Cold Springs Solar

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: 3354 Cold Springs Solar		
Project Location (describe, and attach a general location map): 3400 Cold Springs Rd, Baldwinsville, NY 13027		
Brief Description of Proposed Action (include purpose or need): The proposed action is to install a large-scale, ground-mounted, solar photovoltaic system. The existing parcel (Tax ID: 64-03-2.1) is owned by Landmark Challenger, LLC, and it has an area of 100 AC±. A subdivision of the existing property is proposed, with a resulting solar parcel area of 47 AC±. The project will consist of a 5 MW AC system with 11,928 ± panels. The panels will be mounted on a mechanical tracking system with steel posts & ground screws. The system will be secured with a 7'H chain-link fence. The area inside the fence will be 25.13 AC±. Equipment pads will be located near the panels & will consist of inverters, transformers, data systems & switch gear. The site will be accessed via a proposed gravel road. Stormwater will be managed on site.		
Name of Applicant/Sponsor: 3354 Cold Springs Solar, LLC in care of New Leaf Energy, INC	Telephone: 908-892-0841 E-Mail: tnolan@newleafenergy.com	
Address: 55 Technology Dr, suite 102		
City/PO: Lowell	State: MA	Zip Code: 01851
Project Contact (if not same as sponsor; give name and title/role): Terrence Nolan	Telephone: 908-892-0841 E-Mail: tnolan@newleafenergy.com	
Address: 22 Century Hill Dr, Suite 303		
City/PO: Latham	State: NY	Zip Code: 12110
Property Owner (if not same as sponsor): Landmark Challenger, LLC (Kenneth Raymond)	Telephone: E-Mail:	
Address: 621 Columbia St		
City/PO: Cohoes	State: NY	Zip Code: 12047

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	**If Yes: Identify Agency and Approval(s) Required**	**Application Date (Actual or projected)**
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes☑No		
b. City, Town or Village Planning Board or Commission ☑Yes☐No	Site Plan	4/3/2023
c. City, Town or Village Zoning Board of Appeals ☐Yes☑No		
d. Other local agencies ☐Yes☑No		
e. County agencies ☑Yes☐No	Onondaga County Planning Board	5/3/2023
f. Regional agencies ☐Yes☑No		
g. State agencies ☑Yes☐No	NYSDEC, SPDES, SHPO, NYSDOT	5/3/2023
h. Federal agencies ☑Yes☐No	USACE, USFWS	

i. Coastal Resources.
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes☑No

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
AR-40, incentive overlay district

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site?

C.4. Existing community services.

a. In what school district is the project site located? BALDWINSVILE CENTRAL SCHOOL DISTRICT

b. What police or other public protection forces serve the project site?
Onondaga County Sheriff's Department

c. Which fire protection and emergency medical services serve the project site?
Cold Springs Fire Department

d. What parks serve the project site?

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Solar Farm

b. a. Total acreage of the site of the proposed action? 44.7 ± acres
b. Total acreage to be physically disturbed? 1.8 ± acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 294 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☑ Yes ☐ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Residential, solar, land trust
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 3
iv. Minimum and maximum proposed lot sizes? Minimum 14.1 ± Maximum 44.7 ± ac

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 6 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑Yes ☐No

If Yes,

i. Total number of structures 1 solar farm

ii. Dimensions (in feet) of largest proposed structure: 18 height; 900 width; and 1500 length

iii. Approximate extent of building space to be heated or cooled: N/A square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source. _____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes ☑No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes ☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No
- Do existing lines serve the project site? ☐Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes ☑No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No

- Do existing sewer lines serve the project site? ☐Yes☐No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes☐No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑Yes☐No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 1.0 acres (impervious surface)

_____ Square feet or 44.7 acres (parcel size)

ii. Describe types of new point sources. No point source likely, sheet flow intended. Roadside ditches possible.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Stormwater will be flow onto existing drainage patterns and discharge in the on-site riparian buffers, wetlands and streams.
Grass filter strips and riparian buffers will be utilized adjacent to new impervious surfaces

- If to surface waters, identify receiving water bodies or wetlands: USACE wetland
- Will stormwater runoff flow to adjacent properties? ☐Yes☑No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7am-5pm
- Saturday: 8am-5pm
- Sunday: 9am-5pm
- Holidays: 7am-5pm

ii. During Operations:

- Monday - Friday: Daylight, unmanned
- Saturday: Daylight, unmanned
- Sunday: Daylight, unmanned
- Holidays: Daylight, unmanned

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

During construction period, (first 3 months) noise from drilling and placing racking foundation screws will be noticeable but sporadic during working hours. No noise above ambient levels post-construction

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☐ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

A dark sky rated motion-activated light approximately 9-10 feet in height will be installed at the electrical equipment area & will be directed downward.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: 0-6 tons per month (unit of time)
- Operation : 0 tons per month (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: Cardboard packaging & wood pallets will be recycled. The majority of waste generated is from the packaging materials.
- Operation: None

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: On-site dumpsters will be used to store solid waste & recyclables.
- Operation: None

