

March 1, 2023

Town of Farmington  
Zoning Board of Adjustment  
356 Main Street  
Farmington, NH 03835

**Via Overnight Delivery**

**Re: Application for Special Exception**

Dear Ladies and Gentlemen:

**PURPOSE/SUBMISSIONS**

The purpose of this letter is to deliver the following materials<sup>1</sup>, which comprise the application of Nutes Solar, LLC, for a special exception to permit a solar farm as a non-specified utility use across a number of parcels in the rural residential zoning district in the eastern most corner of Farmington, near the municipal boundaries with Milton and Rochester:

1. Letters of Authorization (or equivalent) from property owners;
2. Application for Special Exception, with Attachment 1 showing property owners and property/parcel information;
3. One certified list of abutters (including owners, applicant, and applicant's development team);
4. Three sets of mailing labels for all of the parties included on the list of abutters;
5. Executed Fee Schedule;
6. Filing fee in the amount of \$100 (costs for the legal notice and abutter postage will be submitted promptly upon advice of same);
7. Location maps:
  - a. Aerial Project Location Map;
  - b. Subject parcels superimposed on USGS topographic map;
  - c. Close up excerpt of Farmington zoning map;
8. Concept Plan of proposed solar array layout prepared by Krebs & Lansing Consulting Engineers dated March 1, 2023;
9. PPT Deck Overview of Walden Renewables (photographs of comparable projects completed by applicant and affiliates, and more information can be found at: <http://www.waldenrenewables.com/>);

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<sup>1</sup> In addition to one original, six copies of all items (except for items 4 and 6) are provided in accordance with the form's instructions.

10. Solar panel Safety Data Sheet; and
11. Property Value Impact Study.

### DESCRIBE PROPOSED OR EXISTING USE FOR THE PROPERTY

As set forth in Attachment 1 to the application form, the project encompasses a number of parcels which, in the aggregate, make up approximately 500 acres. The solar project is expected to be limited less than half that. The parcels are essentially adjacent to each other, and located between the Farmington/Milton town line, and Chestnut Hill Road. As the Google Earth image shows, aside from the residential developments clustered along Chestnut Hill Road and the side streets off Chestnut Hill (i.e., Great Pine, Branson, etc.), the proposed project site involves the largely undeveloped backlands which, today, are primarily wooded. The Google Earth image also shows the existing approximately 100' wide utility right of way running northeasterly and easterly through the project area. The current properties consist of gently sloping woodlots containing a mix of uplands, wetlands, and streams. The properties are currently used for timber harvest, recreation, and hunting by the respective landowners.

The proposed use is for 20 MW solar facility, for which portions of the properties will be cleared and graded to support an array of single access tracker photovoltaic solar panels. The facility will include single axis tracker solar arrays mounted on steel posts, access drives, equipment pads, and ancillary equipment, and will interconnect to the existing Eversource electrical transmission line which runs through the site within the existing utility right of way. The applicant has filed an interconnection request (on May 18, 2021) ISO New England ("ISO-NE" the regional transmission operator) to allow this interconnection and will have an interconnection agreement with ISO-NE and Eversource (the transmission owner) for this purpose expected in Q3 2023. A preliminary solar array layout is provided on the plan prepared by Krebs & Lansing Consulting Engineers dated February 23, 2023<sup>2</sup>.

### SPECIAL EXCEPTION NARRATIVE

The following sections provide the narrative responses for the information required by the Special Exception Application form.

***1. Explain how the proposed use is consistent with the character of other permitted uses within the district.***

There are several uses permitted in the rural residential district that are similar in character (either in whole or in part) to the proposed solar facility. The most closely related uses include:

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<sup>2</sup> Detailed site plans are not required for special exception applications. The details shown on this plan are intended to be an accurate representation of the overall site. But the precise placement of the elements, the location of internal access drives, the location of drainage features, and the like, will not be settled until the additional on-site engineering required in conjunction with the site plan review process to be conducted by the planning board.

(i) essential services, (ii) mineral exploration and extraction, (iii) timber harvesting, (iv) golf courses and (v) commercial agriculture.

**Essential services** are permitted uses which include facilities such as electrical power transmission and distribution lines, collection and supply systems, poles, wires, conduits, and cables. The proposed solar system will collect energy from the sun, convert it to electricity, and deliver that electricity to the local power grid by way of the interconnection agreement with Eversource and ISO-NE.

The proposed solar facility requires an integrated collection of cleared parcels to support the arrays, similar to the large cleared area for the footprint of a **golf course**. The solar facility is a much lower impact use than a golf course. The solar facility makes almost no noise. It generates virtually no traffic. It will be barely visible to the neighbors on account of the low height of the arrays, the substantial 100' setback arrays to from neighboring residential properties, and the presence of a vegetative buffer within the setback. Moreover, the solar facility will not have a club house, a practice driving range, a parking lot, a charging garage for golf carts, etc.

**Commercial agriculture** is typically a land use which also requires clearing large areas for development. When managed appropriately, agriculture maintains large areas of open space and provides net benefits to soil health and composition. These attributes are similar functions of a solar development. Land is cleared to support arrays which capture sun and convert it to electricity. Soil health and fertility is improved through years of vegetation management (e.g., mowing or grazing). The vast majority of the site will remain vegetated in a meadow state for the duration of the project's life.

Stages during the construction of the solar facility, such as grading and earth moving are similar to **mineral exploration and extraction**, another use permitted in the rural residential district. However, the grading for the solar facility will be significantly lower impact than the extraction and transport of sand and gravel or other minerals offsite from a new pit. The applicant does not expect to export any fill material from excavation and grading offsite.

