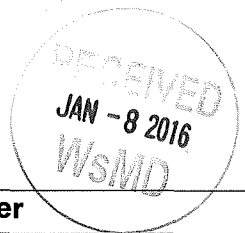


Vermont Wetland Section Wetland Application Database Form (AFFIX TO THE FRONT OF THE APPLICATION)



Applicant Name: Integrated Solar Applications		Representative Name: Jim McClammer	
Town where project is located: Londonderry		County: Windham	
Project Location Description: 4174 Route 11; north side of road across from Rest Haven Road <i>911 Street Address or direction from nearest intersection</i>			
Project Summary: 144 kW Hodge Solar Array			
Permit Type Requested (check all that apply)			
<input type="checkbox"/> Vermont General Permit Coverage		<input type="checkbox"/> Wetland Determination	
		<input checked="" type="checkbox"/> Vermont Wetland Permit	
Impact Calculations: Total up proposed impacts from wetland tables listed below			
Total Wetland Impact		Total Buffer Zone Impact	
416square feet (s.f.)		16459square feet (s.f.)	
Total Wetland Clearing (qualified linear projects only)		Total Buffer Zone Clearing (qualified linear projects only)	
square feet (s.f.)		square feet (s.f.)	
Permit Fees: Make check payable to - State of Vermont			
Wetland Impact Fee: (\$0.75/sf) \$312.00		Administrative Fee: \$240	
Buffer Impact Fee: (\$0.25/sf) \$4,114.75		Total Check Amount: \$4,666.75	
Clearing Fee: (\$0.25/sf) \$			
Existing Land Use Type: (check all that apply)			
<input checked="" type="checkbox"/> Forestry		<input type="checkbox"/> Residential (Subdivision)	
<input type="checkbox"/> Residential (Single Family)		<input type="checkbox"/> Industrial/ commercial	
<input type="checkbox"/> Agriculture		<input type="checkbox"/> Transportation	
<input type="checkbox"/> Parks/Rec/Trail		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Undeveloped			
Proposed Land Use Type: (check all that apply)			
<input checked="" type="checkbox"/> Forestry		<input type="checkbox"/> Residential (Subdivision)	
<input type="checkbox"/> Residential (Single Family)		<input checked="" type="checkbox"/> Industrial/ commercial	
<input type="checkbox"/> Agriculture		<input type="checkbox"/> Transportation	
<input type="checkbox"/> Parks/Rec/Trail		<input type="checkbox"/> Institutional	
<input type="checkbox"/> No Change			
Proposed Impact Type: (check all that apply)			
<input type="checkbox"/> Buildings		<input checked="" type="checkbox"/> Utilities	
<input type="checkbox"/> Parking		<input type="checkbox"/> Septic/Well	
<input type="checkbox"/> Stormwater			
<input checked="" type="checkbox"/> Driveway		<input type="checkbox"/> Road	
<input type="checkbox"/> Parks/Path		<input type="checkbox"/> Agriculture	
<input type="checkbox"/> Pond		<input type="checkbox"/> Lawn	
<input type="checkbox"/> Dry Hydrant		<input type="checkbox"/> Beaver dam alteration	
<input type="checkbox"/> Silviculture		<input type="checkbox"/> Aesthetics	
<input type="checkbox"/> Other		<input type="checkbox"/> No Impact	
Wetland 1: (Label using Wetland ID from application if applicable, use supplemental sheets if more than one wetland is being impacted)			
Wetland Type: PEM/PSS -Emergent arWL		Location: <1 acre	
Wetland Size Class: <1 acre			
Proposed Alterations			
Wetland Alteration:		Wetland Alteration Type (check all that apply)	
Buffer Zone Alteration:			
Wetland Fill: 416s.f.		<input type="checkbox"/> Dredge	
Temporary: s.f.		<input type="checkbox"/> Drain	
Permanent: s.f.		<input type="checkbox"/> Cut Vegetation	
Temporary: 2,011 s.f.		<input type="checkbox"/> Stormwater	
Permanent: 14,448 s.f.		<input checked="" type="checkbox"/> Trench/Fill	
		<input type="checkbox"/> Other	
Mitigation			
Avoidance and Minimization (s.f. of wetland NOT impacted):		Wetland: 29,512s.f. Buffer Zone 91,184s.f.	
Wetland Mitigation: (s.f. Gained)			
Restoration s.f.		Enhancement s.f.	
Creation s.f.		Conservation s.f.	
Reason for Mitigation:			
<input type="checkbox"/> Correction of Violation		<input type="checkbox"/> Mitigation to offset permit impacts	
		<input type="checkbox"/> Voluntary	



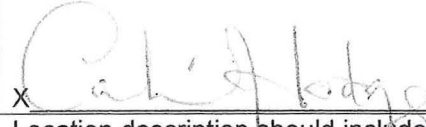
All Applications Should be Mailed To:

**Vermont Wetlands Program
 Watershed Management Division
 One National Life Drive, Main 2
 Montpelier, VT 05620-3522**

Staff To Complete

Wetland Project Number:		
Wetland Project Name:		DEC ID#:
Date Application Received:		
Request for Information Date:		Information Received Date:
Request for Information Date:		Information Received Date:
Date Application Complete:		Distribution Complete Date:
Notice Begin Date:		Notice End Date:
Final Action Date:		Public Meeting Date:
Check#	Check Amount	Date Check Received
Check#	Check Amount	Date Check Received

Vermont Wetland Permit Application/Determination Petition

QUESTION	INSTRUCTIONS AND APPLICANT ANSWER	STAFF NOTE
1. Applicant	If the applicant is someone other than the landowner, the landowner information must also be included below.	
1.1. Applicant Name	Integrated Solar Applications Corporation, Andrew R. Cay	
1.2. Applicant Address	121 Spring Tree Road, Brattleboro, VT 05301	
1.3. Applicant Phone Number	802-257-7493 x101	
1.4. Applicant Email	acay@isasolar.com;	
1.5. Applicant Signature (original signature required)	<p>By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge.</p> <p style="text-align: right;">Date: 12/10/15</p> <p>X </p>	
2. Representative	Consultant, engineer, or other representative that is responsible for filling out this application, if other than the applicant or landowner	
2.1. Representative Name	Jim McClammer, Connecticut Valley Environmental Services, Inc.	
2.2. Representative Address	391 River Road, Charlestown, NH 03603	
2.3. Representative Phone Number	603-826-5214	
2.4. Applicant Email	McClammer@aol.com	
2.5. Representative Signature (original signature required)	<p>By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge.</p> <p style="text-align: right;">Date: 12/31/2015</p> <p>X </p>	
3. Landowner	Landowner must sign the application. Use this space if landowner is different from the applicant	
3.1. Landowner Name	C & C Family Trust ("Hodge Property") c/o Calvin & Carole Hodge	
3.2. Landowner Address	5123 Vermont Route 11, Londonderry, VT 05148	
3.3. Landowner Phone Number	678-675-8007	
3.4. Landowner Email	balsamlog@gmail.com	
3.5. Landowner Easement	<p>Attach copies of any easements, agreements or other documents conveying permission, and agreement with the landowner stating who will be responsible for meeting the terms and conditions of the permit. List the attachment for this information in this section.</p> <p><i>See attached option to lease</i></p>	
3.6. Landowner Signature (original signature required)	<p>By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge.</p> <p style="text-align: right;">Date: 12/10/15</p> <p>X </p>	
4. Location of Wetland and Project	<p>Location description should include the road the wetland is located on, the compass direction of the wetland in relation to the road, 911 street address if available, and any other distinguishing geographic features.</p> <p>North side of Route 11, opposite Rest Haven Road, Londonderry, VT</p>	