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☑ Forest ☑ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0	1.08	+1.08
• Forested	2.27	2.04	-0.23
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.47	13.91	+14.38
• Agricultural (includes active orchards, field, greenhouse etc.)	40.36	0	-40.36
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)	1.60	1.60	0.00
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Solar Farm	0	25.13	+25.13

c. Is the project site presently used by members of the community for public recreation? ☐Yes ☑No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐Yes ☑No
If Yes,
i. Identify Facilities:

_____
_____

e. Does the project site contain an existing dam? ☐Yes ☑No
If Yes:
i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

_____
_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐Yes ☑No
If Yes:
i. Has the facility been formally closed? ☐Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____
_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐Yes ☑No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____
_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐Yes ☑ No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐Yes ☐No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____
☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____
☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

_____
_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐Yes ☑No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____
_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? >6 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

ArD	19 %
ArB	14 %
HIA	13 %

d. What is the average depth to the water table on the project site? Average: >6 feet

e. Drainage status of project site soils:

☑ Well Drained:	60 % of site
☐ Moderately Well Drained:	% of site
☑ Poorly Drained	40 % of site

f. Approximate proportion of proposed action site with slopes:

☑ 0-10%:	100 % of site
☐ 10-15%:	% of site
☐ 15% or greater:	% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 897-43 Classification C
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer, Primary Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
Birds | Deer | Rodents

n. Does the project site contain a designated significant natural community? ☐Yes ☑No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑Yes ☐No
If Yes:
i. Species and listing (endangered or threatened):
Indiana Bat, Bald Eagle

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐Yes ☑No
If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☑No
If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☑Yes ☐No
If Yes, provide county plus district name/number: ONON003

b. Are agricultural lands consisting of highly productive soils present? ☑Yes ☐No
i. If Yes: acreage(s) on project site? +/- 30 ac
ii. Source(s) of soil rating(s): USDA Web soil survey

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☑No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐Yes ☑No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Eligible property:MELVIN FARM

iii. Brief description of attributes on which listing is based:

Historic Farm House in poor/dilapitated condition

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Onondaga Lake, Lysander Town Park, Three Rivers wildlife management area

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Lake, local park, wildlife area

iii. Distance between project and resource: 2.5, 4.5, 4.5 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

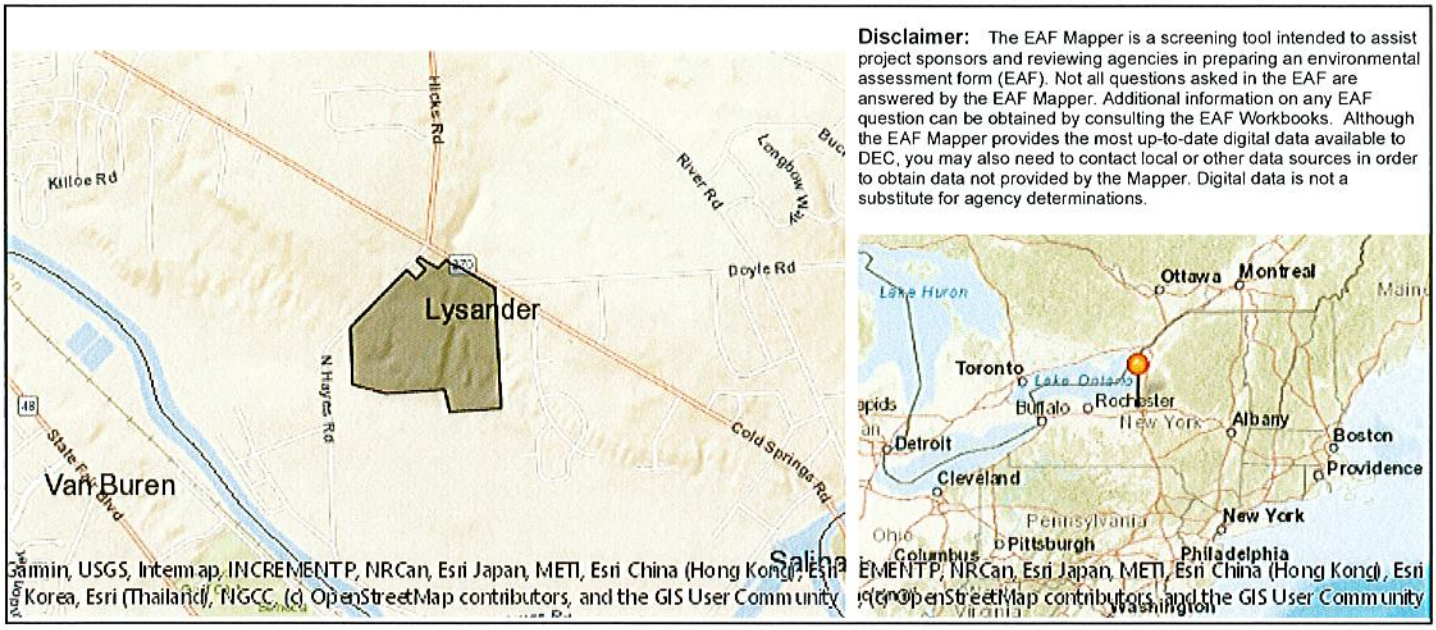
Applicant/Sponsor Name Terrence Nolan Date 3/30/23