In addition to the similarities and consistent characteristics with several permitted uses in the RR district, **public utilities** are permitted by special exception on the zone. Public utilities are defined in the ordinance as: *"A private organization subject to governmental regulation that provides an essential service or commodity, such as water, electricity, transportation, or communication to the public, and which are intended to serve primarily populations outside the Town of Farmington. This term also includes buildings and pumping stations, which are necessary for the furnishing of essential services as defined by this Ordinance, whether local or greater in scope."* The applicant's proposed solar facility is consistent with this definition.

***2. Explain how no hazard shall be created to the public or adjacent property on account of potential fire explosion or release of toxic materials.***

The components of the proposed solar facility consists of:

- solar modules (single axis trackers affixed to the ground using driven steel posts or screws)
- above and below ground electrical wiring and conduit;
- inverters that convert the direct current (DC) electricity generated by the solar modules into alternating current (AC) electricity for transmission onto the electrical grid;
- transformers that step up the voltage to transmission voltage (34.5 kV);
- concrete pads to support the inverters and transformers; and
- an agricultural style woven wire mesh fence to prevent unauthorized access to the site and ensure public safety.

The solar panels, which are the most significant component of the project equipment, are exactly the same type of panels routinely installed on homes and businesses across New Hampshire. We have included with this application a Safety Data Sheet (SDS) (formerly known as Material Safety Data Sheets (MSDS)) for a typical crystalline solar module (either mono or polycrystalline), the type which will be utilized in the Nutes Solar project. Section 3 of the SDS notes that there are no materials which are hazardous to the environment or health.

The facility will be constructed in accordance with the National Electric Code and all applicable laws. Electrical equipment containing mineral oils, such as transformers, will have secondary containment systems and will be regularly monitored to ensure optimum operational performance – periodically by in-person field inspections, and remotely 24/7/365. Ground mounted solar photovoltaic facilities can be expected to operate safely and quietly for many decades without risk to the health or safety of neighboring properties.

***3. Explain how no detriment to property values shall be created in the vicinity or change in the essential characteristics of any area including residential neighborhoods or business and industrial districts on account of the location or scale of buildings and other structures, parking areas, access ways, odor, smoke, gas, dust, or other pollutant, noise, glare, heat, vibration, or unsightly outdoor storage of equipment or other materials.***

The project includes an enhanced set back from public and private roads and residential properties: a minimum of a 100' buffer from any solar arrays to abutting residential property lines, which is four times the required setback for structures in the RR district. The low height of the solar arrays (less than 20' – considerably less than the 35' building height permitted in the district) combined with siting of the project within a forested area with significant vegetative buffers, will limit visibility of the solar array to neighboring properties and roadways. In specific locations closer to residences, strategic landscape plantings will be added during final design to further reduce visibility.

Once completed and operational, the site will be accessed periodically for maintenance of equipment or mowing. Typical site inspections and mowing are carried out 1-2 times per year. The solar arrays and associated electrical equipment will generate minimal noise. The project will not generate smoke, odor, dust, heat, vibration or other pollutants that could be considered harmful or nuisance.

Solar projects make good neighbors. They do not emit objectionable noise, generate traffic, require municipal services, create dust, smoke or odor, and are largely screened from view. The applicant has submitted with the application a Property Value Impact Study prepared by Cohn Reznick finding that existing solar facilities have not had any negative impact on the value of surrounding properties. The following chart summarizes the findings from the report.

#	Name	State	Owner	Acreage	MW	\$ Impact % (+/-) <sup>3</sup>	Page
1	DTE's Lapeer Solar	MI	DTE Electric Company	270	48	+0.24 +3.31 <sup>4</sup>	32-39
2	North Star Solar Farm	MN	Renewable Energy Asset Co.	1,000	100	+1.35	40-48
3	Dominion Indy Solar	IN	PLH, Inc.	134	8.6	+1.47 +2.18 +1.03	49-55
4	Grand Ridge Solar Farm	IL	Invenergy	160	23	+7.46	56-58
5	Innovative Solar	NC	Innovative Solar Systems	414	71	+6.75	59-63
6	Rutherford Farm	NC	Cypress Creek Renewables	489	61	-3.48	64-67
7	Elm City Solar	NC	Duke Energy	354	40	+2.00	68-71
8	Woodland Solar Farm	VA	Dominion Virginia Power	204	19	+2.71	72-75

In every case but one, properties in proximity to existing solar farms did not experience any diminution of value when compared to control groups of comparable properties not in proximity to the farm. In fact, in all cases but one, the properties closer to the solar fared modestly better than properties not influenced by their proximity to a solar farm.

It may also be useful to remember that solar farms are not forever. The applicant does not own the land that will support the facility. The applicant does not have an option to buy the land. The land is all leased for a finite term of years. The expected life of a solar facility is approximately 40 years. At the end of the useful life of the facility it will be decommissioned. Decommissioning includes the removal of all panels, racking, inverters, transformers, fencing, poles, above ground electrical equipment and below ground infrastructure (including wires and foundations) to a depth of 48". All decommissioned equipment and materials are recycled to the

<sup>3</sup> Plus (+) means that properties proximate to the solar farm were positively impacted by the presence. Minus (-) means that properties proximate to the solar farm were negatively impacted by the presence.

<sup>4</sup> More than one number in this column means that multiple groups/clusters of homes were evaluated.

greatest extent practicable, or properly disposed of in accordance with applicable laws. After decommissioning is complete, the site will be stabilized and revegetated with approved seed mixes and made ready for another use.