<p>5. Site Visit Date and Attendees</p>	<p>Date of visit with District Wetlands Ecologist</p> <p>September 23, 2015</p>	<p>List people present for site visits including Ecologist, landowner, and representatives.</p> <p>Rebecca Chalmers, Jim McClammer, Andy Cay</p>	
<p>6. Wetland Classification</p>	<p>The wetland is a Class II wetland because (Choose one):</p> <p>The wetland meets the presumption of significance</p>		
<p>7. Description of Entire Wetland or Wetland Complex</p>	<p>Answer the following questions regarding the entire wetland or wetland complex. A wetland complex is generally defined as two or more wetland types that are contiguous and interrelated. Specific questions about the wetland in the project area will follow.</p>		
<p>7.1. Size of Wetland Complex in Acres</p>	<p>Can be obtained from the Environmental Interest Locator Map for mapped wetlands</p> <p>0.69 acres</p>		
<p>7.2. Natural Community Types Present</p>	<p>List all wetland types in the wetland or wetland complex and their abundance or relative abundance. For example: 50 acres of softwood forested swamp; or 30% scrub swamp, 70% emergent wetland</p> <p>75% emergent wetland; 25% scrub shrub wetland</p>		
<p>7.3. Landscape Position</p>	<p>Where is the wetland located on the landscape? Examples: bottom of a basin, edge of a stream, shore of a lake, etc.</p> <p>drainageway at toe of slope</p>		
<p>7.4. Wetland Hydrology</p>	<p>Describe the main source of wetland hydrology for the wetland complex. List any river, streams, lakes and ponds.</p> <p>groundwater discharge, surface runoff, and ephemeral stream</p> <p>Include answers to the following where appropriate:</p>		
<p>7.4.1. Direction of flow</p>	<p>For example: stream flows from north to south through the wetland complex. east to west in upper reach then north to south in lower reach; see site plan</p>		
<p>7.4.2. Influence of hydrology on wetland complex</p>	<p>For example: The river provides flood water to the wetland in the spring.</p> <p>The wetland is primarily maintained by groundwater discharge</p>		
<p>7.4.3. Relation to the project area</p>	<p>Distance between the project area and any nearby surface waters.</p> <p>approximately 250 feet to unnamed tributary to West River on south side of Route 11</p>		
<p>7.4.4. Hydroperiod</p>	<p>Discuss frequency and duration of flooding, ponding, and/or soil saturation.</p> <p>saturated to the surface during most of the year; occassionally inundated</p>		
<p>7.5. Surrounding Landuse of the Wetland Complex</p>	<p>For example: rural residential and forested; agricultural and undeveloped, 80% forested, 5% rural residential, 3% Route 11, and, 7% agricultural and undeveloped; see Location Map and Soil Survey Map</p>		
<p>7.6. Relation to Other Nearby Wetlands</p>	<p>Provide any information on wetlands or wetland complexes that are close enough to contribute to the overall function of the wetland in question.</p> <p>None</p>		
<p>7.7. Pre-project Cumulative Impacts to the Wetland</p>	<p>Identify any cumulative ongoing impacts outside of the project that may influence the wetland. Examples include but are not limited to wetland encroachments off the subject property, land management in or surrounding the wetland, or development that influences hydrology or water quality.</p> <p>Areas adjacent to the wetland have been used for outside storage of various items; see photographs 3 and 4. Forested areas are managed for timber production.</p>		
<p>8. Description of Subject Wetland</p>	<p>Subject Wetland is defined as the area of wetland in the project area, but not limited to the portion of the wetland to be directly impacted by the project. For the purposes of this application, the subject wetland should encompass any portion of the larger wetland or wetland complex that could be directly or indirectly impacted by the project, as defined by hydrology, vegetation and/or physical characteristics.</p>		
<p>8.1. Context of Subject</p>	<p>Describe where the subject wetland is in the context of the larger wetland or wetland complex described above.</p>		

Wetland	The subject wetland begins at a spring within the project area and terminates in a catch basin adjacent to Route 11, also within the project area.
8.2. Wetland Landuse	For example: mowed lawn; old field; naturally vegetated. Describe any previous and ongoing disturbance in the subject wetland. Naturally vegetated, and, water line in upper reach suggests the spring has historically been used as a source of drinking water.
8.3. Wetland Vegetation	List dominant wetland community type and associated dominant plant species. The palustrine emergent/scrub shrub wetland is dominated by interrupted fern, New York fern, impatiens, sedges, and saplings of red maple, balsam fir and elm. See ACOE Wetland Determination Data Form for sampling point OB 1-2.
8.4. Wetland Soils	Use USDA NRCS information where possible and use the ACOE Delineation Manual soil description The soils are mapped by the NRCS as moderately well-drained Mundal fine sandy loam; but, they are similar to poorly drained Wilmington fine sandy loam. They have a depleted matrix.
8.5. Wetland Hydrology	Use descriptions from the ACOE Delineation Manual. The wetland borders an ephemeral stream, has a high water table, and is saturated to near the surface.
8.6. Buffer Zone	Describe the buffer zone of the subject wetland including:
8.6.1. General landuse	For example: mowed road shoulder; forested; old field; paved road and residential lawns etc. Describe any previous and ongoing disturbance in the buffer zone. The buffer zone is forest land that is used to store material (see Photographs 3 and 4) and is managed for timber production. It is currently in need of selective cutting to remove marketable timber, particularly white pine.
8.6.2. Buffer vegetation	List community type and dominant plant species Managed hardwood forest. Dominant species include white pine, sugar maple, balsam fir, beech, black cherry and hemlock. See ACOE Wetland Determination Data Form for sampling point OB 1-1.
8.6.3. Buffer soils	Use USDA NRCS information where possible, and the ACOE Delineation Manual soil description The soils are mapped by the NRCS as moderately well-drained Mundal fine sandy loam

9. Wetland Determination	If the application involves a wetland determination please answer the following. If not, skip to Section 10.
9.1. Reason for Petition	Please choose one from the dropdown menu: Add a Section 4.6 presumed wetland to the VSWI map
9.2. Previous Decisions	Please list all determinations and decisions, if any, issued by the Secretary, Panel or former Water Resources Board, pertaining to the wetland or buffer at issue:
9.3. Narrative	Please provide any narrative to support the petition for a wetland determination here. This section is not required for petitions to add a Section 4.6 presumed wetland to the VSWI map, but is required for all other petitions.

If the application is only for a Wetland Determination only, skip to Section 13

10. Project Description	
10.1. Overall Project	Description of the project. For example: six-lot residential subdivision; expansion of an existing commercial building, access drive to a single family residence.

	<p>The solar array is proposed to be permitted and constructed in two phases.</p> <p>Phase I, proposed here, consists of a 144 kW solar array. An application for a Certificate of Public Good (CPG) for this phase was submitted on July 25, 2015 by Integrated Solar Applications (ISA). The Agency of Natural Resources (ANR) expressed concern over potential impact to Class II wetland and Class II wetland buffer zone. Impacts are necessary to construct Phase I (see Site Plan, Sheet 1/2, attached).</p> <p>Phase II. It is anticipated that ISA will submit a CPG for the expansion of the solar array to 500kW in the first quarter of 2016. Potential impact to wetland buffer zones for tree clearing is shown on the Phase II Conceptual Plan (Sheet 2/2, attached).</p> <p>During Phase I, no tree clearing is proposed in the buffer zone of the purported "vernal pool" wetland. If this wetland is confirmed as a vernal pool in the Spring 2016, then tree clearing in its buffer zone may be proposed during Phase II. If clearing is necessary it will be designed to minimize the impact on aquatic biota and maximize the efficiency of the solar array.</p>	
10.2. Project Purpose	For example: To construct a residential subdivision, upgrade existing road to improve access, extend a trail system generate electricity	
10.3. Acres Owned by Applicant	Acreage of subject property. 60 acres owned by land owner	
10.4. Acres Involved in the Project	Acreage of area involved in the project. The Phase I solar project includes 3.6 acres. Phase II includes an additional area of 4.4 acres, for a combined total of 8 acres.	
11. Project Details	Provide details regarding specific impacts to the wetland and buffer zone	
11.1. Specific Impacts to Wetland and Buffer Zone	List portions of the project that will specifically impact the wetland or buffer zone. Construction of a vehicle access road to the solar array will impact wetland and buffer zone. Tree clearing to reduce shading of the solar modules will impact buffer zone.	
11.2. Dimension Details	Square footage of buildings, dimension of roads including fill footprint. The access drive will have a 12-foot wide travel surface. This drive, including slope extensions, will require 416 square feet of fill in wetland and 2,011 square feet of grading in buffer zone. Tree clearing to prevent shading of the solar modules will impact 14,448 square feet of buffer zone. See Site Plan, Sheet 1/1.	
11.3. Bridges and Culverts	Culvert circumference, length, placement and shapes, or bridge details. Two 30" x 20' HDPE culverts will be embedded 10 inches in the wetland under the access drive.	
11.4. Construction Sequence	Describe any details pertaining to the work planned in the wetland and buffer in terms of sequence or phasing that is relevant The access drive from Route 11 to the location of the solar array will be constructed first and used for logging operations and construction of the solar array. The parking area will be constructed next and used as a staging area.	
11.5. Stormwater Design	List any stormwater permits obtained or applied for. Describe any stormwater and/or erosion controls proposed to prevent discharges to the wetland and buffer zone. Silt fence will be placed in buffer zone adjacent to the access drive during grading of the roadway. Straw bale dikes will be placed in the wetland during culvert installation and placement of fill for the access drive to ensure no sediment is transported to wetland.	

<p>11.6. Permanent Demarcation of Limits of Impact</p>	<p>Describe any plantings, fencing, signage, or other memorialization that provides permanent on-the-ground boundaries for the limits of disturbance for ongoing uses. The access drive and culverts will serve to memorialize the limits of disturbance in wetland and the extent of clearing will mark the limit of tree clearing in buffer zone.</p>							
<p>12. Wetland and Buffer Zone Impacts</p>								
<p>12.1. Wetland Impacts</p>	<p>Summarize the square footage of impact in the appropriate category. If more than one wetland is impacted, provide that information and use the supplemental wetland sheets.</p> <p>Totals</p> <table border="1" data-bbox="586 600 1406 699"> <tr> <td>Wetland Fill</td> <td>416 s.f.</td> </tr> <tr> <td>Temporary Wetland Impact</td> <td>s.f.</td> </tr> <tr> <td>Other Permanent Wetland Impact</td> <td>s.f.</td> </tr> </table> <p>Describe in detail the proposed impact. Clean fill and two culverts will be placed in wetland for construction of a 12-foot wide access drive with slope extensions.</p>	Wetland Fill	416 s.f.	Temporary Wetland Impact	s.f.	Other Permanent Wetland Impact	s.f.	
Wetland Fill	416 s.f.							
Temporary Wetland Impact	s.f.							
Other Permanent Wetland Impact	s.f.							
<p>12.2. Buffer Zone Impacts</p>	<p>Summarize the square footage of impact in the appropriate category. If more than one wetland is impacted, provide that information and use the supplemental wetland sheets.</p> <p>Totals</p> <table border="1" data-bbox="586 1058 1406 1121"> <tr> <td>Temporary Buffer Impact</td> <td>14,448 s.f.</td> </tr> <tr> <td>Permanent Buffer Impact</td> <td>2,011 s.f.</td> </tr> </table> <p>Describe in detail the proposed impact. Grading for the access drive with slope extensions; and, tree clearing.</p>	Temporary Buffer Impact	14,448 s.f.	Permanent Buffer Impact	2,011 s.f.			
Temporary Buffer Impact	14,448 s.f.							
Permanent Buffer Impact	2,011 s.f.							
<p>12.3. Cumulative Impacts</p>	<p>List any potential cumulative or ongoing, direct and indirect impacts on the functions of the wetland that could result from the proposed project. None</p>							
<p>12.4. Avoidance and Minimization</p>	<p>Please refer to Section 9.5b of the rules on Mitigation Sequencing for this section.</p>							
<p>12.4.1. Avoidance</p>	<p>Can the proposed activity be practicably located outside the wetland/buffer zone, or on another site owned or controlled by the applicant or reasonably available to satisfy the basic project purpose? If not, indicate why. This answer should include any examination of alternatives that you have explored including using other properties, requesting easements, and altering the project design. The land owners, Calvin & Carole Hodge, wish to develop a solar project and do not own another suitable parcel. They also desire to put this parcel to a higher use, retain ownership of the land, and receive a modest rental income to pay their property taxes. They may also want to participate as a buyer of the solar power. Integrated Solar Applications Corporation has evaluated other parcels under the control of the owner and found that there is no other practicable parcel or site that will meet the project purposes with less impact on environmental resources.</p>							
<p>12.4.2. Minimization</p>	<p>If the proposed activity cannot practicably be located outside the wetland/buffer zone, have all practicable measures have been taken to avoid adverse impacts on protected functions? Please include any information on</p>							

