeter of the facility.			
b.	Check all that apply and enter the size in ac	res or % of area in the space after each checked category.		
	Industrial/Commercial	□ Residential		
	☐ Wetland	Field/grassland Agricultural		
	□ Water	Utility Right-of-way		
	Transportation Right-of-way	Other (specify): 65% golf course		

Part IV: Project Information

1.	PROJECT TYPE: Choose Project Type: Utility construction/modification , If other describe: <u>Solar facility</u>
2.	Is the subject activity limited to the maintenance, repair, or improvement of an existing structure within the existing footprint? ☐ Yes ⊠ No If yes, explain.

Part IV: Project Information (continued)

3.	Give a detailed description of the activity which is the subject of this request and describe the methods and
	equipment that will be used. Include a description of steps that will be taken to minimize impacts to any
	known listed species.

The proposed activity involves installation of solar panels and appurtenant connections within 17 acres in two discrete areas on an existing golf course. Standard construction equipment will be used to install the panels. Ground disturbance will be kept to a minimum, with no topsoil removal proposed. Standard site protections, including straw wattles or silt fence, will surround the construction areas. The proposed activities are not located within a mapped NDDB area but rather within 0.25 mile of one. Stormwater will be captured at the drip edge of the proposed panels and allowed to infiltrate.

4. If this is a renewal or extension of an existing Safe Harbor request *with* modifications, explain what about the project has changed.

5. Provide a contact for questions about the project details if different from Part II primary contact. Name:

Phone:

E-mail:

Part V: Request Requirements and Associated Application Types

Check one box from either Group 1, Group 2 or Group 3, indicating the appropriate category for this request.

Group 1. If you check one of these boxes, complete Parts I – VII of this form and submit the required attachments A and B.			
Preliminary screening was negative but an NDDB review is still requested			
Request regards a municipally regulated or unregulated activity (no state permit/certificate needed)			
Request regards a preliminary site assessment or project feasibility study			
Request relates to land acquisition or protection			
Request is associated with a <i>renewal</i> of an existing permit or authorization, with no modifications			
Group 2. If you check one of these boxes, complete Parts I – VII of this form and submit required attachments A, B, <i>and</i> C.			
Request is associated with a <i>new</i> state or federal permit or authorization application or registration			
Request is associated with modification of an existing permit or other authorization			
Request is associated with a permit enforcement action			
Request regards site management or planning, requiring detailed species recommendations			
Request regards a state funded project, state agency activity, or CEPA request			
Group 3. If you are requesting a Safe Harbor Determination , complete Parts I-VII and submit required attachments A, B, and D. Safe Harbor determinations can only be requested if you are applying for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities			
If you are filing this request as part of a state or federal permit application(s) enter the application information below.			
Permitting Agency and Application Name(s): GP for Stormwater from Construction Activities			
Related State DEEP Permit Number(s), if applicable:			
State DEEP Enforcement Action Number, if applicable:			
State DEEP Permit Analyst(s)/Engineer(s), if known:			
Is this request related to a previously submitted NDDB request? Yes No If yes, provide the previous NDDB Determination Number(s), if known:			

Part VI: Supporting Documents

Check each attachment submitted as verification that *all* applicable attachments have been supplied with this request form. Label each attachment as indicated in this part (e.g., Attachment A, etc.) and be sure to include the requester's name, site name and the date. **Please note that Attachments A and B are required for all new requests and Safe Harbor renewals/extensions with modifications.** Renewals/Extensions with no modifications do not need to submit any attachments. Attachments C and D are supplied at the end of this form.

Attachment A:	Overview Map: an 8 1/2" X 11" print/copy of the relevant portion of a USGS Topographic Quadrangle Map clearly indicating the exact location of the site.		
Attachment B:	Detailed Site Map: fine scaled map showing site boundary and area of work details on aerial imagery with relevant landmarks labeled. (Site and work boundaries in GIS [ESRI ArcView shapefile, in NAD83, State Plane, feet] format can be substituted for detailed maps, see instruction document)		
Attachment C:	Supplemental Information, Group 2 requirement (attached, DEEP-APP-007C) Image: Section i: Supplemental Site Information and supporting documents Image: Section ii: Supplemental Project Information and supporting documents		
Attachment D:	Safe Harbor Report Requirements, Group 3 (attached, DEEP-APP-007D)		

Part VII: Requester Certification

The requester *and* the individual(s) responsible for actually preparing the request must sign this part. A request will be considered incomplete unless all required signatures are provided.