***4. Explain how no traffic hazard or substantial increase in the level of traffic congestion shall be created.***

The facility is not manned or staffed. It does not attract customers or visitors. Once operational, field technicians and maintenance personnel will visit the site approximately twice weekly initially (for the first two months) and thereafter approximately once per month. Each visit will consist of one or two standard vehicles (passenger car or pick-up truck) for basic inspection and diagnostics. No traffic hazard or substantial increase in the level of traffic congestion shall be created by the operation of the facility.

The only vehicle activity of note will occur during construction, which is expected to take 9-12 months, depending on factors such as weather, supply chain constraints, and the like.

***5. Explain how there will be no excessive demand on municipal services, including but not limited to, water, sewer, waste disposal, police and fire protection and schools.***

The project will not rely on municipal services and will not require water, sewer, waste-disposal or other services that would typically be required for a residential subdivision or most any other use permitted in the RR zone. Emergency personnel will have access the site by way of a Knox Box in case of emergencies. However, the site will be maintained and managed to prevent emergencies. In accordance with electric code, the facility will be surrounded by a fence, and accessed through a locked gate to maintain the safety and security of the site.

***6. Explain how no significant increase of stormwater runoff onto adjacent property or streets shall be created.***

In accordance with NH Department of Environmental Service (NHDES) Alteration of Terrain (AoT) Bureau's regulations, the project will be required to meet rigorous standards for stormwater treatment. The project team will work with the AoT Bureau throughout the design process to develop a site plan that meets these standards, which will ensure that the project will not have an impact to neighboring properties. (See, RSA 485-A:17, NH Code of Administrative Rules Env-Wq 1500, as well as the New Hampshire Stormwater Manual.) By complying with the NHDES AoT stormwater requirements as part of its state permitting efforts, no increase in the rate, or decrease in the quality of stormwater runoff from the site will occur.

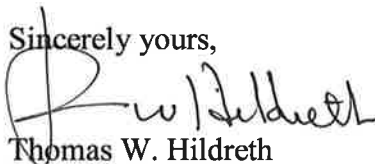
**CONCLUSION**

We believe that the materials and explanations provided here amply demonstrate that the proposal satisfies the criteria for a special exception for a utility use not specified in the RR zone. In late 2018 and early 2019, this board granted two special exceptions for the same use in the same zoning district. The same facts and the same law should lead to the same conclusion here.

The proposed solar farm is consistent with the character of a number of other permitted uses within the district. The proposed solar farm creates no hazard to the public or adjacent properties on account of potential fire, explosion, or release of toxic materials. No detriment to property values would be created in the vicinity nor will the essential characteristics of the area be changed on account of the scale of buildings or other structures, parking areas, access ways, odor, smoke, gas, dust or other pollutants, noise, glare, heat, vibration, or unsightly storage of outdoor equipment. No traffic hazard or substantial increase in traffic congestion is created by the proposed solar farm. The facility will impose no excessive demand on any municipal services but, rather, will be a substantial benefit to the community. And, finally, because of state level regulatory and design requirements, no increase in storm water runoff onto adjacent properties or streets shall be created.

The Nutes Solar development team looks forward to speaking with you and other interested parties at your meeting on April 6. If you require any additional information or materials in support of this application in advance of that date, please so advise.

Otherwise, thank you for your attention to and assistance with this application.

Sincerely yours,  
  
Thomas W. Hildreth

TWH:  
Enclosures

ec: Nutes Solar, LLC  
Flycatcher, LLC  
Nobis Engineering  
Krebs & Lansing

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R17 LOT NO. 068

STREET ADDRESS: 180 Dodge Cross Rd, Farmington, NH 03835

*Please print*  
Property Owner: Aaron Allen

Property Owner: —

The undersigned, registered property owners of the above noted property, do hereby authorize

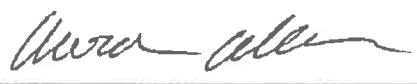
NUTES SOLAR LLC

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

Telephone: 603-833-6934

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.



Authorized Signature

Date: 3/1/2023



Authorized Signature

Date: —



AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R18 LOT NO. 10

STREET ADDRESS: 85 GREAT PINE CIRCLE

FARMINGTON, NH 03835

Please print:

Property Owner: JONATHAN CARDINAL

The undersigned, registered property owner of the above noted property, do hereby authorize NUTES SOLAR LLC as my agent and to act on my behalf and take all actions necessary actions for the submission, processing, issuance and acceptance of any and all municipal, state or federal permits that may be necessary in connection with the Nutes Solar project.

We hereby certify the information contained herein is true and accurate to the best of our knowledge.

  
\_\_\_\_\_  
Authorized Signature  
Date: 2/14/2023

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R17 LOT NO. 055

STREET ADDRESS: Chestnut Hill Rd, Farmington, NH 03835

Please print  
Property Owner: FRANCIS J. CASSIDY

Property Owner: \_\_\_\_\_

The undersigned, registered property owners of the above noted property, do hereby authorize

NUTES SOLAR LLC

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

210 DOVER POINT RD, DOVER, NH 03820

Telephone: 603-817-6156 (cell)

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.