Signature _____ Title Project Developer

PRINT FORM

EAF Mapper Summary Report

Friday, March 24, 2023 12:45 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	897-43
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No

E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer, Primary Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Indiana Bat, Bald Eagle
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	ONON003
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:MELVIN FARM
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2023-0044565
Project Name: 3400 Cold Springs Rd - Lysander

February 13, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location 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

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

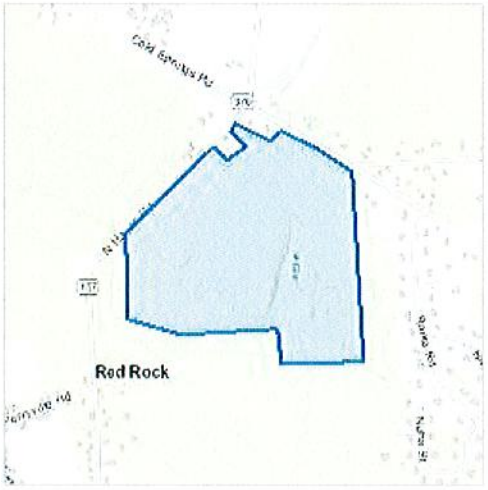
This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

Project Summary

Project Code: 2023-0044565
Project Name: 3400 Cold Springs Rd - Lysander
Project Type: Power Gen - Solar
Project Description: Solar Power Generation
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.138118750000004,-76.27831935130177,14z



Counties: Onondaga County, New York

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: New Leaf Energy
Name: Ashley Chandler
Address: 22 Century Hill Drive, Suite 303
City: Latham
State: NY
Zip: 12110
Email achandler@newleafenergy.com
Phone: 5182589054

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

March 28, 2023

Ashley Chandler
New Leaf Energy
22 Century Hill Drive, Suite 303
Latham, NY 12110

Re: 3400 Cold Springs Rd - Lysander
County: Onondaga Town/City: Lysander

Dear Ashley Chandler:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 7 Office, Division of Environmental Permits, at dep.r7@dec.ny.gov.

Sincerely,

Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program

The following state-listed animals have been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed.

For information about any permit considerations for your project, please contact the Permits staff at the NYSDEC Region 7 Office at dep.r7@dec.ny.gov, 315-426-7438.

The following species has been documented within one mile of the project site.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Birds				
Bald Eagle	*Haliaeetus leucocephalus*	Threatened		13494
Breeding				

The following species has been documented within one mile of the project site. Individual animals may travel 2.5 miles from documented locations.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Mammals				
Indiana Bat	*Myotis sodalis*	Endangered	Endangered	
Maternity colony				12156
Bachelor colony				13799

This report only includes records from the NY Natural Heritage database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

NEW YORK STATE OF OPPORTUNITY. | **Parks, Recreation, and Historic Preservation**

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

September 25, 2020

Lauren Haberland
Borrego Solar Systems, Inc.
30 Century Hill Drive, Suite 301
Latham, NY 12110

Re: DEC
Lysander Solar Facility/5 MW/35 Acres
3400 Cold Springs Rd, Baldwinsville, Onondaga County
20PR05253

Dear Lauren Haberland:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

We note that the proposed undertaking is adjacent to the State and National Registers of Historic Places eligible Melvin Farm and 3246 Cold Spring Road. We further note the project is within the viewshed of the New York State Barge Canal Historic District, which has been designated a National Historic Landmark. We have reviewed the submission received on August 27, 2020. In order to continue our review, we request the following additional information:

- Please key the submitted Site Walk Photos to a site plan indicating the location and direction of each image and submit it for our review and comments.
- We request the installation of a vegetative buffer to screen the proposed project from the historic Melvin Farm. Please submit a landscape plan detailing the location, lay-out and species of the vegetative buffer, as well as a leaf-off and leaf-on simulation.

We would appreciate additional submissions be provided via our Cultural Resource Information System (CRIS) at www.nysparks.com/SHPO/online-tools/. To submit, log into CRIS as a guest, choose "submit" at the very top of the menu. Go to "Other Options" and choose "submit new information for an existing project." If you have any questions, I can be reached at (518) 268-2170.

Sincerely,

Robyn Sedgwick
Historic Site Restoration Coordinator
e-mail: robyn.sedgwick@parks.ny.gov

via e-mail only

cc: C. Vandrei – DEC; J. Kondrat – Borrego Solar

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Appendices

GEI Consultants

Consulting
Engineers and
Scientists

Wetland and Waterbodies Delineation Report

Borrego Solar Systems, Inc.