"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 the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."			
Megan B. Raymond	October 29, 2019		
Signature of Requester (a typed name will substitute for a handwritten signature)	Date		
Megan B. Raymond Senior Environmental Scientist			
Name of Requester (print or type)	Title (if applicable)		
Signature of Preparer (if different than above)	Date		

Note: Please submit the completed Request Form and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

Or email request to: deep.nddbrequest@ct.gov

Attachment C: Supplemental Information, Group 2 requirement

Section i: Supplemental Site Information

1. Existing Conditions

Describe all natural and man-made features including wetlands, watercourses, fish and wildlife habitat, floodplains and any existing structures potentially affected by the subject activity. Such features should be depicted and labeled on the site plan that must be submitted. Photographs of current site conditions may be helpful to reviewers.

Project involves solar panel installation in two locations on the existing Elmridge Golf course property that total 17-acres. Panels and associated infrastructure will be located in existing grass areas and no woodland disturbance is proposed. The western site is adjacent to Anguilla Brook, while the eastern site is located adjacent to the golf club house.

Site Photographs	(optional)	attached
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Site Plan/sketch of existing conditions attached

2. Biological Surveys

Has a biologist visited the site and conducted a biological survey to determine the presence of any endangered, threatened or special concern species \Box Yes \boxtimes No

If yes, complete the following questions and submit any reports of biological surveys, documentation of the biologist's qualifications, and any NDDB survey forms.

Bio	logist	(s)	name:
		` '	

Habitat and/or species targeted by survey:

Dates when surveys were conducted:

Reports of biological surveys attached

Documentation of biologist's qualifications attached

NDDB Survey forms for any listed species observations attached

Section ii: Supplemental Project Information

- 1. Provide a schedule for all phases of the project including the year, the month and/or season that the proposed activity will be initiated and the duration of the activity.
- 2. Describe and quantify the proposed changes to existing conditions and describe any on-site or off-site impacts. In addition, provide an annotated site plan detailing the areas of impact and proposed changes to existing conditions.

Annotated Site Plan attached





Natural Diversity Data Base (NDDB) Final **Determination Request** Elmridge Golf Course PV Solar Facility

229 Elmridge Road Stonington, Connecticut March 17, 2020

Prepared for: Greenskies Renewable Energy, LLC P.O. Box 251 Middletown, Connecticut 06457

MMI #6763-10 NDDB #201913016

Prepared by: MILONE & MACBROOM, INC. 195 Church Street, 7th Floor New Haven, Connecticut 06510 (203) 344-7887 www.mminc.com



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TABLE OF CONTENTS

NDDB REVIEW REQUEST FORM

LIST OF ATTACHMENTS

Overview Map	Attachment A
Detailed Site Map	Attachment B
Supplemental Information	Attachment C
Listed Species Review Letter	C-1
Natural Resource Maps	C-2
Site Photographs	C-3
Project Plans	C-4



CPPU USE ONLY



Connecticut Department of Energy & Environmental Protection Bureau of Natural Resources Wildlife Division

Арр #:		
Doc #:		
Check #: No fee required		
Program: Natural Diversity Database		
Endangered Species		
Hardcopy Electronic		

Request for Natural Diversity Data Base (NDDB) State Listed Species Review

Please complete this form in accordance with the <u>instructions</u> (DEEP-INST-007) to ensure proper handling of your request.