Authorized Signature

\_\_\_\_\_

Authorized Signature

Date: FEB 23, 2023

Date: \_\_\_\_\_

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R17 LOT NO. 057

STREET ADDRESS: Dodge Cross Rd, Farmington, NH 03835

*Please print*  
Property Owner: FRANCIS J. CASSIDY

Property Owner: \_\_\_\_\_

The undersigned, registered property owners of the above noted property, do hereby authorize

NUTES SOLAR LLC

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

216 DOVER POINT RD, DOVER, NH 03820

Telephone: 603-872-6156

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

*Tom Janich*  
Authorized Signature

\_\_\_\_\_  
Authorized Signature

Date: 02-23-2023

Date: \_\_\_\_\_

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R18 LOT NO. 005

STREET ADDRESS: 36 Brown Rd, Farmington, NH 03835

*Please print*  
Property Owner: Joseph Gray

Property Owner: Janet Gray

The undersigned, registered property owners of the above noted property, do hereby authorize


NUTES SOLAR LLC

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

Telephone: 603 978 5303

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

  
\_\_\_\_\_  
Authorized Signature

  
\_\_\_\_\_  
Authorized Signature

Date: 1 March 23

Date: 3-1-23

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R17 LOT NO. 033

STREET ADDRESS: Tall Pine Rd, Farmington, NH 03835

Please print  
Property Owner: GREATWOODS LLC

Property Owner: \_\_\_\_\_

The undersigned, registered property owners of the above noted property, do hereby authorize

NUTES SOLAR LLC

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

58 PRISCILLA LANE, AUBURN, NH 03032

Telephone: 603-496-2335

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

By: NICHOLAS C. BRUNET, MANAGER/OWNER



Authorized Signature

Authorized Signature

Date: 2/21/23

Date: \_\_\_\_\_

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

MAP NO. R18 LOT NO. 003

STREET ADDRESS: 479 Chestnut Hill Rd, Farmington, NH 03835

*Please print*  
Property Owner: John Underhill

Property Owner: \_\_\_\_\_

The undersigned, registered property owners of the above noted property, do hereby authorize

NUTES SOLAR LLC

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

301 Bedford Rd, Piermont N.H. 03779

Telephone: 1-603-272-9115

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

John Underhill

Authorized Signature

\_\_\_\_\_

Authorized Signature

Date: 2/23/23

Date: \_\_\_\_\_

**TOWN OF FARMINGTON**  
**ZONING BOARD OF ADJUSTMENT**  
356 Main Street, Farmington, NH 03835  
603-755-2774

(For Office Use Only)		
Date Rec'd: _____	By: _____	Tax Map/Lot _____
<b>FEES:</b>		
Application: \$ _____		
Public Notice: Actual cost of legal listing \$ _____		
Abutters: _____ x actual cost of postage = \$ _____		
Total Received: \$ _____		
Cash <input type="checkbox"/> Check # _____		

**SPECIAL EXCEPTION**

**APPLICANT/PROPERTY OWNER INFORMATION**

APPLICANT: NUTES SOLAR, LLC Phone: (207) 631-9134

Address: 155 FLEET STREET, PORTSMOUTH, NH 03801

Email Address: DALE.KNAPP@WALDENRENEWABLES.COM

PROPERTY OWNER (if different from applicant): SEE ATTACHMENT 1

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

**PROPERTY/PARCEL INFORMATION**

Address: SEE ATTACHMENT 1

Tax Map # \_\_\_\_\_ Lot # \_\_\_\_\_ Zoning District \_\_\_\_\_

Brief Description of Property: \_\_\_\_\_

\_\_\_\_\_

**DESCRIBE PROPOSED OR EXISTING USE FOR THE PROPERTY**

\_\_\_\_\_

Please see accompanying letter.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NOTE: This application is not acceptable unless all required statements have been made. Additional information may be supplied on a separate sheet if the space provided is inadequate.

**Special Exception General Standards (as set forth in Section 2.00 (D)1 of the Zoning Ordinance)**

1: *Explain how the proposed use is consistent with the character of other permitted uses within the district.*

**Please see accompanying transmittal letter.**

2: *Explain how no hazard shall be created to the public or adjacent property on account of potential fire explosion or release of toxic materials.*

**Please see accompanying transmittal letter.**

3: *Explain how no detriment to property values shall be created in the vicinity or change in the essential characteristics of any area including residential neighborhoods or business and industrial districts on account of the location or scale of buildings and other structures, parking areas, access ways, odor, smoke, gas, dust, or other pollutant, noise, glare, heat, vibration, or unsightly outdoor storage of equipment or other materials.*

**Please see accompanying transmittal letter.**

4: *Explain how no traffic hazard or substantial increase in the level of traffic congestion shall be created.*

**Please see accompanying transmittal letter.**

5: *Explain how there will be no excessive demand on municipal services, including but not limited to, water, sewer, waste disposal, police and fire protection and schools.*

**Please see accompanying transmittal letter.**

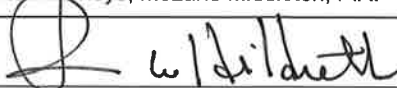
6: *Explain how no significant increase of stormwater runoff onto adjacent property or streets shall be created.*

**Please see accompanying transmittal letter.**

NUTES SOLAR, LLC  
By its Attorneys, McLane Middleton, P.A.