	<p>on-site alternatives that have been examined; minimizing the size and scope of the project to avoid impacts; or relocating portions of the project to avoid impacts</p> <p>This total parcel consists of 60 acres. The 144 kW solar array in Phase I requires a cleared area of approximately 3.6 acres. The expansion of the array to 500 kW in Phase II will require an additional 4.4 acres for a combined total of 8 acres.</p> <p>The entire 60-acre parcel was evaluated to determine the best location for constructing both phases of the array. The proposed location is the most suitable one on the entire parcel. It is reasonably sloped and in close proximity to Route 11 where three phase power is available. The location does not require extensive grading, road construction or infrastructure improvements. It has the proper solar exposure and minimizes impact to wetland and buffer zone. Other areas of the site have steep slopes and more wetland areas.</p> <p>The proposed 144 kW solar array is modest in size; it consists of 648 solar modules. The modules are specifically situated on the parcel to utilize upland areas, avoid wetland and buffer zone impacts (including the possible vernal pool), and minimize tree clearing. All other areas of the site require greater wetland and buffer zone impacts. Furthermore, the proposed site is adjacent to intensive land uses (e.g., Route 11 and residential buildings) and is dominated by young forest species with less timber value.</p> <p>Consequently, this location preserves the higher value forest resources, and a large block of unfragmented forested habitat that is of value to deep woods species and neotropical migrants. There is no other practicable location for the array that will accommodate the project with less impact on wetland, buffer zone and forest habitat.</p>	
<p>12.4.3. Mitigation</p>	<p>If avoidance of adverse effects on protected functions cannot be practically achieved, has the proposed activity has been planned to minimize adverse impacts on the protected functions and a plan has been developed for the prompt restoration of any adverse impacts on protected functions? Include any information on best management practices to be used for the project both for the initial construction and ongoing use. Also include any proposed restoration of temporary impacts, previously disturbed wetland or buffer zones or proposed conservation that are being used to offset the proposed impacts.</p> <p>The access from Route 11 will be constructed first to minimize the need for vehicles to operate in wetland and buffer zone during construction. Next, the parking area will be constructed (in the upland area) so it can be used for staging and stockpiling during erection of the solar array.</p> <p>Routing of electrical lines will be done in a manner that avoids any impact to wetland or buffer zone.</p> <p>No grading of wetland or buffer zone soils will occur. Silt fence and straw bale dikes will be installed during construction and retained until disturbed areas are stabilized with vegetation to prevent discharges to wetland and buffer zone.</p> <p>Mechanized tree clearing will remove woody vegetation in buffer zone areas that need to be cleared. The stumps will remain in place and forest soils will not be disturbed.</p> <p>After about ten years it is anticipated that buffer zone cleared areas will exhibit vigorous growth of woody shrubs and saplings. At that time the removal of saplings will be necessary to prevent shading of the solar modules. This removal of tree species will be done by hand and shrub species will be allowed to thrive.</p>	

<p>12.4.4. Compensation</p>	<p>Please refer to Section 9.5c of the rules for compensation, which is appropriate when the project will result in an undue adverse impact. If compensation is proposed please include a summary here. No undue adverse impact is proposed.</p>	
<p>13. Supporting materials</p>	<p>Where appropriate list the accompanying material by title, author, date and last revision date. Submit these documents and plans with the application.</p>	
<p>13.1. Location map</p>	<p>Provide a project location map that is 8 1/2" x 11" and reproducible in black and white. An Environmental Interest Locator Map is appropriate using the USGS topography map base layer, roads, and VSWI wetlands at minimum. Attached is a Location Map from the ANR's Natural Resource Atlas.</p>	
<p>13.2. Site Plans</p>	<p>List by title, author, date and last revision date. Plans should include wetland delineation and buffer zones, limits of disturbance, erosion controls, building envelopes and permanent memorialization. Attached are a Site Plan for Phase 1 and a Conceptual Plan for Phase II prepared by Jim McClammer, Connecticut Valley Environmental Services, Inc, dated December 31, 2015.</p>	
<p>13.3. ACOE Delineation Forms</p>	<p>List by author, location, and date. Required only for Individual Permits. Attached are ACOE Delineation Forms prepared by Jim McClammer, Connecticut Valley Environmental Services, Inc, based on data collected on November 18, 2015.</p>	
<p>13.4. Other Supporting Documents</p>	<p>Provide any other documentation that supports the application. List photographs; easements; agreements; may include a GIS-compatible wetland submittal for determinations; etc. Attached are photographs of the impact areas, the Option to Lease Agreement between the Hodges and Integrated Solar Applications Corporation (ISA) dated July 7, 2015 as amended December 1, 2015, and a letter from ISA indicating they will be responsible for meeting the terms and conditions of the wetland permit.</p>	
<p>13.5. List of Abutters (Neighbors with land adjoining wetland or buffer zone)</p>	<p>Attach list of names and mailing addresses or submit as word mailing document.</p> <p>Neil and Nancy Perkins 256 Menauhant East Falmouth, MA 02536</p> <p>Timothy Smith 7 Deer Fill Court Woodbury, CT 06798</p> <p>Reginald Cyr PO Box 501 Londonderry, VT 05148</p> <p>Thomas Edward Walsh III 317 Silver St South Boston, MA 02127</p> <p>Brian & Susan Pringle 516 10th Ave Belmar, NJ 07719</p> <p>Erwin & Allan Hodge C & C Family Trust 4174 Rte 11 Londonderry, VT 05148</p> <p>Celia Irvine 214 E 38th St Savannah, GA 31401-9010</p>	

Mark Lacina Jr
401 Delaware Ave Apr D
Delanco, NJ 08075-4500

Paul & Doris Grycel
Grycel Family Trust
6916 Rex Lane
Sarasota, FL 34243

Paul Leili c/o Matthias Leili
2255 41st St
Astoria, NY 11105

Miriam & Robert Ferrell Trust
6611 Wells Parkway
University Park, MD 20782

Gary & Julie Adams
PO Box 405
Londonderry, VT 05148

Cynthia Torsiello Trustee CMT Tevoc TR
5 Crick Holly Lane
East Islip, NY 11730

Gerald & Nancy Martin
PO Box 443
Londonderry, VT 05148

KO Electric & Security Inc
Kramer Services, Inc.
PO Box 542
Londonderry, VT 05148

Larry & Lynn Ryan
412 Harrisson Drive
Hockessin, DE 19707

Cheryl & Phillip Barker
3969 Rte 11
Londonderry, VT 05148

Henry Abbott
PO Box 177
Londonderry, VT 05148

Chris Esposito
Danielle & Natalie Esposito
201 Commadore Dr
Jupiter, FL 33477

Antonnio & Marcy Esposito
9 Lakeview Court
Pomonomy, NY 10970

Faheem & Shabana Khan
PO Box 137
Londonderry, VT 05148

Nancy & Timothy Mullen
385 Ship's Drive

Southhold, NY 11971

Robert & Mary Ellen Von Ancken
 7 East 14st Apt 19S
 NY, NY 10003-3127

13.5.1. Newspaper Notification

If choosing the option to fulfill the notice requirement with a newspaper notice, list the newspaper to be used here. A list of names and addresses for immediately adjacent landowners (500 foot radius) of the project area is required for the List of Abutters. *****NOTE: The applicant will be billed directly by the newspaper you list here. Use of newspaper notification may extend the notice period, depending on when the notice posts in the newspaper.**

14. Check Which Functions are Present in the Subject Wetland and in the Wetland Complex.

Wetland Function Summary: (if more than one wetland use supplemental wetland sheets)

Functions & Values	Subject Wetland	Wetland Complex	Functions & Values	Subject Wetland	Wetland Complex
Flood/Storm Storage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	RTE Species	<input type="checkbox"/>	<input type="checkbox"/>
Surface & Groundwater Protection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Education & Research	<input type="checkbox"/>	<input type="checkbox"/>
Fish Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Recreation/Economic	<input type="checkbox"/>	<input type="checkbox"/>
Wildlife Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Open Space/Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>
Exemplary Natural Community	<input type="checkbox"/>	<input type="checkbox"/>	Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>

15. Coverage under Vermont General Wetland Permit

If applying for an Individual Vermont Wetland Permit or Determination, please proceed to number 16 and answer the remaining application questions.