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Part I: Preliminary Screening & Request Type

Before submitting this request, you must review the most current Natural Diversity Data Base "State and Federal Listed Species and Significant Natural Communities Maps" found on the <u>DEEP website</u> . These maps are updated twice a year, usually in June and December.			
Does your site, including all affected areas, fa	II in an NDDB Area according to the map instructions:		
Yes No Enter the date of	f the map reviewed for pre-screening: December 2019		
This form is being submitted for a :			
 New NDDB request Renewal/Extension of a NDDB Request, without modifications and within two years of issued NDDB determination (no attachments required) [CPPU Use Only - NDDB-Listed Species Determination # 1736] 	 New Safe Harbor Determination (optional) must be associated with an application for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Renewal/Extension of an existing Safe Harbor Determination With modifications Without modifications (no attachments required) [CPPU Use Only - NDDB-Safe Harbor Determination # 1736] 		
Enter NDDB Determination Number for Renewal/Extension:	Enter Safe Harbor Determination Number for Renewal/Extension:		

Part II: Requester Information

*If the requester is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, the name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of the State's database CONCORD. (www.concord-sots.ct.gov/CONCORD/index.jsp)

If the requester is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the <u>Request to Change company/Individual Information</u> to the address indicated on the form.

1.	Requester*					
	Company Name: Milone and MacBroom, Inc.					
	Contact Name: Megan B. Raymond					
	Address: 195 Church Street, 7 th Floor					
	City/Town: New Haven	State: CT	Zip Code:	06510		
	Business Phone: (203) 344-7887	ext.				
	**E-mail: mraymond@mminc.com					
	**By providing this email address you are agreeing to receive this electronic address, concerning this request. Please remy you can receive emails from "ct.gov" addresses. Also, plea changes	official correspo ember to check se notify the de	ondence from your security partment if yo	the department, at settings to be sure our e-mail address		
a)	Requester can best be described as:					
	Individual Federal Agency State agen	cy 🗌 Munici	pality 🗌 T	ribal		
	☆ *business entity (* if a business entity complete i through	n iii):				
	i) Check type 🖾 corporation 🗌 limited liability com	pany 🗌 lim	ited partners	hip		
	🗌 limited liability partnership 🗌 statuto	ory trust 🛛 O	ther:			
	ii) Provide Secretary of the State Business ID #: 0160851	This informatior	n can be acce	essed at the		
	Secretary of the State's database (CONCORD). (www.concord-sots.ct.gov/CONCORD/index.jsp)					
	iii) 🗌 Check here if your business is NOT registered with the Secretary of State's office.					
b)) Acting as (Affiliation), pick one:					
	Property owner Consultant Engineer	Facility owne	er 🗌 App	plicant		
	Biologist Pesticide Applicator Other r	epresentative:				
2.	List Primary Contact to receive Natural Diversity Data B different from requester.	ase correspon	dence and ir	nquiries, if		
	Company Name: NA					
	Contact Person:	Title:				
	Mailing Address:					
	City/Town:	State:	Zip Code:			
	Business Phone:	ext.				
	**E-mail:					

Part III: Site Information

This request can only be completed for one site. A separate request must be filed for each additional site.

1.	SITE NAME AND LOCATION		
	Site Name or Project Name: Elmridge Gol	f Course PV Solar Facility	
	Town(s): Stonington, Connecticut		
	Street Address or Location Description: 229 Elmridge Road		
	Size in acres, or site dimensions: 259 acres	3	
	Latitude and longitude of the center of the s	ite in decimal degrees (e.g., 41.23	456 -71.68574):
	Latitude: 41.3392727	Longitude: -71.86066	
	Method of coordinate determination (check	one):	
	GPS Photo interpolation using	CTECO map viewer 🛛 Other (s	specify): ArcGIS
2a.	Describe the current land use and land cove	er of the site.	
	The subject property is the Elmridge Golf Course, which occupies approximately 259-acres in eastern Stonington. The site is comprised of manicured golf course with scattered canopy trees encircled by a perimeter forest. Proposed work areas occupy 15 acres of mowed and maintained turf grass within existing golf green within the central and western portion of the golf course.		
b.	Check all that apply and enter the size in ac	cres or % of area in the space after	r each checked category.
	Industrial/Commercial	Residential	⊠ Forest <u>35%</u>
	Wetland	Eield/grassland	Agricultural
	Water	Utility Right-of-way	
	Transportation Right-of-way	Other (specify): 65% golf co	ourse

Part IV: Project Information

1.	PROJECT TYPE:
	Choose Project Type: Utility construction/modification , If other describe: Solar facility
2.	Is the subject activity limited to the maintenance, repair, or improvement of an existing structure within the existing footprint? ☐ Yes ⊠ No If yes, explain.