Applicant

By:



(Signature)

Thomas W. Hildreth

Date March 1, 2023





Nutes Solar LLC  
 Special Exception Application  
 Zoning Board of Adjustments  
 Farmington, New Hampshire

**Attachment 1**

Property Owner				Property/Parcel Information				
Name(s)	Address	Phone Number	Email Address	Address	Tax Map	Lot No.	Zoning District	Description of Property
Aaron L. Allen	180 Dodge Cross Rd Farmington, NH 03835	603-833-6934	aaronjen4216@gmail.com	180 Dodge Cross Rd Farmington, NH 03835	R17	068	RR – Rural Residential	Wooded, residence
Jonathan Cardinal	85 Great Pine Cir Farmington, NH 03835	603-948-6870	jon@ajfoss.com	85 Great Pine Cir Farmington, NH 03835	R18	10	RR – Rural Residential	Wooded, residence
Francis J. Cassidy	216 Dover Point Rd Dover, NH 03820	603-817-6156	carerx@comcast.net	Chestnut Hill Rd Farmington, NH 03835	R17	055	RR – Rural Residential	Wooded, residence
Francis J. Cassidy	216 Dover Point Rd Dover, NH 03820	603-817-6156	carerx@comcast.net	Chestnut Hill Rd Farmington, NH 03835	R17	057	RR – Rural Residential	Wooded, access road
Joseph R. Gray; Janet E. Gray	36 Brown Rd Farmington, NH 03835	603-978-5303	joe.r.gray.6@gmail.com	36 Brown Rd Farmington, NH 03835	R18	005	RR – Rural Residential	Wooded, residence
Greatwoods LLC c/o Nicholas C. Brunet	58 Priscilla Ln Auburn, NH 03032	603-496-2333	nick@greatwoodslc.com	Tall Pine Rd Farmington, NH 03835	R17	033	RR – Rural Residential	Wooded, undeveloped
John H. Underhill	301 Bedford Rd Piermont, NH 03779	603-272-9115	Not available	479 Chestnut Hill Rd Farmington, NH 03835	R18	003	RR – Rural Residential	Wooded, residence

## CERTIFIED LIST OF ABUTTERS

**RSA 672:3** "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.

The following information must be completed by the applicant in order to begin the subdivision/site plan review/lot line adjustment application process. Below, list the verified names and mailing addresses of the applicant, authorized agent(s), engineer, architect, land surveyor, soil scientist, consultant, abutter, holders of conservation easements or restrictions on adjacent lands, municipal/regional planning commissions (if a regional notice is required), associations, etc., not more than five (5) days prior to submission, per RSA 676:4,I(b). Abutters' names and mailing addresses must be verified against the records kept in the Farmington Assessor's Office. Attach additional copies of this form if necessary. Include two (2) sets of mailing labels for each person listed below and an extra set for each owner/applicant/professional listed.

<b>Map/Lot</b>	<b>Name of Property Owner/Professional</b>	<b>Mailing Address</b>
R33-002-000	Stanley J & Bobbie-Jo Glidden	19 Glidden Ln Farmington, NH 03835
R33-003-000	Paula A Kenyon	509 Chestnut Hill Rd Farmington, NH 03835
R18-001-000	Estate of Thomas V Walker Sr	422 Beccarris Dr Rollinsford, NH 03869
R18-002-000	Joseph & Judith Costanzo	491 Chestnut Hill Rd Farmington, NH 03835
R32-005-000	Kris L & Nathan M Adams	508 Chestnut Hill Rd Farmington, NH 03835
R32-004-000	Norman Russell (Trustee) Russell Living Trust	506 Chestnut Hill Rd Farmington, NH 03835
R32-003-000	Lawrence K & Donna J Gorney	500 Chestnut Hill Rd Farmington, NH 03835
R32-002-000	Christian R & Marie E Stickles	490 Chestnut Hill Rd Farmington, NH 03835
R32-001-000	Sarah E & Jacob J Mackenzie	484 Chestnut Hill Rd Farmington, NH 03835
R19-027-000	Norma Morrison	474 Chestnut Hill Rd Farmington, NH 03835
R18-004-000	Erik Fliby & Pamela Dumont	86 Briarcliff Rd Gilford, NH 03249
R18-004-004	Brigitte A & Mark A Garber	39 Brown Rd Farmington, NH 03835
R18-004-005	Brandon M Tufts & Megan Alexis Heon	38 Brown Rd Farmington, NH 03835
R18-010-002	David L & Sharon Brock	141 Great Pine Circle Farmington, NH 03835

<b>Map/Lot</b>	<b>Name of Property Owner/Professional</b>	<b>Mailing Address</b>
R18-010-003	Angela Cheney	131 Great Pine Circle Farmington, NH 03835
R18-010-004	Ronald O & Kristie V Holtz	117 Great Pine Circle Farmington, NH 03835
R18-010-005	Glenn S & Breanne B Varney	115 Great Pine Circle Farmington, NH 03835
R18-010-007	Jonathan Cardinal	85 Great Pine Circle Farmington, NH 03835
R18-011-008	Jonathan Cardinal	85 Great Pine Circle Farmington, NH 03835
R18-011-006	Jason & Stacy Lauze	555 Main St Farmington, NH 03835
R18-012-000	Jonathan Cardinal	85 Great Pine Circle Farmington, NH 03835
R17-013-000	Steven H & Sandra K Brown	80 Branson Rd Farmington, NH 03835
R17-014-000	Gary M & Jolene C Clark	79 Branson Rd Farmington, NH 03835
R17-032-000	Kristafer D & Ashley M Camire	75 Tall Pine Rd Farmington, NH 03835
R17-034-000	George Drost Jr & Gretchen Roussin	73 Tall Pine Rd Farmington, NH 03835
R17-043-000	Jonathan R & Jaiden K Glidden	52 Oakwood Rd Farmington, NH 03835
R17-044-000	Richard C & Christine Hickman	55 Oakwood Rd Farmington, NH 03835
R17-045-000	Lorraine K Dickenson-Carner & Thomas F Carver	45 Oakwood Rd Farmington, NH 03835
R17-046-000	William & Nichole Koster	39 Oakwood Rd Farmington, NH 03835
R17-047-000	Joseph A & Patricia A Szmyt	33 Oakwood Rd Farmington, NH 03835
R17-048-000	Aaron W & Catherine E Anderson	PO Box 434 Farmington, NH 03835
R17-049-000	Benjamin Jamer	15 Oakwood Rd Farmington, NH 03835
R17-054-000	Michael P Keenan	319 Chestnut Hill Rd Farmington, NH 03835
R19-001-001	Kevin F Grondin	PO Box 2040 Rochester, NH 03866
R15-012-000	Richard D Townsend Jr	119 Hall Rd Barrington, NH 03825
R15-011-000	Frank Willard	304 Chestnut Hill Rd Farmington, NH 03835
R15-008-002	Judson J & Paula J Goodwin	PO Box 17 Greenville, ME 04441
R15-008-001	Edward F Shave Jr	292 Chestnut Hill Rd Farmington, NH 03835