If applying for Coverage under the Vermont General Wetland Permit, please complete question 15.1 prior to submitting application.

15.1. VWP Vermont General Permit eligibility checklist

If applying for coverage under the Vermont General Wetland Permit, please verify the following to complete the application:

- The activity qualifies as an eligible activity for coverage under the Vermont General Wetland Permit
- The proposed project will meet the conditions applicable to the proposed project in the Vermont Wetland General Permit
- The activity does not qualify as an Allowed Use under Section 6 of the Vermont Wetland Rules.
- The activity will not result in an undue adverse impact on protected wetland functions and values, nor does it need additional conditions to protect functions and values.
- All impacts have been avoided and minimized to the greatest extent possible.
- The wetland complex is not significant for Function 5.5 Exemplary Wetland Natural Community or 5.6 Rare, Threatened and

Endangered Species Habitat.

- The activity is not located in or adjacent to a vernal pool, fen, or bog.
- The wetland is not at or above 2,500' in elevation (headwaters wetland).
- The project is not located in a Class I wetland or associated buffer zone.
- The activity is not an as-built project that constitutes a violation of the Vermont Wetland Rules.

Stop here if applying for Coverage under the Vermont General Wetland Permit

Complete the following Functions and Values checklist if applying for an Individual Wetland Permit and/or a Wetland Determination

Functions and Values

For each Function and Value, first evaluate the entire wetland or **wetland complex** and check all that apply. Secondly, evaluate how the wetland in the project area contributes to that function. Thirdly explain how the project will not result in adverse impacts to this function. Include any information on specific avoidance and minimization measures.

If more than one wetland complex is involved, use the Supplemental Wetland Forms.

16. Storage for Flood Water and Storm Runoff

- Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.
 - Constricted outlet or no outlet and an unconstricted inlet.
 - Physical space for floodwater expansion and dense, persistent, emergent vegetation or dense woody vegetation that slows down flood waters or stormwater runoff during peak flows and facilitates water removal by evaporation and transpiration.
 - If a stream is present, its course is sinuous and there is sufficient woody vegetation to intercept surface flows in the portion of the wetland that floods.
 - Physical evidence of seasonal flooding or ponding such as water stained leaves, water marks on trees, drift rows, debris deposits, or standing water.
 - Hydrologic or hydraulic study indicates wetland attenuates flooding.
- If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.
- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *lower* level.
 - Significant flood storage capacity upstream of the wetland, and the wetland in question provides this function at a negligible level in comparison to upstream storage (unless the upstream storage is temporary such as a beaver

	<p>impoundment).</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wetland is contiguous to a major lake or pond that provides storage benefits independently of the wetland. <input type="checkbox"/> Wetland's storage capacity is created primarily by recent beaver dams or other temporary structures. <input type="checkbox"/> Wetland is very small in size, not contiguous to a stream, and not part of a collection of small wetlands in the landscape that provide this function cumulatively. <input checked="" type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>higher</i> level. <ul style="list-style-type: none"> <input type="checkbox"/> History of downstream flood damage to public or private property. <input type="checkbox"/> Any of the following conditions present downstream of the wetland, but upstream of a major lake or pond, could be impacted by a loss or reduction of the water storage function. <ul style="list-style-type: none"> <input type="checkbox"/> 1. Developed public or private property. <input type="checkbox"/> 2. Stream banks susceptible to scouring and erosion. <input type="checkbox"/> 3. Important habitat for aquatic life. <input type="checkbox"/> The wetland is large in size and naturally vegetated. <input checked="" type="checkbox"/> Any of the following conditions present upstream of the wetland may indicate a large volume of runoff may reach the wetland. <ul style="list-style-type: none"> <input type="checkbox"/> 1. A large amount of impervious surface in urbanized areas. <input type="checkbox"/> 2. Relatively impervious soils. <input checked="" type="checkbox"/> 3. Steep slopes in the adjacent areas. 	
<p>16.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The subject wetland contributes to this function as it allows temporary storage of flood water which attenuates downstream peak flows; however, as the watershed of the wetland is relatively small (about 55 acres) the overall value of this function is low.</p>	
<p>16.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>The project as proposed will not result in any undue adverse impact on this function.</p>	
<p>17. Surface and Ground Water Protection</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Constricted or no outlets. <input checked="" type="checkbox"/> Low water velocity through dense, persistent vegetation. <input checked="" type="checkbox"/> Hydroperiod permanently flooded or saturated. <input checked="" type="checkbox"/> Wetlands in depositional environments with persistent 	

vegetation wider than 20 feet.

- Wetlands with persistent vegetation comprising a defined delta, island, bar or peninsula.
- Presence of seeps or springs.
- Wetland contains a high amount of microtopography that helps slow and filter surface water.
- Position in the landscape indicates the wetland is a headwaters area.
- Wetland is adjacent to surface waters.
- Wetland recharges a drinking water source.
- Water sampling indicates removal of pollutants or nutrients.
- Water sampling indicates retention of sediments or organic matter.
- Fine mineral soils and alkalinity not low.
- The wetland provides an obvious filter between surface water or ground water and land uses that may contribute point or nonpoint sources of sediments, toxic substances or nutrients to the wetland, such as: steep erodible slopes; row crops; dumps; areas of pesticide, herbicide or fertilizer application; feed lots; parking lots or heavily traveled road; and septic systems.

If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.

- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *lower* level.
 - Presence of dead forest or shrub areas in sufficient amounts to result in diminished nutrient uptake.
 - Presence of ditches or channels that confine water and restrict contact of water with vegetation.
 - Wetland is very small in size, not contiguous to a stream, and not part of a collection of small wetlands in the landscape that provide this function cumulatively.
 - Current use in the wetland results in disturbance that compromises this function.
- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *higher* level.
 - The wetland is adjacent to a well head or source protection area, and provides ground water recharge.
 - The wetland provides flows to Class A surface waters.
 - The wetland contributes to the protection or improvement of water quality of any impaired waters.

	<input type="checkbox"/> The wetland is large in size and naturally vegetated.	
<p>17.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The subject wetland provides an opportunity to filter and trap sediment (generated during storm events) and toxicants from materials stored in the adjacent buffer zone. The ability of the wetland to perform this function will not be diminished by the proposed work. Furthermore, the material in the buffer that may be a source of toxins is being removed as part of this project.</p>	
<p>17.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>The project will not result in any undue adverse impact on this function.</p>	
<p>18. Fish Habitat</p>	<p><input checked="" type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Contains woody vegetation that overhangs the banks of a stream or river and provides any of the following: shading that controls summer water temperature; cover including refuges created by overhanging branches or undercut banks; source of terrestrial insects as fish food; or streambank stability. <input type="checkbox"/> Provides spawning, nursery, feeding or cover habitat for fish (documented or professionally judged). Common habitat includes deep marsh and shallow marsh associates with lakes and streams, and seasonally flooded wetlands associated with streams and rivers. <input type="checkbox"/> Documented or professionally judged spawning habitat for northern pike. <input type="checkbox"/> Provides cold spring discharge that lowers the temperature of receiving waters and creates summer habitat for salmonoid species. <input checked="" type="checkbox"/> The wetland is located along a tributary that does not support fish, but contributes to a larger body of water that does support fish. The tributary supports downstream fish by providing cooler water, and food sources. 	
<p>18.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The ephemeral stream conveys cool spring water and exports food to waters downstream that support fish. However, this function is compromised by the fact that the stream enters a catch basin adjacent to Route 11 and is then routed under the road through a 24-inch culvert.</p>	
<p>18.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>The project will not result in any undue adverse impact on this function.</p>	
<p>19. Wildlife Habitat</p>	<p><input checked="" type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provides resting, feeding staging or roosting habitat to support waterfowl migration, and feeding habitat for wading birds. Good habitats for these species include open water 	

wetlands.

- Habitat to support one or more breeding pairs or broods of waterfowl including all species of ducks, geese, and swans. Good habitats for these species include open water habitats adjacent shallow marsh, deep marsh, shrub wetland, forested wetland, or naturally vegetated buffer zone.
- Provides a nest site, a buffer for a nest site or feeding habitat for wading birds including but not limited to: great blue heron, black-crowned night heron, green-backed heron, cattle egret, or snowy egret. Good habitats for these species include open water or deep marsh adjacent to forested wetlands, or standing dead trees.
- Supports or has the habitat to support one or more breeding pairs of any migratory bird that requires wetland habitat for breeding, nesting, rearing of young, feeding, staging roosting, or migration, including: Virginia rail, common snipe, marsh wren, American bittern, northern water thrush, northern harrier, spruce grouse, Cerulean warbler, and common loon.
- Supports winter habitat for white-tailed deer. Good habitats for these species include softwood swamps. Evidence of use includes deer browsing, bark stripping, worn trails, or pellet piles.
- Provides important feeding habitat for black bear, bobcat, or moose based on an assessment of use. Good habitat for these types of species includes wetlands located in a forested mosaic.
- Has the habitat to support muskrat, otter or mink. Good habitats for these species include deep marshes, wetlands adjacent to bodies of water including lakes, ponds, rivers and streams.
- Supports an active beaver dam, one or more lodges, or evidence of use in two or more consecutive years by an adult beaver population.
- Provides the following habitats that support the reproduction of Uncommon Vermont amphibian species including:
 - 1. Wood Frog, Jefferson Salamander, Blue-spotted Salamander, or Spotted Salamander. Breeding habitat for these species includes vernal pools and small ponds.
 - 2. Northern Dusky Salamander and the Spring Salamander. Habitat for these species includes headwater seeps, springs, and streams.
 - 3. The Four-toed salamander; Fowler's Toad; Western or Boreal Chorus frog, or other amphibians found in Vermont of similar significance.
- Supports or has the habitat to support significant populations of Vermont amphibian species including, but

not limited to Pickerel Frog, Northern Leopard Frog, Mink Frog, and others found in Vermont of similar significance. Good habitat for these types of species includes large marsh systems with open water components.