Part IV: Project Information (continued)

3. Give a detailed description of the activity which is the subject of this request and describe the methods and equipment that will be used. Include a description of steps that will be taken to minimize impacts to any known listed species.

The proposed project consists of the installation of two ground-mounted arrays of solar panels on 15 total acres on the Elmridge Golf Course in Stonington, Connecticut. These activities will take place largely within the existing manicured turf on Elmridge fairways. No significant disturbance of undeveloped, forested areas is proposed. Activities are not proposed within a mapped NDDB area but between 0.19-mile and 0.65-mile of a mapped NDDB polygon located east/northeast of the work. Proposed work is located in the Anguilla Brook watershed, while the majority of the mapped NDDB area is located within the Pawcatuck River watershed. The exisiting site conditions do not demonstrate preferred habitat for identified NDDB fauna. Site soils are dominated by lodgement till with a small area of graded and compacted glacial outwash within the western work area.

Limited grading is necessary to install the ground-mounted arrays. Work will be performed with standard construction equipment, such as backhoes, bull dozers, and excavators. Sedimentation and erosion control protections, including straw wattles or silt fence, will surround the construction areas. Stormwater will be captured at the drip edge of the proposed panels and allowed to infiltrate. Ancillary stormwater management basins are also proposed as mandated by CT DEEP Stormwater guidance. Species protections will include sweeps of the site prior to construction and post silt fence installation. The loss of manicured lawn may result in a net improvement to water quality in the watershed by removing areas currently treated with fertilizers and pesticides. Improvements are also possible through the introduction of pollinator plants adjacent to the solar field perimeter. Finally, the creation of a source renewable energy may provide greenhouse gas emission benefits locally.

4. If this is a renewal or extension of an existing Safe Harbor request *with* modifications, explain what about the project has changed.

NA

5.	Provide a contact for	questions about the	ne project details if	f different from Part II	primary contact.
----	-----------------------	---------------------	-----------------------	--------------------------	------------------

Name: NA

Phone:

E-mail:

Part V: Request Requirements and Associated Application Types

Check one box from either Group 1, Group 2 or Group 3, indicating the appropriate category for this request.

Group 1. If you check one of these boxes, complete Parts I – VII of this form and submit the required attachments A and B.
Preliminary screening was negative but an NDDB review is still requested
Request regards a municipally regulated or unregulated activity (no state permit/certificate needed)
Request regards a preliminary site assessment or project feasibility study
Request relates to land acquisition or protection
Request is associated with a <i>renewal</i> of an existing permit or authorization, with no modifications
Group 2. If you check one of these boxes, complete Parts I – VII of this form and submit required attachments A, B, and C.
Request is associated with a <i>new</i> state or federal permit or authorization application or registration
Request is associated with modification of an existing permit or other authorization
Request is associated with a permit enforcement action
Request regards site management or planning, requiring detailed species recommendations
Request regards a state funded project, state agency activity, or CEPA request
Group 3. If you are requesting a Safe Harbor Determination , complete Parts I-VII and submit required attachments A, B, and D. Safe Harbor determinations can only be requested if you are applying for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
If you are filing this request as part of a state or federal permit application(s) enter the application information below.
Permitting Agency and Application Name(s): GP for Stormwater from Construction Activities
Related State DEEP Permit Number(s), if applicable:
State DEEP Enforcement Action Number, if applicable:
State DEEP Permit Analyst(s)/Engineer(s), if known:
Is this request related to a previously submitted NDDB request? X Yes No
If yes, provide the previous NDDB Determination Number(s), if known: 201913016

Part VI: Supporting Documents

Check each attachment submitted as verification that *all* applicable attachments have been supplied with this request form. Label each attachment as indicated in this part (e.g., Attachment A, etc.) and be sure to include the requester's name, site name and the date. **Please note that Attachments A and B are required for all new requests and Safe Harbor renewals/extensions with modifications.** Renewals/Extensions with no modifications do not need to submit any attachments. Attachments C and D are supplied at the end of this form.