3400 Cold Springs Road
Lysander, New York

Submitted to:
James Kondrat
Borrego Solar Systems, Inc.
30 Century Hill Dr., Suite 301
Latham, NY 12110

Submitted by:
GEI Consultants, Inc., P.C.
1301 Trumansburg Rd., Suite N
Ithaca, NY 14850

October 2020
Project No. 2003807

Jerry Peake
Project Scientist

Mallory Smith
Project Professional

Abbreviations and Acronyms

CWA	Clean Water Act
ERM	Environmental Resource Mapper
FEMA	Federal Emergency Management Act
FIRM	Flood Insurance Rate Map
GEI	GEI Consultants, Inc., P.C.
JD	Jurisdictional Determination
MSL	Mean Sea Level
NHD	National Hydrography Dataset
NRCC	Northeast Regional Climate Center
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
NYSDEC	New York State Department of Environmental Conservation
OHWM	Ordinary High-Water Mark
PEM	Palustrine Emergent
PFO	Palustrine Forested
PSS	Palustrine Scrub-Shrub
USACE	United States Army Corps of Engineers
USACE Manual	1987 United States Army Corps of Engineers Wetlands Delineation Manual
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WOTUS	Waters of the United States
WSS	Web Soil Survey

Executive Summary

The site at 3400 Cold Springs Road is being assessed for development of a ground-mounted photovoltaic power generation system. GEI Consultants, Inc., P.C. (GEI) was contracted to complete a wetland and waterbody delineation for all wetlands and waters of the United States (WOTUS). This wetland and waterbody delineation included a database review of U.S. Geologic Survey (USGS) Topographic Map Series and National Hydrography Dataset (NHD), U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper (ERM), U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Soil Survey, and Federal Emergency Management Act (FEMA) Floodplain Data. After database review, on-site field surveys were conducted using the Routine On-Site Determination method as described in the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE Manual) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.

The database review identified one NYSDEC-mapped stream and two NWI wetlands. Sixteen (16) different soils were identified within the Site, two of which are considered hydric or partially hydric.

The field surveys revealed two streams comprising one larger waterbody system, one forested wetland system, and two riverine wetland systems. From the database review and field surveys, the wetlands are anticipated to be under the jurisdiction of the USACE. If development is pursued, a Jurisdictional Determination (JD) should be requested from the USACE. A Preliminary JD would be appropriate in this case as all identified resources are anticipated to be under the jurisdiction of the USACE.

1. Introduction

1.1 Site Location and Setting

The 3400 Cold Springs Road property (Site) is a 100.32-acre site that is being considered for potential development of photovoltaic array. The Site is located in the Town of Lysander, New York, south of Cold Springs Road and east of N Hayes Road (Figure 1). The Site consists of a mixture of agricultural and undeveloped forested area. The surrounding land use consists of a mix of residential, undeveloped, and agricultural parcels.

Elevations at the Site range from approximately 380 to 450 feet above mean sea level. The topography of the Site is somewhat hilly and generally slopes to the south with north/south depressions that follow the course of streams within the parcel boundaries (United States Geological Survey [USGS] Topographic Map, Baldwinsville, 2019).

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) (http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm), with the exception of two mapped areas of Fluvaquents (mapped as Fl) located on the southwest corner and spanning the central portion of the Site from north to south, none of the other soils are classified as hydric. One mapped area of Howard gravelly silt loam (mapped as HyB) on the southwest corner of the Site is classified as partially hydric with a rating of 5, indicating that the soil type has a slight chance of being hydric. The Site is primarily mapped as Arkport very fine sandy loam, hilly (28.8%), Fluvaquents, frequently flooded (13.6%), and Collamer silt loam, (2 to 6 percent slopes) (12.7%).

Per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps 36067C0088F and 36067C0069F (effective date November 4, 2016), the Site is located in an area of minimal flood hazard (Zone X). This is defined as an area determined to be outside of the 0.2% annual chance of flood (i.e. outside of the 500-year flood plain).

2. Methodology

Before a site visit was conducted, GEI reviewed several resource reference maps covering the Site. These included: the USGS Baldwinsville, NY 2019 Quadrangle Topographic Map, the USDA NRCS Soils Map, the NYSDEC Environmental Resource Mapper, and the USFWS NWI map. These maps identify potential drainageways, soil units, wetlands, and streams within the Site.

GEI walked the Site on September 24 & 25, 2020 to determine the extent and regulatory status of any wetlands and streams present on site. Wetland areas (if present) were identified and delineated in accordance with the USACE Manual (Environmental Laboratory, 1987) and the Northcentral and Northeast Regional Supplement (USACE, 2012).

Soils, vegetation, and hydrology were observed and recorded to determine the potential presence of wetland habitats. A soil test pit was dug at representative wetland areas to examine soils for evidence of hydric soil indicators. The soil profile was described, and key characteristics including color and presence of redox concentrations were recorded. Soil colors were determined using Munsell Soil Color Charts (Munsell Color, 2010). Vegetation was evaluated at each soil pit location to determine the presence of hydrophytic plant communities. Wetland indicator status was obtained for each species referring to the USACE Northcentral and Northeast 2016 Regional Wetland Plant List (Lichvar, et al. 2016). Wetland hydrology indicators were also assessed at each soil pit location, including the presence of standing water, soil saturation within 12 inches of the surface, and/or evidence suggesting episodes of past inundation. Direct observations and indicators of wetland hydrology were evaluated and recorded. A Cowardin classification identification code was assigned to each wetland area based upon the representative wetland features and the Cowardin classification system definitions (Cowardin, et al. 1979).