<b>Map/Lot</b>	<b>Name of Property Owner/Professional</b>	<b>Mailing Address</b>
R15-008-000	Thomas Huckins Trust & Michelle Huckins Trust C/O Thomas & Michelle Huckins Trust	38 Huckins Ln Farmington, NH 03835
R15-007-001	William H & Traci D Cameron Jr	270 Chestnut Hill Rd Farmington, NH 03835
R17-056-002	Dennis H Fields	277 Chestnut Hill Rd Farmington, NH 03835
R17-056-005	George Seaman & Emily Amazeen	40 Dodge Cross Rd Farmington, NH 03835
R17-056-006	Cynthia M & Paul Prato	42 Dodge Cross Rd Farmington, NH 03835
R17-056-009	Jamie & Kristal Corriveau	74 Dodge Cross Rd Farmington, NH 03835
R17-056-013	Stephen Gallant & Rach Laporte	88 Dodge Cross Rd Farmington, NH 03835
R17-058-000	Darlene Couture-Laquerre	106 Dodge Cross Rd Farmington, NH 03835
R17-058-001	14 LCR LLC	PO Box 397 Dover, NH 03821
R17-059-001	Debbic Pruc	24 Little City Rd Farmington, NH 03835
R17-059-000	Cleon F & Irene E Powers	34 Little City Rd Farmington, NH 03835
R17-060-000	Janice M Doughty c/o Carolyn Purcell	12 Wedgewood Way, Apt 1 Peabody, MA 01960
R17-061-000	Brian K Howard	37 Little City Rd Farmington, NH 03835
R17-062-000	Patricia Colanto	29 Little City Rd Farmington, NH 03835
R17-063-000	Irene H & Robert V Dupont & Linda J Carroll	23 Little City Rd Farmington, NH 03835
R17-064-000	Tanya Pozdziaik & William Mackinnon Jr	PO Box 303 Union, NH 03887
R17-068-001	Aaron L Allen	180 Dodge Cross Rd Farmington, NH 03835
R01-002-000	George H & Josephine Szirbik	PO Box 206 Milton Mills, NH 03852
R17-067-001	The Duquette Company LLC	382 New Boston Rd Bedford, NH 03110
R17-067-002	Matthew & Lacey Beal	156 Dodge Cross Rd Farmington, NH 03835
R17-067-000	Scott M & Therese Healey	168 Dodge Cross Rd Farmington, NH 03835
R16-005-000	Terry L Skinner	177 Dodge Cross Rd Farmington, NH 03835
049-1-1	Christopher D & Cara L Baker	37 Cross Rd Milton, NH 03851
048-001	Aaron L & Marilyn W Allen	180 Dodge Cross Rd Farmington, NH 03835

Map/Lot	Name of Property Owner/Professional	Mailing Address
046-007	Zackery Mickclonis	372 Nutes Rd Milton, NH 03851
046-7-A	John Morton	362 Nutes Rd Milton, NH 03851
046-006	Adam C & Claudia M Govoni	296 Nutes Rd Milton, NH 03851
046-005	Crystal, Scott & Justin West	284 Nutes Rd Milton, NH 03851
046-004	Katherine L Robicheau	282 Nutes Rd Milton, NH 03851
046-003	Sandra J Galarneau	276 Nutes Rd Milton, NH 03851
046-001	David Wayne Jacobs	179 Nutes Rd Milton, NH 03851
044-015	William V & Kathleen E Hinton	156 Nutes Rd Milton, NH 03851
044-014	Scott A & Stamatia K Macdonald	13 Dundee Circle Harwich, MA 02645
044-011	Robert & Sally Riley Revoc Living Trust	96 Nutes Rd Milton, NH 03851
Project Team	Walden Renewables c/o Dale Knapp	155 Fleet Street Portsmouth, NH 03801
Project Team	Flycatcher LLC c/o Katelin Nickerson	106 Lafayette Street Yarmouth, ME 04096
Project Team	Mclanc/Middleton c/o Tom Hildreth	900 Elm Street Manchester, NH
Project Team	Nobis Group c/o Chris Nadeau	18 Chenell Drive Concord, NH 03301
Project Team	Krebs & Lansing c/o Ian Jewkes	164 Main Street, Suite 201 Colchester, Vermont 05446

Name of Person Preparing List Katelin Nickerson, Flycatcher LLC Date Prepared 2/28/2023