Attachment A:	Overview Map: an 8 1/2" X 11" print/copy of the relevant portion of a USGS Topographic Quadrangle Map clearly indicating the exact location of the site.
Attachment B:	Detailed Site Map: fine scaled map showing site boundary and area of work details on aerial imagery with relevant landmarks labeled. (Site and work boundaries in GIS [ESRI ArcView shapefile, in NAD83, State Plane, feet] format can be substituted for detailed maps, see instruction document)
Attachment C:	Supplemental Information, Group 2 requirement (attached, DEEP-APP-007C)Section i:Supplemental Site Information and supporting documentsSection ii:Supplemental Project Information and supporting documents
Attachment D:	Safe Harbor Report Requirements, Group 3 (attached, DEEP-APP-007D)

Part VII: Requester Certification

The requester *and* the individual(s) responsible for actually preparing the request must sign this part. A request will be considered incomplete unless all required signatures are provided.

"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 the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."		
Megan B. Raymond	March 40, 2020	
Signature of Requester (a typed name will substitute for a handwritten signature)	Date	
Megan B. Raymond	Senior Environmental Scientist	
Name of Requester (print or type)	Title (if applicable)	
Signature of Preparer (if different than above)	Date	
Name of Preparer (print or type)	Title (if applicable)	

Note: Please submit the completed Request Form and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

Or email request to: deep.nddbrequest@ct.gov













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Attachment C: Supplemental Information, Group 2 requirement

Section i: Supplemental Site Information

1. Existing Conditions

Describe all natural and man-made features including wetlands, watercourses, fish and wildlife habitat, floodplains and any existing structures potentially affected by the subject activity. Such features should be depicted and labeled on the site plan that must be submitted. Photographs of current site conditions may be helpful to reviewers.

The project involves solar panel installation in two locations on the existing Elmridge Golf course property that total approximately 15 acres. Panels and associated infrastructure will be largely located in existing grass areas and no significant woodland disturbance is proposed. The western site is adjacent to Anguilla Brook, while the eastern site is located adjacent to the golf club house. Please see the attached report for additional information. Proposed work is not located within a mapped NDDB area but between 0.19-mile and 0.65-mile from a mapped area.

Site Photographs (optional) attached

Site Plan/sketch of existing conditions attached

2. Biological Surveys

Has a biologist visited the site and conducted a biolo	gical surve	ey to determine	e the presence of any
endangered, threatened or special concern species	Yes	🛛 No	

If yes, complete the following questions and submit any reports of biological surveys, documentation of the biologist's qualifications, and any NDDB survey forms.

Biologist(s) name: Megan B. Raymond

Habitat and/or species targeted by survey: wetland delineation, overall ecological community mapping

Dates when surveys were conducted: November 2019, January 2020

Reports of biological surveys attached

Documentation of biologist's qualifications attached

<u>NDDB Survey forms</u> for any listed species observations attached

Section ii: Supplemental Project Information

1. Provide a schedule for all phases of the project including the year, the month and/or season that the proposed activity will be initiated and the duration of the activity.

The proposed work is currently in the final stages of site design and a permit application will be filed with the CT Siting Council. The construction timeline will be dependent upon local and state regulatory review processes. Once permits are received, work will commence. Construction will likely target the winter months and require 4-6 months to complete.

2. Describe and quantify the proposed changes to existing conditions and describe any on-site or off-site impacts. In addition, provide an annotated site plan detailing the areas of impact and proposed changes to existing conditions.