The wetland boundary and data points were then mapped with a Trimble R1 GNSS receiver to facilitate sub-meter accuracy. Representative photographs of the wetland (if present) and project area were taken and are included in this report (Appendix A).

3. Findings

3.1 Database Review

During the database review, various data sources were consulted to identify potential drainageways, soil units, wetlands, streams, and floodplains within the Site. The NRCS soil survey maps indicated sixteen (16) different soil types, two being rated hydric or partially hydric. One Class C(C) stream was mapped on the Site via NYSDEC ERM (Figure 1). There was one potential freshwater forested shrub wetland and one potential riverine resource mapped on the Site via NWI maps. The NWI maps also identified a second riverine resource immediately south of the Site (Figure 1). Per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps 36067C0088F and 36067C0069F (effective date November 4, 2016), the Site is located in an area of minimal flood hazard (Zone X). This is defined as an area determined to be outside of 0.2% annual chance of flood.

3.2 Wetlands

GEI assessed the Site on September 24 & 25, 2020 and found approximately eleven (11) percent of the Site (11.53-acres) consists of wetlands (Figure 1). Three (3) wetlands were delineated on the Site, labelled Wetlands A, B and C. The delineated wetlands that are mapped on site all share a hydrologic connection via the blue line stream that is oriented in an east/west direction adjacent to/south of the property boundary. A distinct topographic rise in elevation defined the wetland limits for the majority of these delineated wetlands. The wetland areas identified within the Site and their Cowardin description is summarized in Table 1 below and a summary of each of these wetlands follows.

Table 1 – Delineated Wetlands

Feature ID	On-Site Acreage	Cowardin Classification	Description
Wetland A	2.11	PSS1/PEM1E	Scrub shrub/emergent wetland, dominated by green ash, black cherry, multiflora rose, Japanese honeysuckle, rough stemmed goldenrod, and aster.
Wetland B	5.4	PSS1/PEM5A/PFO1A	Scrub shrub/emergent/forested wetland dominated by boxelder, *Phragmites*, jewelweed, and goldenrod.

Feature ID	On-Site Acreage	Cowardin Classification	Description
Wetland C	4.02	PFO1A	Forested wetland dominated by boxelder and red maple.
Total Acreage	11.53		

Notes:
*Acreage within Site based on approximate site boundary lines
PSS1E = palustrine scrub/shrub wetland/seasonally flooded/saturated
PEM1E = palustrine emergent wetland, seasonally flooded/saturated
PEM5A = palustrine emergent wetland, dominated by *Phragmites australis*, temporarily flooded
PFO1A = palustrine forested wetland, broadleaved deciduous, temporarily flooded

Wetland A is a scrub/shrub and emergent wetland habitat that borders a mapped blue line stream on the western portion of the Site (Figure 1 and Appendix A, Photos 1 and 2). The stream flows from the northwest property boundary, where it enters the Site via a culvert under N Hayes Rd., (Figure 1 and Appendix A, Photo 3). The stream and wetland transect the Site in a north/south direction, discharging into a second mapped blue line stream at the south of the Site. The scrub/shrub wetland consists primarily of a black cherry (*Prunus serotina*) and green ash (*Fraxinus pennsylvanica*) canopy with and understory comprised of multiflora rose (*Rosa multiflora*) and Japanese honeysuckle (*Lonicera japonica*). The emergent plant species dominating the herbaceous layer of the wetland are goldenrods (*Solidago*), aster (*Symphyotrichum*), and jewelweed (*Impatiens capensis*). Soils within the wetland display the Redox Dark Surface (F6) hydric indicator in the soil layer from 0 to17 inches deep, a hue of 10YR with a matrix/chroma of 3/2 and 2 percent or more distinct or prominent redox concentrations. The consolidated bottom of the streambed and geomorphic position were positive indicators of wetland hydrology. This wetland's hydrologic connections to other off-site resources indicate it would be under the jurisdiction of the USACE.

Wetland B is primarily a forested wetland with scrub/shrub and emergent wetland communities that border a mapped blue line stream that transects the Site from north to south (Figure 1 and Appendix A, Photos 7, 8 and 9). The stream flows from the north-central portion of the property, where it enters the Site via a culvert under Cold Springs Rd. The stream and wetland transect the Site in a north/south direction, discharging into a second mapped blue line stream at the southern limits of the Site. The wetland transitions from scrub shrub/emergent at the northernmost portion of the Site to forested in the central and southern portions. The scrub/shrub community consists primarily of honeysuckle and multiflora rose with the herbaceous layer dominated by goldenrods, and *Phragmites*. The wetland is defined

by a distinct topographic drop in elevation, on both the east and west sides, from the top of bank to the streambed. The forested wetland consists of a canopy of red maple (*Acer rubrum*) and boxelder (*Acer negundo*) with an understory of gray dogwood (*Cornus racemosa*). The herbaceous layer within the wetland is dominated by *Phragmites* (in northern portion of wetland), joe pye weed (*Eutrochium maculatum*), and jewelweed. Soils within the wetland display the Depleted Matrix (F3) hydric indicator in the soil layer from 0 to2 inches deep, a hue of 10YR with a matrix/chroma of 3/2 and Redox Dark Surface (F6) hydric indicator in the soil layer from 2 to10 inches deep, a hue of 10YR with a matrix/chroma of 3/2 and 2 percent or more distinct or prominent redox concentrations. This wetland's hydrologic connections to other off-site resources indicate it would be under the jurisdiction of the USACE.