- Supports or has the habitat to support populations of uncommon Vermont reptile species including: Wood Turtle, Northern Map Turtle, Eastern Musk Turtle, Spotted Turtle, Spiny Softshell, Eastern Ribbonsnake, Northern Watersnake, and others found in Vermont of similar significance.
- Supports or has the habitat to support significant populations of Vermont reptile species, including Smooth Greensnake, DeKay's Brownsnake, or other more common wetland-associated species.
- Meets four or more of the following conditions indicative of wildlife habitat diversity:
 - 1. Three or more wetland vegetation classes (greater than 1/2 acre) present including but not limited to: open water contiguous to, but not necessarily part of, the wetland, deep marsh, shallow marsh, shrub swamp, forested swamp, fen, or bog;
 - 2. The dominant vegetation class is one of the following types: deep marsh, shallow marsh, shrub swamp or, forested swamp;
 - 3. Located adjacent to a lake, pond, river or stream;
 - 4. Fifty percent or more of surrounding habitat type is one or more of the following: forest, agricultural land, old field or open land;
 - 5. Emergent or woody vegetation occupies 26 to 75 percent of wetland, the rest is open water;
 - 6. One of the following:
 - i. hydrologically connected to other wetlands of different dominant classes or open water within 1 mile;
 - ii. hydrologically connected to other wetlands of same dominant class within 1/2 mile;
 - iii. within 1/4 mile of other wetlands of different dominant classes or open water, but not hydrologically connected;
- Wetland or wetland complex is owned in whole or in part by state or federal government and managed for wildlife and habitat conservation; and
- Contains evidence that it is used by wetland dependent wildlife species.

If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a

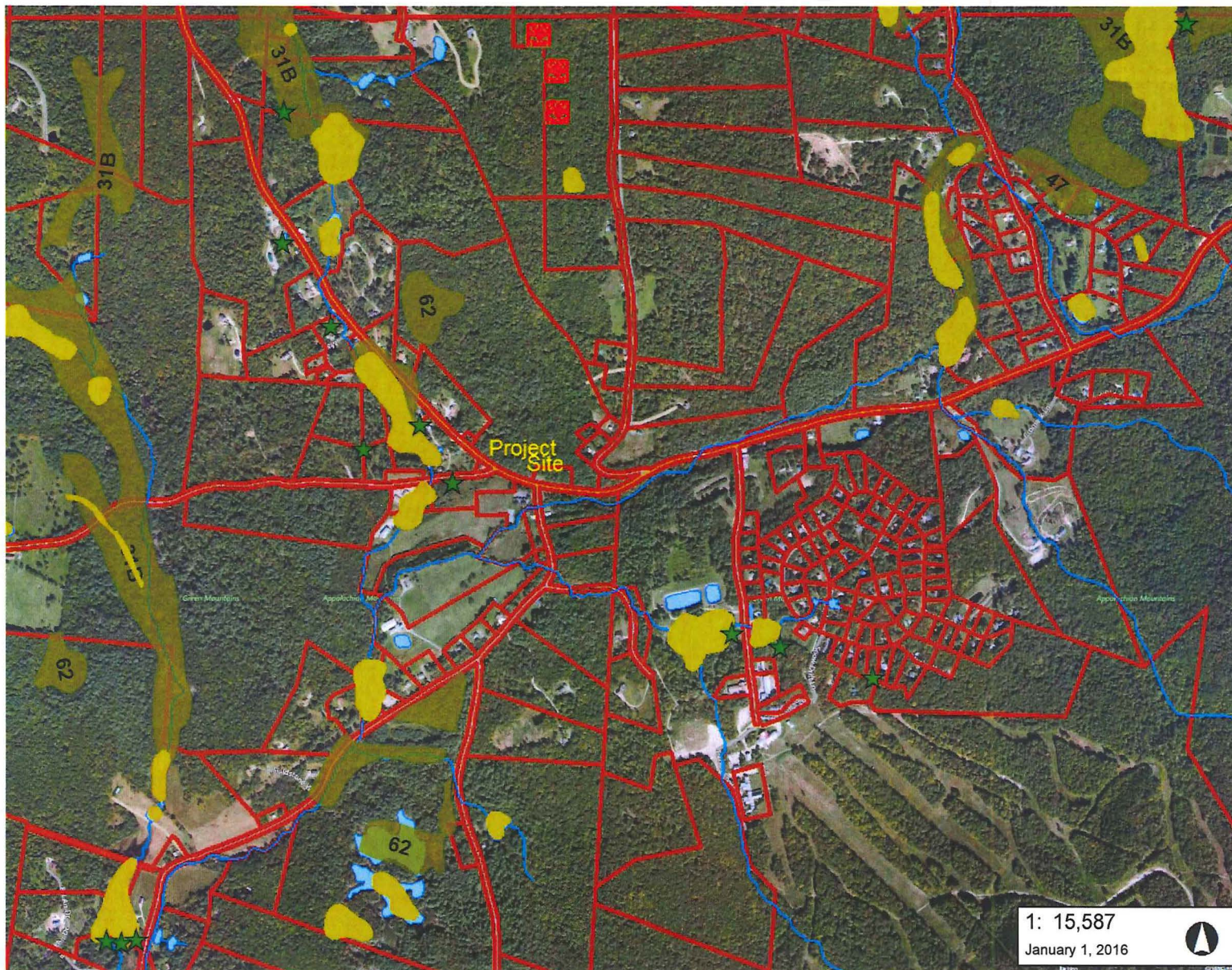
	<p>moderate level.</p> <p><input checked="" type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>lower</i> level.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The wetland is small in size for its type and does not represent fugitive habitat in developed areas (vernal pools and seeps are generally small in size, so this does not apply). <input type="checkbox"/> The surrounding land use is densely developed enough to limit use by wildlife species (with the exception of wetlands with open water habitat). Can be negated by evidence of use. <input type="checkbox"/> The current use in the wetland results in frequent cutting, mowing or other disturbance. <input checked="" type="checkbox"/> The wetland hydrology and character is at a drier end of the scale and does not support wetland dependent species. <p><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>higher</i> level.</p> <ul style="list-style-type: none"> <input type="checkbox"/> The wetland complex is large in size and high in quality. <input type="checkbox"/> The habitat has the potential to support several species based on the assessment above. <input type="checkbox"/> Wetland is associated with an important wildlife corridor. <input type="checkbox"/> The wetland has been identified as a locally important wildlife habitat by an ANR Wildlife Biologist. 	
<p>19.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The subject wetland provides wildlife habitat at a low level as it is relatively small (just over 1/2 acre) and has little habitat interspersion.</p>	
<p>19.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>The project will not result in any undue adverse impact on this function.</p>	
<p>20. Exemplary Wetland Natural Community</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wetlands that are identified as high quality examples of Vermont's natural community types recognized by the Natural Heritage Information Project of the Vermont Fish and Wildlife Department, including rare types such as dwarf shrub bogs, rich fens, alpine peatlands, red maple-black gum swamps and the more common types including deep bulrush marshes, cattail marshes, northern white cedar swamps, spruce-fir-tamarack swamps, and red maple-black ash seepage swamps are automatically significant for this function. <p>The wetland is also likely to be significant if any of the following conditions are met:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Is an example of a wetland natural community type that has been identified and mapped by, or meets the ranking and 	

	<p>mapping standards of, the Natural Heritage Information Project of the Vermont Fish and Wildlife Department.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Contains ecological features that contribute to Vermont's natural heritage, including, but not limited to: <ul style="list-style-type: none"> <input type="checkbox"/> Deep peat accumulation reflecting a long history of wetland formation; <input type="checkbox"/> Forested wetlands displaying very old trees and other old growth characteristics; <input type="checkbox"/> A wetland natural community that is at the edge of the normal range for that type; <input type="checkbox"/> A wetland mosaic containing examples of several to many wetland community types; or <input type="checkbox"/> A large wetland complex containing examples of several wetland community types. <p>List species or communities of concern:</p>	
<p>20.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above The subject wetland does not contribute to the function of an exemplary natural community.</p>	
<p>20.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The project will not result in any undue adverse impact on this function.</p>	
<p>21. Rare, Threatened, and Endangered Species Habitat</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function. <ul style="list-style-type: none"> <input type="checkbox"/> Wetlands that contain one or more species on the federal or state threatened or endangered lists, as well as species that are rare in Vermont, are automatically significant for this function. <p>The wetland is also likely to be significant if any of the following apply:</p> <ul style="list-style-type: none"> <input type="checkbox"/> There is credible documentation that the wetland provides important habitat for any species on the federal or state threatened or endangered species lists; <input type="checkbox"/> There is credible documentation that threatened or endangered species have been present in past 10 years; <input type="checkbox"/> There is credible documentation that the wetland provides important habitat for any species listed as rare in Vermont (S1 or S2 ranks), state historic (SH rank), or rare to uncommon globally (G1, G2, or G3 ranks) by the Natural Heritage Information Project of the Vermont Fish and Wildlife Department; <input type="checkbox"/> There is credible documentation that the wetland provides habitat for multiple uncommon species of plants or animals (S3 rank). 	