Proposed changes to existing conditions include installation of ground-mounted solar panels and associated stormwater management features within 15 acres of manicured lawn on an existing golf course. The primary modification of this project will be three-dimensional with the erection of the ground mounted panels, as well as subsurface, due to the ground mounting. The ground cover between the panels will remain herbaceous, though less manicured so a reduction in pesticide and fertilizer use will occur. Minimal work is proposed outside the existing fairway limits.

Annotated Site Plan attached







March 17, 2020

Ms. Dawn McKay, Environmental Analyst 3/Biologist 3 Natural Diversity Database Connecticut Department of Energy & Environmental Protection 79 Elm Street Hartford, CT 06106

RE: Elmridge Golf Course PV Solar Facility Elmridge/North Anguilla Road Stonington, Connecticut MMI #6763-10-08 NDDB #201913016

Dear Ms. McKay:

On behalf of Greenskies Renewable Energy, LLC (Greenskies), Milone and MacBroom, Inc. (MMI) is providing additional information and detailed site plans in support of a final determination from the Natural Diversity Database (NDDB). Greenskies proposes to install two solar arrays within existing fairways on the Elmridge Golf Course located at 229 Elmridge Road in Stonington, Connecticut. The arrays and associated stormwater management will total 15 acres in size. The proposed project areas consist of manicured turf grasses within existing golf greens. The following letter will demonstrate that the proposed project does not demonstrate the potential to affect mapped NDDB areas, either through direct or indirect capacities, which are located a minimum of 0.19 miles from the proposed work areas. Further, the proposed project areas do not provide preferred habitat for either state-listed fauna identified in the initial correspondence.

The proposed project area is not located within a mapped NDDB area. However, the eastern extent of the approximately 259-acre Elmridge Golf Course property is mapped NDDB habitat. No work is proposed within this area. The proposed solar arrays lie 0.19 miles from the mapped polygon at the closest point and 0.65 miles at its furthest (Figure 1, Attachment B). Given the topography of the area, the proposed work is also located in a separate watershed from the majority of the mapped NDDB area. Given the spatial and topographic separation between the mapped polygon and the proposed project, the proposed activities do not demonstrate the potential to affect mapped NDDB habitat.

MMI submitted a preliminary NDDB inquiry and received a letter from the Connecticut Department of Energy & Environmental Protection (CT DEEP) on November 8, 2019, identifying two state-listed fauna documented in the vicinity of the site. The identified species with potential to occur on the property are:

Scientific Name	Common Name	State Status
Vertebrate Animal		
Scaphiopus holbrookii	Eastern spadefoot	E
Invertebrate Animal		
Coccinella novemnotata	Nine-spotted lady beetle	SC

State-Listed Species, Suitable Habitat, Proposed Work Areas

The eastern spadefoot (*Scaphiopus holbrookii*) is a state-listed endangered species. This amphibian occupies arid to semi-arid landscapes, such as fields, farmland, dunes, and woodlands with sandy or loose soils. This species burrows up to 6 feet below ground in well-drained sandy soils. Breeding occurs within temporary bodies of water, flooded fields, and forested wetlands. The most active period for the eastern spadefoot is from June through August.

The proposed work areas do not demonstrate preferred habitat for this species. One array is located on the western flank of a drumlin, underlain by lodgment till. The other array is located in compacted and graded outwash. Neither work area nor the immediate periphery displays ephemeral surface water bodies suitable for breeding. Rather, adjacent areas in the western work area are comprised of palustrine forested wetlands, while woodland uplands and a drainage corridor abut the eastern project site. The proposed project areas are comprised of actively used manicured lawn areas that support recreational golfing.

The nine-spotted lady beetle (*Coccinella novemnotata*) is a state-listed species of special concern (SC). This insect prefers agricultural fields comprised of alfalfa, clover, corn, cotton, potato, or soybean, as well as wooded habitats and grasslands. Breeding occurs during several weeks in the summer. The nine-spotted lady beetle is an insectivore and feeds primarily on aphids.