Wetland C is forested wetland located in the southeast portion of the Site (Figure 1 and Appendix A, Photos 10 and 11). The wetland is a continuation of Wetland B with a common hydrologic connection via the stream system located beyond the southern property limits of the Site. The wetland is defined by distinct topographic drops in elevation along the east and west sides of drainage patterns that extend in a north/south direction, draining water towards the stream system located to the south of the Site. The vegetative community in Wetland C is similar to that of Wetland B, excluding the emergent habitat type dominated by *Phragmites*. The forested canopy cover within the wetland is dominated by red maple and boxelder with an understory dominated by dogwood shrubs. Wetland C is a continuation of Wetland B, therefore no data points were collected in Wetland C. However, the delineation of Wetland C determined that hydrophytic vegetation, hydric soils, and wetland hydrology are present. This wetland's hydrologic connections to other off-site resources indicate it would be under the jurisdiction of the USACE.

3.3 Waterbodies

Surface water was present at the time of the Site visit in two waterways, Stream 1 and Stream 2 (Appendix A, Photos 1, 3, 4, 8, and 9). These streams are entirely within the delineated boundaries of Wetlands A and B, respectively. Stream 1 drains through a culvert under N Hayes Rd., from outside of the study area and flows south into Wetland A at the northwestern property boundary. The stream was primarily dry with water pooled in limited areas within the streambed channel, indicating that the stream is seasonally flooded. Wrack lines along the channel and channel morphology indicate that surface water is seasonally present within the waterway. Stream 1 drains into the mapped NYSDEC stream at the southern limits of the Site which flows west and south, merging with the Seneca River approximately 0.6 miles to the southwest of the Site.

Stream 2 roughly aligns with the mapped NYSDEC Class C(C) stream. It drains through a culvert under Cold Springs Rd., from outside of the study area and flows south into Wetland B. The stream is defined by a distinct topographic drop in elevation from the top of bank

down to the stream channel on both the east and west sides of the system. Water was observed in standing pools and small pockets along the length of the channel; however, the majority of the stream bed was dry. Wrack lines along the channel and channel morphology indicate that surface water is seasonally present within the waterway. The stream transects the Site from north to south, merging with the wetland/stream complex at the southern limits of the Site and continuing west. Stream 2 and Stream 1 merge at the southwestern corner of the Site to continue for approximately 0.6 miles to the west and south to join the Seneca River.

4. Conclusions

Wetlands A, B and C all exhibit hydrologic connections to other resources both on- and off-site. Based on field surveys and database review information, these wetlands and all delineated streams are anticipated to be jurisdictional USACE wetlands. If development is pursued, a Jurisdictional Determination (JD) should be requested from the USACE. In this instance, a Preliminary JD would be appropriate as all identified resources are anticipated to be under their jurisdiction.

None of the delineated wetlands are mapped NYSDEC Freshwater Wetlands nor are they associated with any mapped NYSDEC Freshwater Wetlands. These wetlands are therefore not anticipated to be under the jurisdiction of the NYSDEC. Stream 2 is a mapped NYSDEC Class C(C) stream and Stream 1 is a direct tributary. As Class C(C) streams, NYSDEC would not regulate them.

A professional opinion of anticipated permitting requirements for impacts to state and/or federally jurisdictional wetlands and streams can be provided upon review of preliminary site plans.

5. Limitation

The Site investigation described in this report was conducted and prepared on behalf of and for the exclusive use of Borrego Solar Systems, Inc. No other entity may rely upon the results of the assessment or contents of this report for any reasons or purpose, whatsoever.

GEI performed this investigation in accordance with generally accepted practices of engineers, scientists, and/or consultants providing similar services at the same time, in the same locale, and under like circumstances. No other warranty, expressed or implied, is made as to the professional opinions included by GEI in this report.

6. References

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. United States Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, United States Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17.

Munsell Color (Firm), Munsell Soil Color Charts: with Genuine Munsell Color Chips. Grand Rapids, MI: Munsell Color, 2010.

Northeast Regional Climate Center, Climate Normal Maps, May 11, 2018, On-line: http://www.nrcc.cornell.edu/regional/climatenorms/climatenorms.html