Preparer's Signature  Date 2/28/2023

# NEW FEE SCHEDULE 2022

## TOWN OF FARMINGTON - VALUATION AND FEE SCHEDULE

### BUILDING DEPARTMENT

#### Calculation of Value:

Residential Building Permit	\$70 per square foot
Non-livable structures	\$35 per square foot
Porches & Decks & Sheds	\$20 per square foot
Manufactured Housing/Mobile Homes	Bill of Sale Required
Commercial Structures /Buildings	Based on construction contract (copy required)
In Ground Pool	Based on construction cost

Example: 1200 square feet x \$70 = \$84,000 divided by 1000 = 84 times \$8.00 = \$672

*\*\* Does not include inspections or technician permit fees*

#### Fees:

Building Permit	\$25 flat fee plus \$8.00 per \$1000 value
Electrical, Plumbing, Gas/Mechanical Permit	\$50 + Inspections @ \$30 each
Propane Tank Set	\$50 + Inspections @ \$30 each
Inspections / Re-inspections	\$30 each occurrence
Above Ground Pool or Hot Tub Permit	\$25 + Inspections @ \$30 each & Electrical Permit Fee
Demolition/Wrecking Permit	\$75 flat fee
Oil Burning Permit	\$50 flat fee

All fees must be paid for BEFORE the permit is issued.

### PLANNING BOARD

#### Application Fees:

Minor Site Review	\$100
Major Site Review	Residential: \$200 base fee plus \$50 per new dwelling unit Commercial: \$200 base fee plus \$0.10 per square foot of new non-residential construction.
Minor Subdivision Review	\$175 base fee plus \$100 per newly created lot
Major Subdivision Review	\$225 base fee plus \$100 per newly created lot
Lot Line Revision	\$150 base fee
Special Use Permit	\$150 base fee
Voluntary Lot Merger	\$20 (Recording Fee)
Earth Removal Permit	\$150 base fee
Scenic Tree Cutting/Trimming	\$150 base fee
Legal Notice Advertising	Actual cost of listing
Abutter Fees	Actual cost of current postage rates per abutter (Including applicant and professionals)

Planner's Fee: A fee of \$85.00 per hour will be incurred by the applicant for any Planning Board application that requires more than a total of eight hours to review and process.

Over



Revised August 23, 2022

**NOTE:** All plats and/or plans to be recorded at the Registry of Deeds will require the applicant to pay \$29 per page plus the mandatory LCHIP charge of \$25.00. The Town of Farmington will file all plats/plans at the Registry on behalf of the applicant.

Additionally, all other fees for third party review or legal review by the Town Attorney must be paid by the applicant prior to filing of the decision for the application.

In the event that a Compliance Hearing is deemed necessary by the Planning Board, any and all fees resulting from said compliance hearing will be borne by the APPLICANT/DEVELOPER, including any third-party review and all legal fees.

**Additional Requirements:**

3 sets of Mailing Labels for Abutter Notices on all public hearings.

1 certified Abutters List – Please confirm Abutters address with Assessing Department.

Initial Submittal: 1 complete copy of the application, 1 complete full-size plan set and 1 electronic copy.

Technical Review Committee (if required): 7 complete copies of the application, 7 copies of 11” x 17 plan sets, 1 complete full-size set and 1 electronic copy.

Planning Board: Final Revised plan set should include 8 complete copies of the application, 8 copies of 11” x 17” plan set, 2 complete full-size sets, 1 colorized full-size plan set, and 1 electronic copy.

1 signed copy of this Fee Schedule.

**ZONING BOARD OF ADJUSTMENT**

**Application Fees:**

Variance Request	\$100
Special Exception	\$100
Appeal from an Administrative Decision	\$100
Legal notice advertising	Actual cost of listing
Abutter Fees	Actual cost of current postage rates per abutter (Including applicant and professionals)

**Additional Requirements:**

3 sets of Mailing Labels for Abutter Notices for all public hearings

1 certified Abutters List– Please confirm Abutters address with Assessing Department.

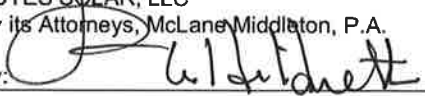
6 complete copies of Application with supporting documentation plus original

1 signed copy of this Fee Schedule

**NOTE:** All additional copies of plans and application materials currently before the Planning Board or ZBA requested by Town staff and Boards shall be provided at the applicant’s expense.

NUTES SOLAR, LLC

By its Attorneys, McLane Middleton, P.A.

By:  \_\_\_\_\_

Applicant’s Signature

Thomas W. Hildreth

March 1, 2023

\_\_\_\_\_  
Date



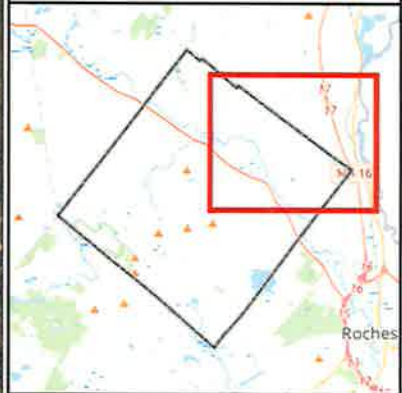
Coordinate System: NAD 1983 StatePlane New Hampshire FIPS 2600 Feet (Feet US)  
Map Information:

Plot Date: 2/28/2023, 2:08:00 PM by DREWCS\NWCORP\... \LAW\JULIAN\B117171  
Path: C:\Y:\CAD\DWG\Projects\Walden\Walden\_1500\_NutSolar\_LocationMap\_11x17.dwg



**LEGEND**

- PROJECT PARCEL
- TOWN BOUNDARY



**NOTES:**

- BASEMAP IMAGERY FROM GOOGLE AERIAL BASEMAP SERVICES.