The proposed project areas are comprised of actively used and maintained manicured lawn areas on a golf course. The project areas are not comprised of agricultural fields or within close proximity of agricultural areas. Forested areas abut the proposed project site, though no significant disturbance is proposed within adjacent forests.

General Site Description

Elmridge Golf Course is located in northeastern Stonington, Connecticut (Figure 2, Attachment A). The course is centered around the clubhouse, which is accessed to the south from Elmridge Road. The golf course consists of a number of fairways, interspersed by scattered canopy trees and man-made water features that exist north and south of Elmridge Road, as well as west of North Anguilla Road, which bisects the southwestern portion of the site. Interstate 95 abuts the site to the west. The Anguilla Brook riparian corridor traverses the western portion of the site. Overall, the site is characterized by undulating topography and underlain by glacial till over the majority of the site, though west of North Anguilla Road, glacial outwash parent material soils exist. Lightly settled single-family residential properties exist in close proximity. Undeveloped, forested land lies adjacent to the perimeter of the manicured golf course.

Wetland Delineation, Existing Ecological Communities

MMI delineated wetlands within and adjacent to the two proposed solar arrays in 2019 and 2020. The study areas consisted of a 26.4-acre western study area, located west of North Anguilla Road, and approximately 26.2 acres in the center of the eastern property, south and west of the clubhouse. The 26.2-acre eastern study area is located on the flank of a drumlin, which projects a moderate slope to the west. The topographical difference between the western and eastern study areas is approximately 100 feet. Within the western study area, topography slopes gently to the south along the Anguilla Brook floodplain. Throughout the study areas, topography and drainage have been modified to foster use of



the site as a golf course. A man-made pond and ditch exist within the boundary of the golf course in the western study area.

The work areas are located within the Anguilla Brook watershed, which drains approximately 6.71 square miles in northeastern Stonington. Anguilla Brook, a perennial watercourse, flows south within the southwestern portion of the site and enters Wequetequock Cove and Fishers Island Sound approximately 2 miles south of the property. Federal Emergency Management Agency (FEMA) Floodway, 100- and 500-year floodplains associated with Anguilla Brook extend across the property in this area. The 100-year floodplain extends to Elevation 48 (North American Vertical Datum [NAVD]).

The proposed project area is largely confined to previously disturbed, currently mowed and maintained turf grasses within 15 acres of the Elmridge Golf Course. A small amount of woodland disturbance is necessary to site the eastern array. This portion of the woodland is comprised of an edge community dominated by Norway maple (*Acer platinoides*) and Northern red oak (*Quercus rubra*) that is cloaked with bittersweet vines (*Celastrus orbiculatus*). Soils within the work areas consist of compact glacial till within the eastern array and compacted and graded glacial outwash in the western work area (Figure 3).

Proposed Project

The proposed project will involve the creation of two ground-mounted solar arrays totaling 15 acres within the bounds of the existing golf course. Proposed activities will take place a minimum of 100 feet from delineated wetlands. The project is designed to avoid ecological impairment by siting the proposed renewable energy features largely within the limit of disturbance of the golf course. The project may be considered a redevelopment of a previously developed and disturbed area. Sedimentation and erosion controls, designed to 2002 Connecticut Guidelines, will be utilized to minimize temporary impacts during construction. Stormwater management will be installed to prevent long-term impacts to adjacent upland and wetland ecosystems and will address water quality and water quantity measures. The project is not located within a mapped NDDB area and is located a minimum of 0.19 miles from the mapped polygon. Further, the majority of the mapped polygon is located within the Pawcatuck River watershed, while the proposed activities are located in the Anguilla Brook watershed. The project will respect existing topography and drain to the west/southwest and away from the mapped NDDB area.

Given the nexus of the project area to high functioning and diverse wetland systems, species protections are proposed to minimize impacts to wildlife during construction. The measures are detailed below. The redevelopment project may also improve water quality in the local watershed by removing 15 acres of heavily maintained and manicured turf on the golf course in favor of natural warm-season grasses.