	List name of species and ranking:	
21.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above The subject wetland does not function as listed species habitat.	
21.2. Statement of no adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The project will not result in any undue adverse impact on this function.	
22. Education and Research in Natural Sciences	<input type="checkbox"/> Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function. <ul style="list-style-type: none"> <input type="checkbox"/> Owned by or leased to a public entity dedicated to education or research. <input type="checkbox"/> History of use for education or research. <input type="checkbox"/> Has one or more characteristics making it valuable for education or research. 	
22.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above The subject wetland does not perform this function.	
22.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The project will not result in any undue adverse impact on this function.	
23. Recreational Value and Economic Benefits	<input type="checkbox"/> Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function. <ul style="list-style-type: none"> <input type="checkbox"/> Used for, or contributes to, recreational activities. <input type="checkbox"/> Provides economic benefits. <input type="checkbox"/> Provides important habitat for fish or wildlife which can be fished, hunted or trapped under applicable state law. <input type="checkbox"/> Used for harvesting of wild foods. Comments:	
23.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above The subject wetland does not perform this function.	
23.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The project will not result in any undue adverse impact on this function.	
24. Open Space and Aesthetics	<input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function. <ul style="list-style-type: none"> <input type="checkbox"/> Can be readily observed by the public; and <ul style="list-style-type: none"> <input type="checkbox"/> Possesses special or unique aesthetic qualities; or 	

	<p><input type="checkbox"/> Has prominence as a distinct feature in the surrounding landscape;</p> <p><input type="checkbox"/> Has been identified as important open space in a municipal, regional or state plan.</p> <p>Comments:</p>	
<p>24.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above The subject wetland does not perform this function.</p>	
<p>24.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The project will not result in any undue adverse impact on this function.</p>	
<p>25. Erosion Control through Binding and Stabilizing the Soil</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <p><input type="checkbox"/> Erosive forces such as wave or current energy are present and any of the following are present as well:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Dense, persistent vegetation along a shoreline or stream bank that reduces an adjacent erosive force. <input type="checkbox"/> Good interspersion of persistent emergent vegetation and water along course of water flow. <input type="checkbox"/> Studies show that wetlands of similar size, vegetation type, and hydrology are important for erosion control. <p>What type of erosive forces are present:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lake fetch and waves <input type="checkbox"/> High current velocities: <input type="checkbox"/> Water level influenced by upstream impoundment <p>If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.</p> <p><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>lower</i> level.</p> <ul style="list-style-type: none"> <input type="checkbox"/> The stream is artificially channelized and/or lacks vegetation that contributes to controlling the erosive force. <p><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>higher</i> level.</p> <ul style="list-style-type: none"> <input type="checkbox"/> The stream contains high sinuosity. <input type="checkbox"/> Has been identified through fluvial geomorphic assessment to be important in maintaining the natural condition of the stream or river corridor. 	
<p>25.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	

	The subject wetland does not perform this function at a significant level.	
25.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The project will not result in any undue adverse impact on this function.	



LEGEND

- Vernal Pools Confirmed – AE/A
- Vernal Pools Unconfirmed – AI
- Wetland Projects
- Wetlands - VSWI
 - Class 1 Wetland
 - Class 2 Wetland
- Wetlands Advisory Layer
- Soils - Hydric
- Waterbody
- Stream
- Parcels (where available)

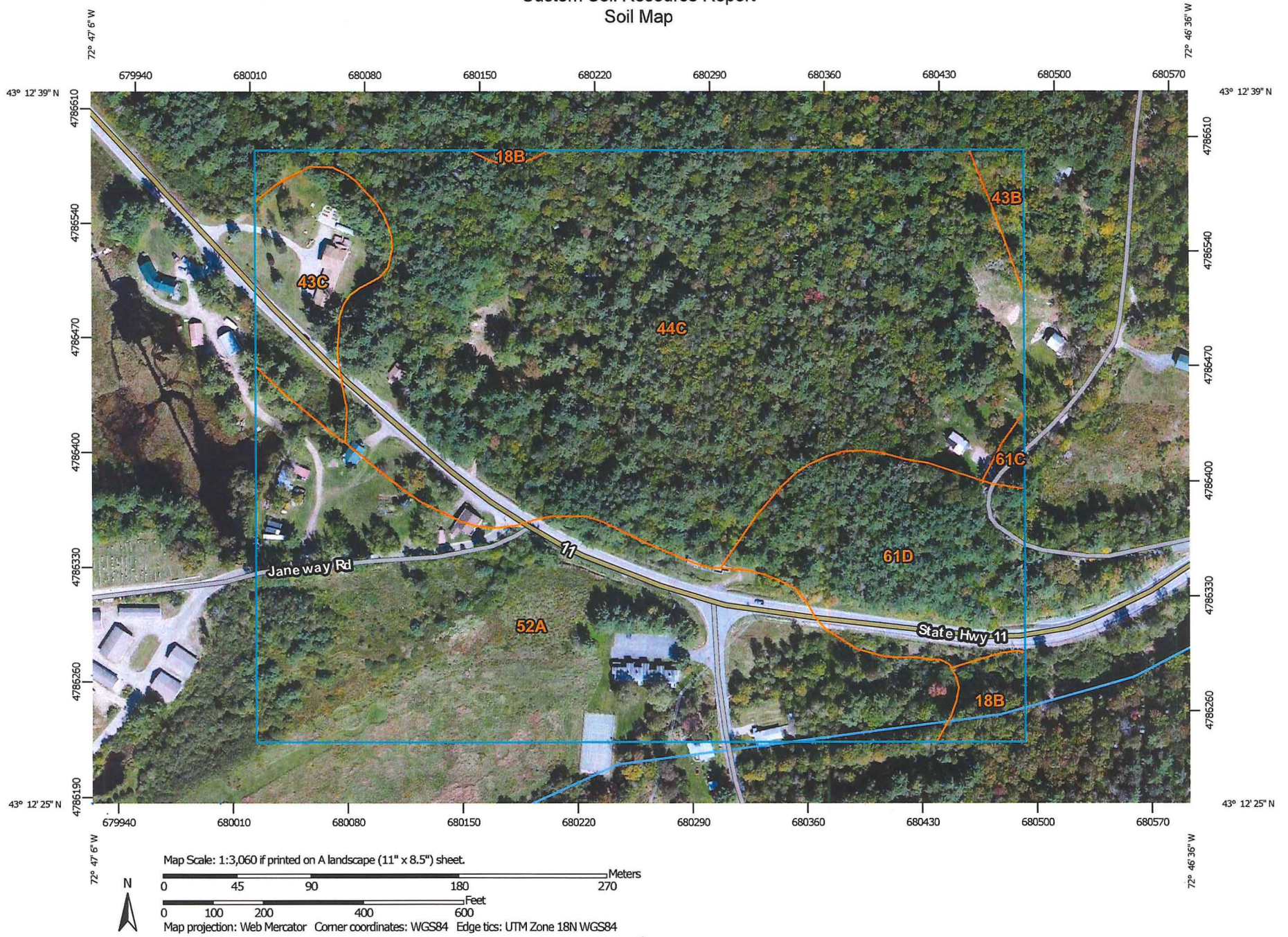
1: 15,587
January 1, 2016

792.0 0 396.00 792.0 Meters
 WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 1299 Ft. 1cm = 156 Meters
 © Vermont Agency of Natural Resources THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

NOTES
Map created using ANR's Natural Resources Atlas

Custom Soil Resource Report
Soil Map





Photograph 1. The emergent/scrub shrub wetland in the foreground needs to be crossed to access the solar array. Photo taken November 18, 2015, looking east.



Photograph 2. Two 30-inch HDPE culverts will be embedded 10 inches into the ephemeral stream (located in front of the soil auger) to maintain existing hydrology and habitat connectivity. Photo taken November 18, 2015, looking south.



Photograph 3. Portions of the buffer zone adjacent to the proposed access drive and is used to store various items. As part of the project this material is being removed and the large pine will be harvested. Photo taken September 23, 2015, looking west.



Photograph 4. A trailer is perched above the swale and ephemeral stream in the buffer zone. Photo taken September 23, 2015, looking north.



Photograph 5. This wetland area lies northeast of the proposed solar array and may be a 'vernal pool'. It, and its 50-foot upland buffer will not be impacted until the applicant is able to confirm next spring whether or not it functions as a vernal pool. Photo taken July 24, 2015, looking east.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hodge 144 kW Solar Array City/County: Londonderry/Windham Sampling Date: November 18, 2015
 Applicant/Owner: ISA Corp., C & C Family Trust ("Hodge Property") State: VT Sampling Point: OB 1-1
 Investigator(s): Jim McClammer Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): concave Slope (%): 8-15
 Subregion (LRR or MLRA): LRR R Lat: 43°12'32.69"N Long: 72°46'52.19"W Datum: DD
 Soil Map Unit Name: Mapped as Mundal fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation n, Soil n, or Hydrology n significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation n, Soil n, or Hydrology n naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks: Transect near wetland flag #14.	

VEGETATION – Use scientific names of plants.