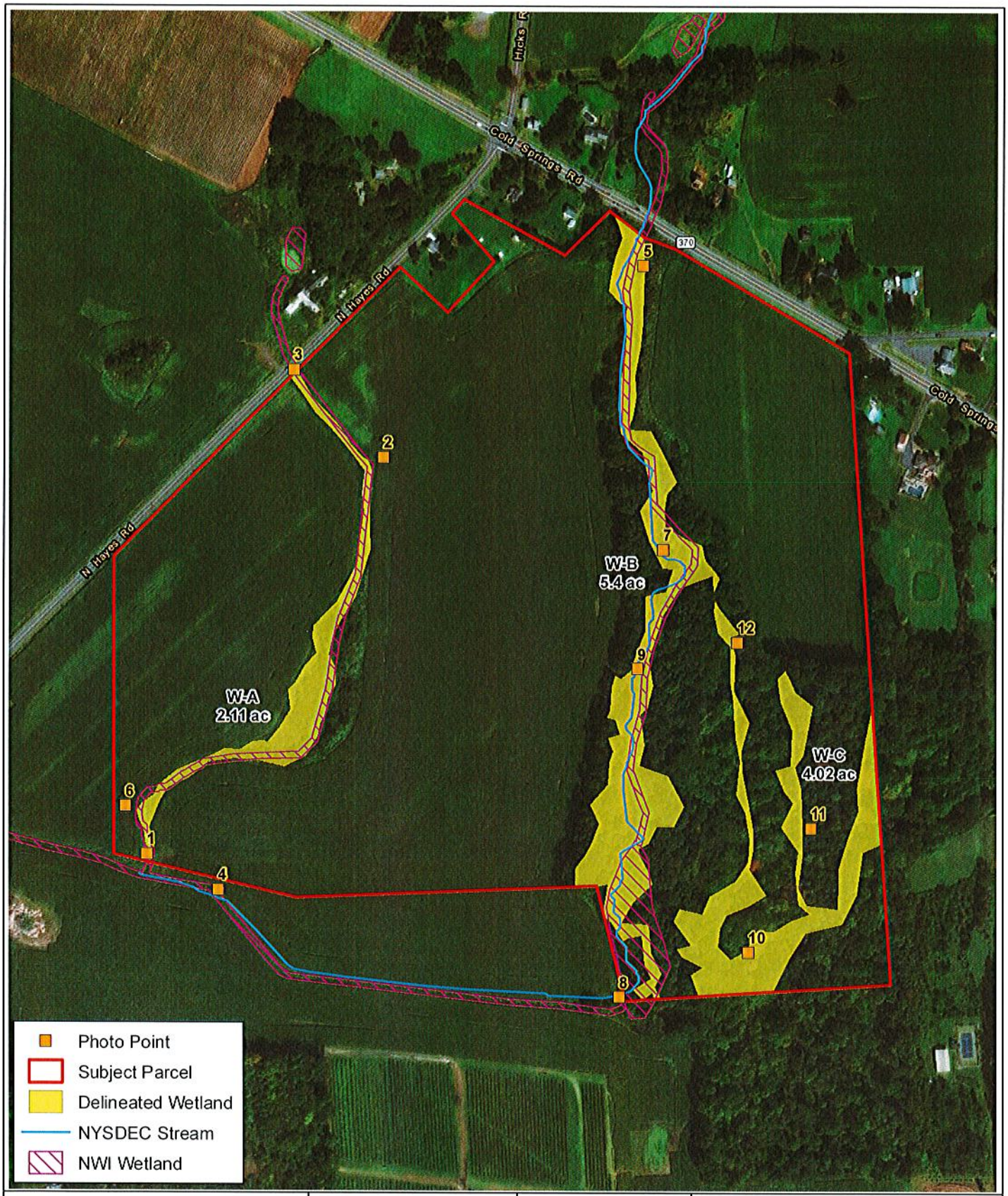
National Centers for Environmental Information, National Oceanic and Atmospheric Administration, Climate Data Online, Data Tools, 1981-2010 Normals, May 11, 2018, Online: https://www.ncdc.noaa.gov/cdo-web/datatools/normals

United States Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

United States Geological Survey Topographic Map, Baldwinsville, New York Quadrangle, 7.5-Minute Series, dated 2019.

United States Department of Agriculture and Natural Resources Conservation Service, Natural Resources Conservation Service (NRCS), Web Soil Survey, August 3, 2020, On-line: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Figure



Proposed Solar Energy Storage Site 3400 Cold Springs Rd, Lysander Onondaga County, NY	0 200 400 Feet 1 inch = 400 feet	GEI Consultants	**WETLAND DELINEATION**
Borrego Solar Systems, Inc.			Project: 2003807 Figure: 1

\\geiconsultants.com\data\Data_Storage\Working\BORREGO SOLAR\2003807 3400 Cold Springs Rd Lysander\GIS\201001_Wetland_Delineation.mxd
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

October 2020

Appendix A

Photo Documentation

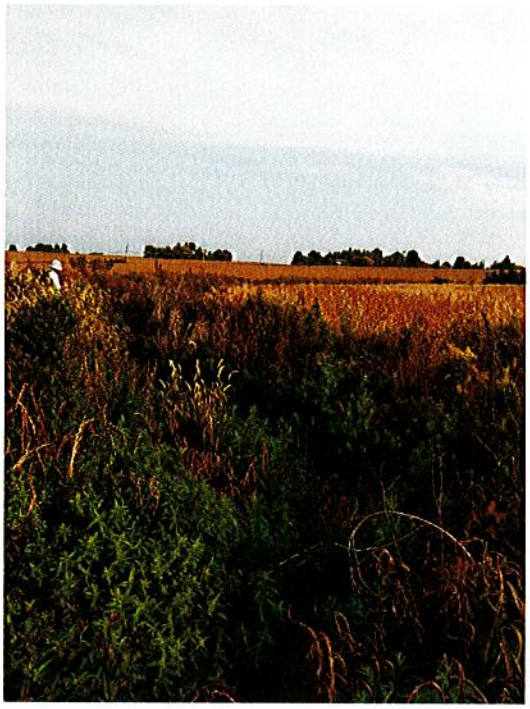


Photo No. 1 – Facing NNW from southwest corner of Site, view of Wetland A/Stream 1.