Species Protections

Species protections have been considered to minimize wildlife mortality during construction. The shortterm protocols provide steps that will be followed throughout construction to minimize wildlife mortality during the active construction phase. Though preferred habitat for state-listed species is not present on the golf course, the work areas lie adjacent to high-functioning, structurally and vegetatively diverse wetland systems that support a variety of wildlife species. Long-term management approaches are centered around the nature of the project as redevelopment.



Short-Term Construction Protocol – Habitat Protection

Sedimentation and erosion control measures, including silt fence installation, will be implemented along the perimeter of the work zone to prevent disturbance into adjacent ecosystems. Silt fence will additionally provide an exclusionary barrier to prevent small mammals, reptiles, and amphibian species from accessing the work areas. The following protocols will be implemented to minimize wildlife mortality during construction:

- Exclusionary fencing will be at least 20 inches tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animals pass through.
- Staging and storage of equipment and supplies will be confined to previously disturbed areas within the limits of exclusionary fencing.
- Notify construction personnel regarding potential to encounter wildlife and designate specific relocation procedures, dependent on species type, e.g., small mammal, reptilian, amphibian, etc. In general, species should be removed from the work area and placed in an adjacent ecosystem pointed in the same compass direction at its point of capture.
- A designated worker shall search the work area each morning prior to work to identify trapped wildlife species.
- Exclusionary fencing shall be removed as soon as a given work area is stable and disturbance is complete to allow for wildlife passage to resume.

Long-term Habitat Management

The proposed project provides long-term habitat management through the proposed site design, specifically through the use of existing cleared areas to site proposed solar arrays. Other project benefits include the reduction of fertilizer and pesticide through the elimination of 15 acres of heavily managed golf course turf, and an investment in a renewable energy source, which will lead to less reliance on fossil fuels, resulting in clearer air and ecosystems. No direct wetland disturbance is proposed, and all proposed work is largely confined to the previously disturbed manicured lawn of the golf course green. Stormwater management features have been incorporated in the proposed project design to avoid long-term impacts to adjacent wetlands and watercourses.

Conclusion

Greenskies is requesting a final determination from NDDB in order to advance submission of a General Permit for Stormwater Discharge from Construction Activities (GP). The GP is necessary to facilitate construction of two solar arrays that total 15 acres on the existing Elmridge Golf Course. The construction activities will largely occur within previously disturbed and currently maintained golf course greens. Site protections are incorporated to avoid potential impacts during construction and maintain the long-term potential for wildlife species utilization through habitat protection. The spatial and topographic separation between the mapped NDDB area and the proposed activities, along with a lack of physical habitat infrastructure within the work areas, results in a minimal potential for adverse impacts to state-listed species. Therefore, the project is consistent with the general conditions of the GP.



Thank you very much for your consideration of this request. If you have any questions or would like any additional information, please don't hesitate to contact me via phone (203-344-7889) or email (mraymond@mminc.com).

Very truly yours,

MILONE & MACBROOM, INC.

B.

Megan B. Raymond, MS, PWS Senior Project Manager, Environmental Science

6763-10-08-mr1720-ltr









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SOURCE: 2016 AERIAL PHOTO, CT DEEP





MILONE & MACBROO	M P	HOTOGRAPHIC LOG
Client Name: Greenskies Renewable Energy, LLC	Site Location: Stonington, CT	Project No. 6763-10
Photo No. Date: 1 11/21/2019 Direction Photo Taken: East East Image: Cart path between wetland 4 and 5.		
Photo No. Date: 2 11/21/2019 Direction Photo Taken: Image: Construction of the second sec	<image/>	

MILC	ONE & MACBI	PHOTOGRAPHIC LOG	
Client Name: Greenskies Renewable Energy, LLC		Site Location: Stonington, CT	Project No. 6763-10
Photo No. 3 1 Direction Photo South	Date: .1/21/2019 o Taken:		
Description: Wetland 4 cont meadow, interr watercourse, an water pond.	caining wet mittent nd an open		
Photo No. 4 Direction Photo South	Date: 11/21/2019 o Taken:		
Description: Wetland 5 adjacent to Anguilla Brook.			















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