Sampling Point: OB 1-1

<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Abies balsamea</u>	<u>4</u>	<u>n</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. <u>Fagus grandifolia</u>	<u>3</u>	<u>n</u>	<u>FACU</u>	
3. <u>Prunus serotina</u>	<u>3</u>	<u>n</u>	<u>FACU</u>	
4. <u>Pinus strobus</u>	<u>66</u>	<u>y</u>	<u>FACU</u>	
5. <u>Acer saccharum</u>	<u>24</u>	<u>y</u>	<u>FACU</u>	
6. _____				
7. _____				
<u>100</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15-foot radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Fagus grandifolia</u>	<u>10.5</u>	<u>y</u>	<u>FACU</u>	
2. <u>Tsuga canadensis</u>	<u>10.5</u>	<u>Y</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>21</u> = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
<u>Herb Stratum</u> (Plot size: <u>5-foot radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Dryopteris intermedia</u>	<u>38</u>	<u>y</u>	<u>FAC</u>	
2. <u>Parathelypteris noveboracensis</u>	<u>10.5</u>	<u>y</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
<u>48.5</u> = Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
<u>Woody Vine Stratum</u> (Plot size: <u>30-foot radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)
Big tooth aspen, paper birch and pine dominate upland canopy.

SOIL

Sampling Point: OB 1-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10 YR 4/2						Silt loam	organics
5-15+	2.5 YR 3/3		faint	few	D	M	Fine Sandy Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: NA
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hodge 144 kW Solar Array City/County: Londonderry/Windham Sampling Date: November 18, 2015
 Applicant/Owner: ISA Corp., C & C Family Trust ("Hodge Property") State: VT Sampling Point: OB 1-2
 Investigator(s): Jim McClammer Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR or MLRA): LRR R Lat: 43°12'32.69"N Long: 72°46'52.19"W Datum: DD
 Soil Map Unit Name: Mapped as Mundal fine sandy loam NWI classification: Palustrine EM/SS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation n, Soil n, or Hydrology n significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation n, Soil n, or Hydrology n naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) <u>✓</u> High Water Table (A2) ___ Aquatic Fauna (B13) <u>✓</u> Saturation (A3) ___ Marl Deposits (B15) <u>✓</u> Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) <u>✓</u> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) <u>✓</u> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>5</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks: Transect near wetland flag #14.	

VEGETATION – Use scientific names of plants.

Sampling Point: OB 1-2

<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Abies balsamea</u>	45	y	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
2. <u>Fagus grandifolia</u>	40	y	FACU	
3. <u>Prunus serotina</u>	15	n	FACU	
4. _____				
5. _____				
6. _____				
7. _____				
	100	= Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15-foot radius</u>)				
1. <u>Abies balsamea</u>	10.5	y	FAC	
2. <u>Ulmus americana</u>	20.5	y	FACW	
3. _____				
4. _____				
5. _____				
	31.0	= Total Cover		
<u>Herb Stratum</u> (Plot size: <u>5-foot radius</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Parathelypteris noveboracensis</u>	63	y	FAC	
2. <u>Spagnum sp.</u>	20.5	n	OBL	
3. <u>Mitchella repens</u>	10.5	n	FACU	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	94	= Total Cover		
<u>Woody Vine Stratum</u> (Plot size: <u>30-foot radius</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____

Remarks: (Include photo numbers here or on a separate sheet.)

Other dominants in the wetland include interrupted fern, impatiens, sedges and red maple.

SOIL

Sampling Point: OB 1-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4							Silt loam	organics
4-10	10 YR 3/2			com	D	M	Fine Sandy Loam	
10-20+	10 YR 3/2			com	D	M	Fine Sandy Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: NA
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

OPTION TO LEASE AGREEMENT

This Option to Lease Agreement (the "Agreement") is made and effective July 7, 2015

Landlord: C & C Family Trust

4174 Rte 11 - 5123 VT Rte 11
Londonderry, VT 05148

Off
Cal

Tenant: Integrated Solar Applications Corp.

121 Spring Tree Rd
Brattleboro, VT 05301

Parcel Location and Identification:

4174 Rte 11
Londonderry, VT 05148

WHEREAS TENANT desires to obtain an exclusive Option to Lease approximately 8 acres of land ("The Premises") located at the above Parcel location in Londonderry, VT (the "Property") from LANDLORD as further depicted on the parcel map attached hereto as Exhibit A; and

WHEREAS LANDLORD desires to grant an exclusive Option to Lease to TENANT for the purposes of constructing, and operating a solar electrical generation facility,

NOW THEREFORE, LANDLORD grants to TENANT, its successors and assigns the exclusive option to lease the Premises upon the following terms:

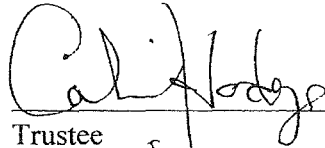
- I. The Option to Lease shall be effective immediately upon execution of this Agreement and shall continue through September 30, 2015 (the "Option Expiration");
- II. LANDLORD pledges that it shall not offer to lease the whole or any portion of the Premises upon any terms for any price to any other party other than TENANT during the term;
- * III. LANDLORD and TENANT shall work together in good faith to complete negotiations for a 25-year Lease Agreement for the Premises with one 5-year Renewal Option. The annual rent shall be fixed at the amount of \$2,500 paid at the beginning of each lease year. TENANT shall also make a one-time payment equal to \$10,000 at the commencement of the lease. The sole purpose of the lease is for TENANT to construct and operate of a solar electrical generation facility on the Premises. The Lease Agreement shall be subject to terms and conditions mutually agreeable to both parties;

* - Tenant and Landlord mutually agree to revised terms to be included in the lease document.

Off

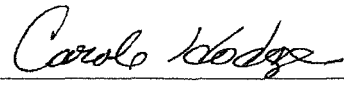
Cal

IN WITNESS WHEREOF, the parties have executed this Option to Lease on this 7th day of July, 2015.




Trustee
Calvin Hodge

Date: 7/7/15



Trustee
Carole Hodge

Date: 7/7/15



Date: 7/7/15


Duly Authorized Agent of:
Integrated Solar Applications Corporation
Andrew R. Cay, President

ADDENDUM A

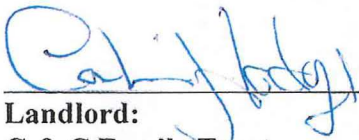
This Addendum shall become part of and be incorporated into the Option to Lease Agreement (the "Agreement") dated July 7, 2015 by and between Integrated Solar Applications Corporation ("Tenant") and C & C Family Trust ("Landlord") as follows:

Option Expiration – The Agreement expiration date is changed from September 30, 2015 to November 30, 2015.


In all other respects, the Agreement shall remain in full force and effect. Agreed to and accepted this 29th day of September 2015.



Tenant:
Integrated Solar Applications Corp.
Andrew R. Cay
President



Landlord:
C & C Family Trust
Calvin Hodge
Trustee



Landlord:
C & C Family Trust
Carole Hodge
Trustee

Exhibit A




ADDENDUM B

This Addendum shall become part of and be incorporated into the Option to Lease Agreement dated July 7, 2015 and Addendum A dated September 29, 2015 (the "Agreement") by and between Integrated Solar Applications Corporation ("Tenant") and C & C Family Trust ("Landlord") as follows:

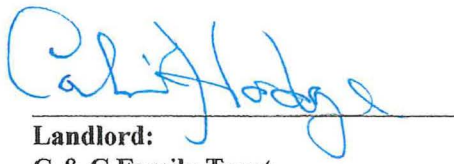
Option Expiration – The Agreement expiration date is changed from November 30, 2015 to March 15, 2016.

In all other respects, the Agreement shall remain in full force and effect. Agreed to and accepted this 1st day of November 2015.


December 



Tenant:
Integrated Solar Applications Corp.
Andrew R. Cay
President



Landlord:
C & C Family Trust
Calvin Hodge
Trustee



Landlord:
C & C Family Trust
Carole Hodge
Trustee



INTEGRATED**SOLAR**

January 5, 2016

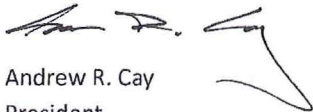
Jim McClammer
Connecticut Valley Environmental Services, Inc.
391 River Rd
Charlestown, NH 03603

Re: VT Wetland Permit Application
4174 Rte 11, Londonderry, VT

Dear Jim:

This letter confirms that Integrated Solar Applications Corporation will lease the project site at 4174 Rte 11 in Londonderry, VT from C & C Family Trust and will be responsible for meeting the conditions of the VT Wetland Permit.