Photo No. 2 – Facing south from northern end of Wetland A.

Photo No. 3 – Facing E at Stream 1 culvert discharge into Wetland A at N Hayes Rd.

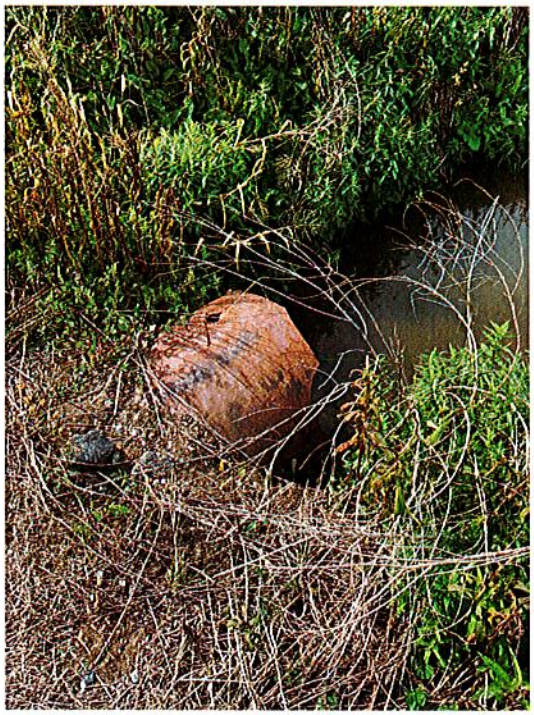


Photo No. 4 – Facing SW at Stream 2 culvert at southwest corner of Site.

Photo No. 5 – Facing SSW from north end of Wetland B, in vicinity of culvert at Cold Springs Rd.

Photo No. 6 – Facing N southwest portion of Site, representative view of soy fields.

Photo No. 7 – Facing S within Wetland B, in vicinity of Wetland Data Plot 2.

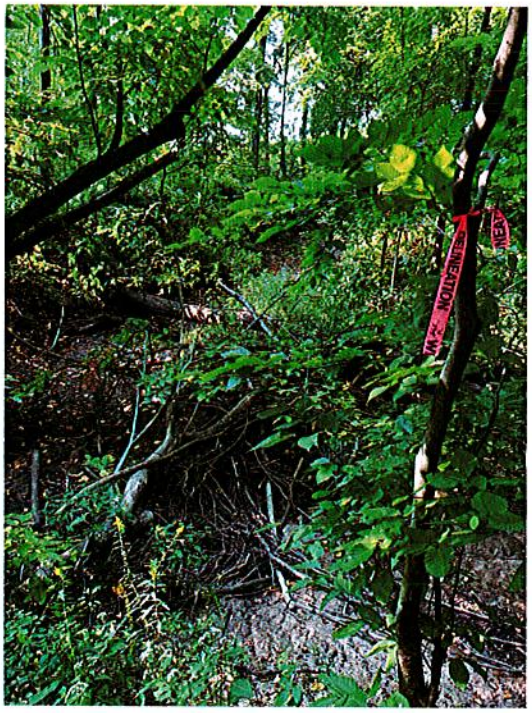


Photo No. 8 – Facing SW at southern property line, view where Stream 2 turns and flows west.

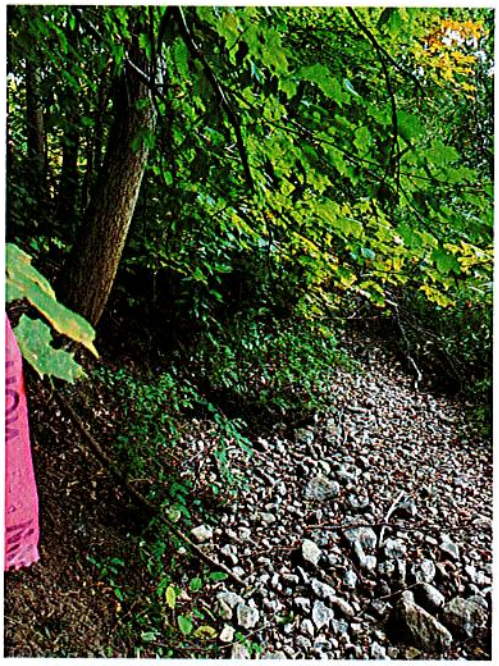


Photo No. 9 – Facing N within Wetland B, showing stream bank and dry streambed.

Photo No. 10 – Facing W at southern property line, Wetland C.

Photo No. 11 – Facing NW within Wetland C.

Photo No. 12 – Discharge drainage pipe within Wetland C.