Regards,


Andrew R. Cay
President

121 Spring Tree Rd, Brattleboro, VT 05301

P 802.257.7493 F 802.257.7447

www.isasolar.com

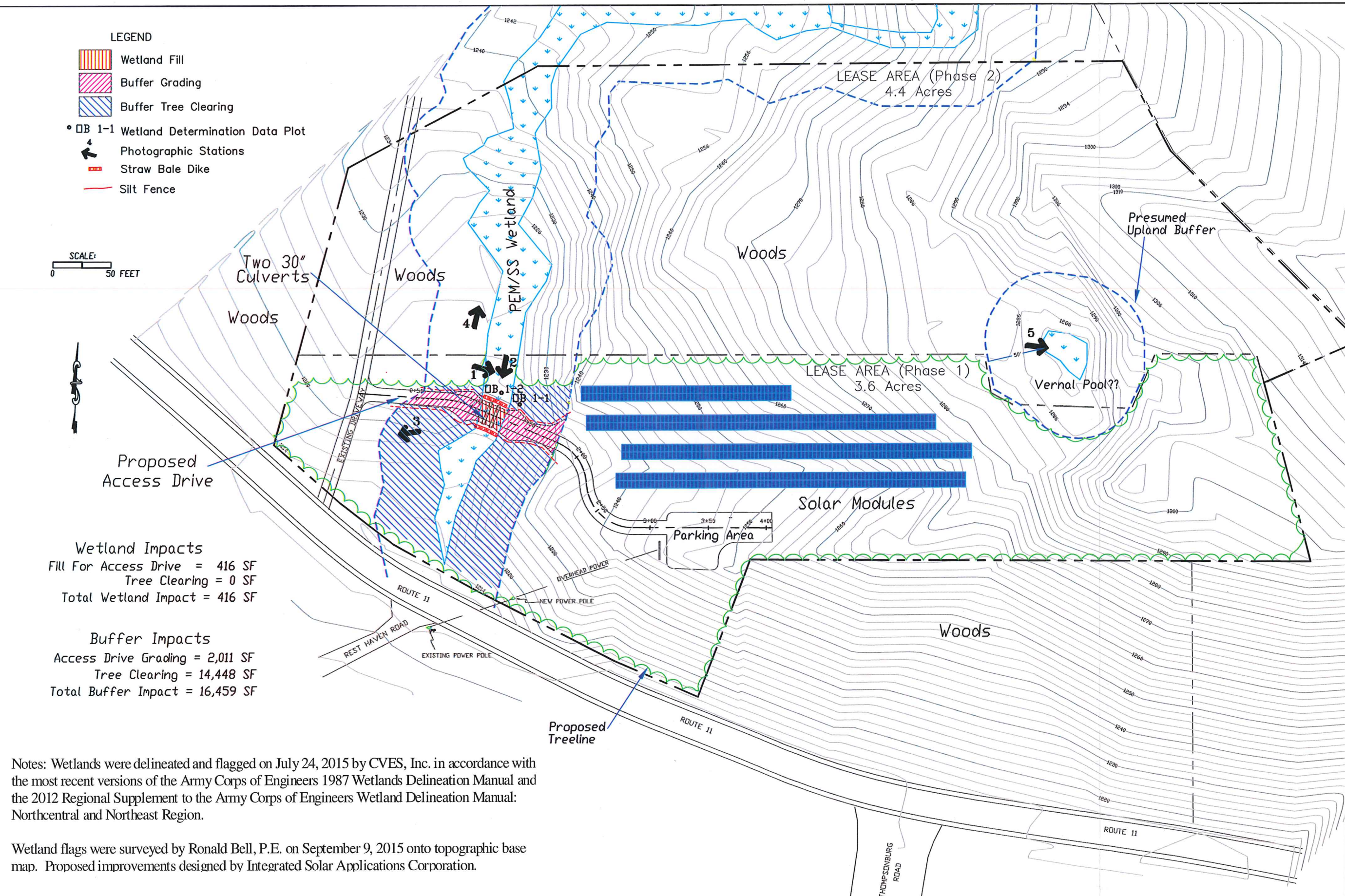
renewable energy solutions

- LEGEND**
-  Wetland Fill
 -  Buffer Grading
 -  Buffer Tree Clearing
 -  DB 1-1 Wetland Determination Data Plot
 -  Photographic Stations
 -  Straw Bale Dike
 -  Silt Fence

SCALE:
0 50 FEET

Wetland Impacts
 Fill For Access Drive = 416 SF
 Tree Clearing = 0 SF
 Total Wetland Impact = 416 SF

Buffer Impacts
 Access Drive Grading = 2,011 SF
 Tree Clearing = 14,448 SF
 Total Buffer Impact = 16,459 SF



Notes: Wetlands were delineated and flagged on July 24, 2015 by CVES, Inc. in accordance with the most recent versions of the Army Corps of Engineers 1987 Wetlands Delineation Manual and the 2012 Regional Supplement to the Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.

Wetland flags were surveyed by Ronald Bell, P.E. on September 9, 2015 onto topographic base map. Proposed improvements designed by Integrated Solar Applications Corporation.

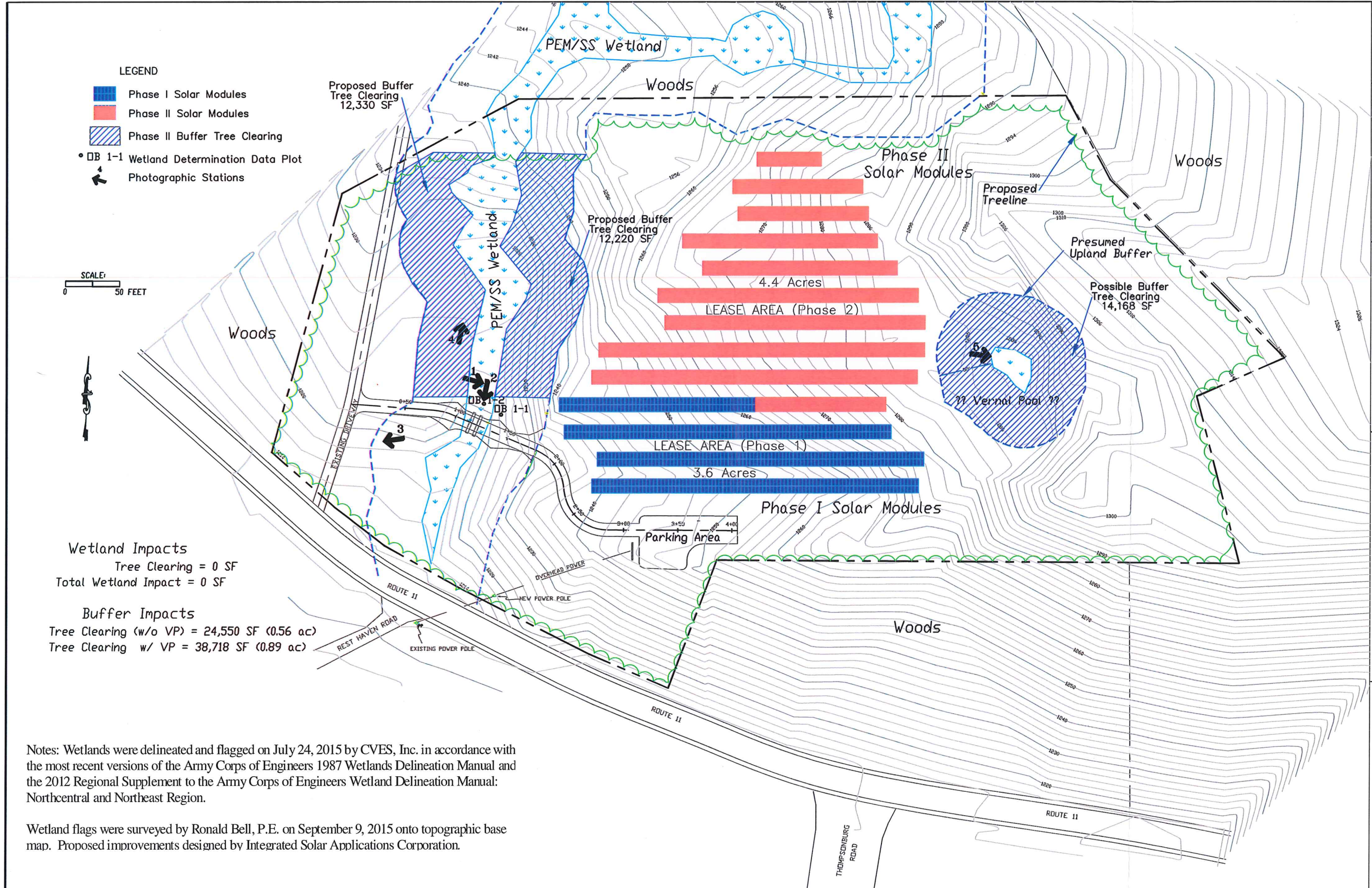
SHEET
1/2

Date:
December 31, 2015

Hodge Solar Array
 Proposed Wetland &
 Buffer Zone Impacts
 Route 11, Londonderry, VT

CONNECTICUT VALLEY
ENVIRONMENTAL SERVICES, INC.
 Wetland and Natural Resource Consultants
 PO Box 1204 • Charlestown, NH 03803
 Phone & Fax: 603-826-5214
 McClammer@aol.com

Integrated Solar
Applications Corporation
 121 Spring Tree Road
 Brattleboro, Vermont 05301



- LEGEND**
- Phase I Solar Modules
 - Phase II Solar Modules
 - Phase II Buffer Tree Clearing
 - DB 1-1 Wetland Determination Data Plot
 - Photographic Stations

SCALE: 0 50 FEET

Wetland Impacts
 Tree Clearing = 0 SF
 Total Wetland Impact = 0 SF

Buffer Impacts
 Tree Clearing (w/o VP) = 24,550 SF (0.56 ac)
 Tree Clearing w/ VP = 38,718 SF (0.89 ac)

Notes: Wetlands were delineated and flagged on July 24, 2015 by CVES, Inc. in accordance with the most recent versions of the Army Corps of Engineers 1987 Wetlands Delineation Manual and the 2012 Regional Supplement to the Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.

Wetland flags were surveyed by Ronald Bell, P.E. on September 9, 2015 onto topographic base map. Proposed improvements designed by Integrated Solar Applications Corporation.

SHEET
2/2

Date:
December 31, 2015

Hodge Solar Array
Phase II
Buffer Zone Impacts
Route 11, Londonderry, VT

CONNECTICUT VALLEY ENVIRONMENTAL SERVICES, INC.
 Wetland and Natural Resource Consultants
 PO Box 1204 • Charlestown, NH 03603
 Phone & Fax: 603-826-5214
 McClammer@aol.com

Integrated Solar Applications Corporation
 121 Spring Tree Road
 Brattleboro, Vermont 05301