1" = 2,000'  
1:24,000

**PROJECT:** WALDEN RENEWABLES DEVELOPMENT  
NUTES SOLAR, LLC  
FARMINGTON, STRAFFORD COUNTY, NH

**TITLE:** PROJECT LOCATION - AERIAL IMAGERY

DRAWN BY	D. KENWORTHY	PROJ NO	158-6
CHECKED BY	K. NICKLSON		
ISSUED	FEBRUARY		
YEAR	2023		

**FIGURE 1**

LAND • SCIENCE • DESIGN

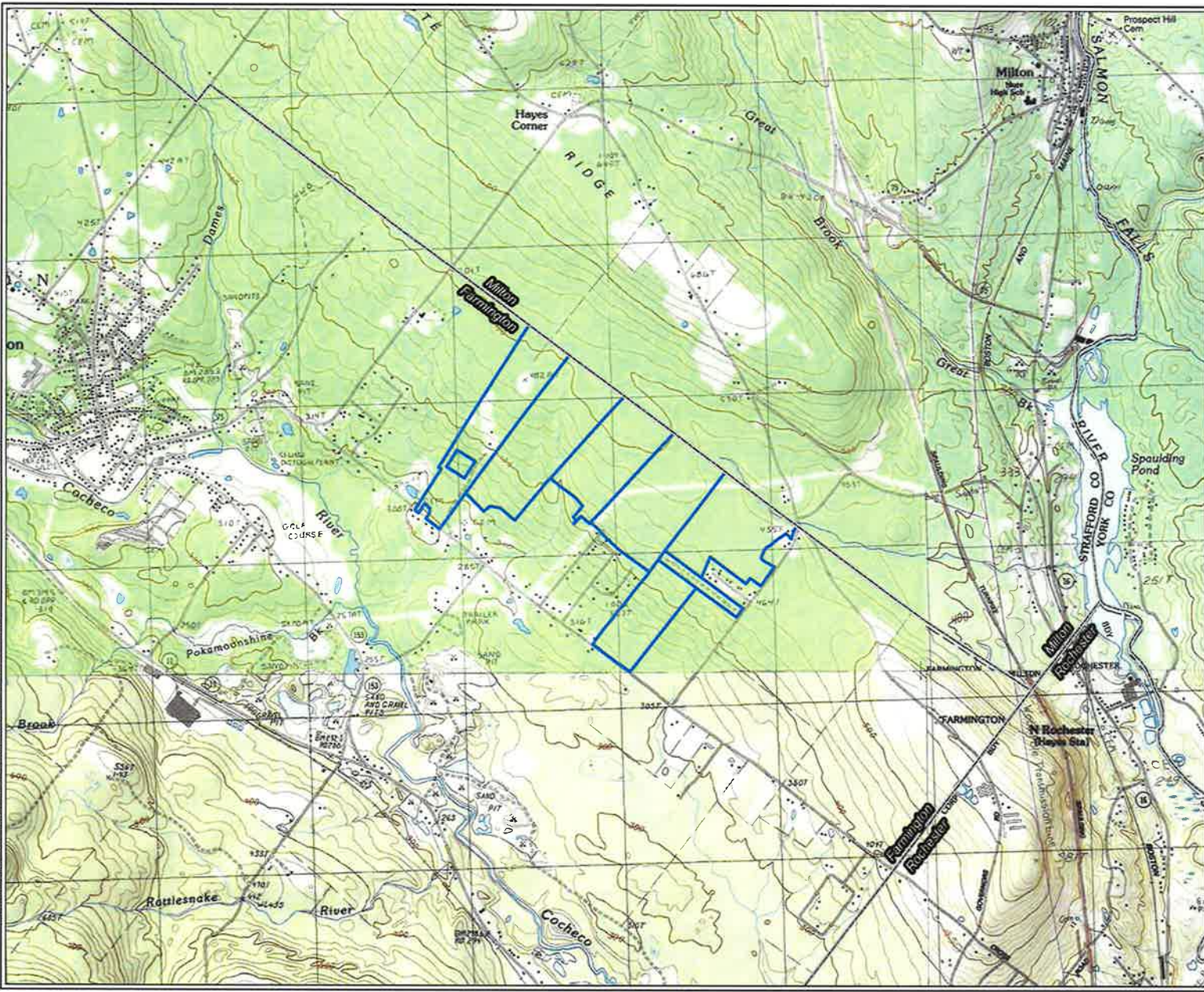
WALDEN RENEWABLES

FILE NO: Walden\_1589\_NutSolar\_LocationMap\_11x17.dwg





Coordinate System: NAD 1983 StatePlane New Hampshire F PS 2830 Feet (Foot US)  
Map Rotation:

Plot Date: 7/13/2023 11:21:18 AM by DREWENWORTHY - LACUT: ANSI 611 (47)  
Path: C:\Flycatcher\Projects\WaldenSolar\_1950\_NutSolar\_LocationMap\_11x17.mxd



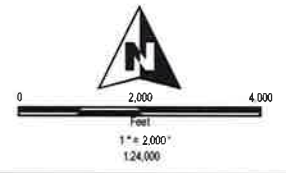
**LEGEND**



-  PROJECT PARCEL
-  TOWN BOUNDARY



**NOTES:**

- 1 BASEMAP IMAGERY FROM USGS 7.5' QUADRANGLE SERIES

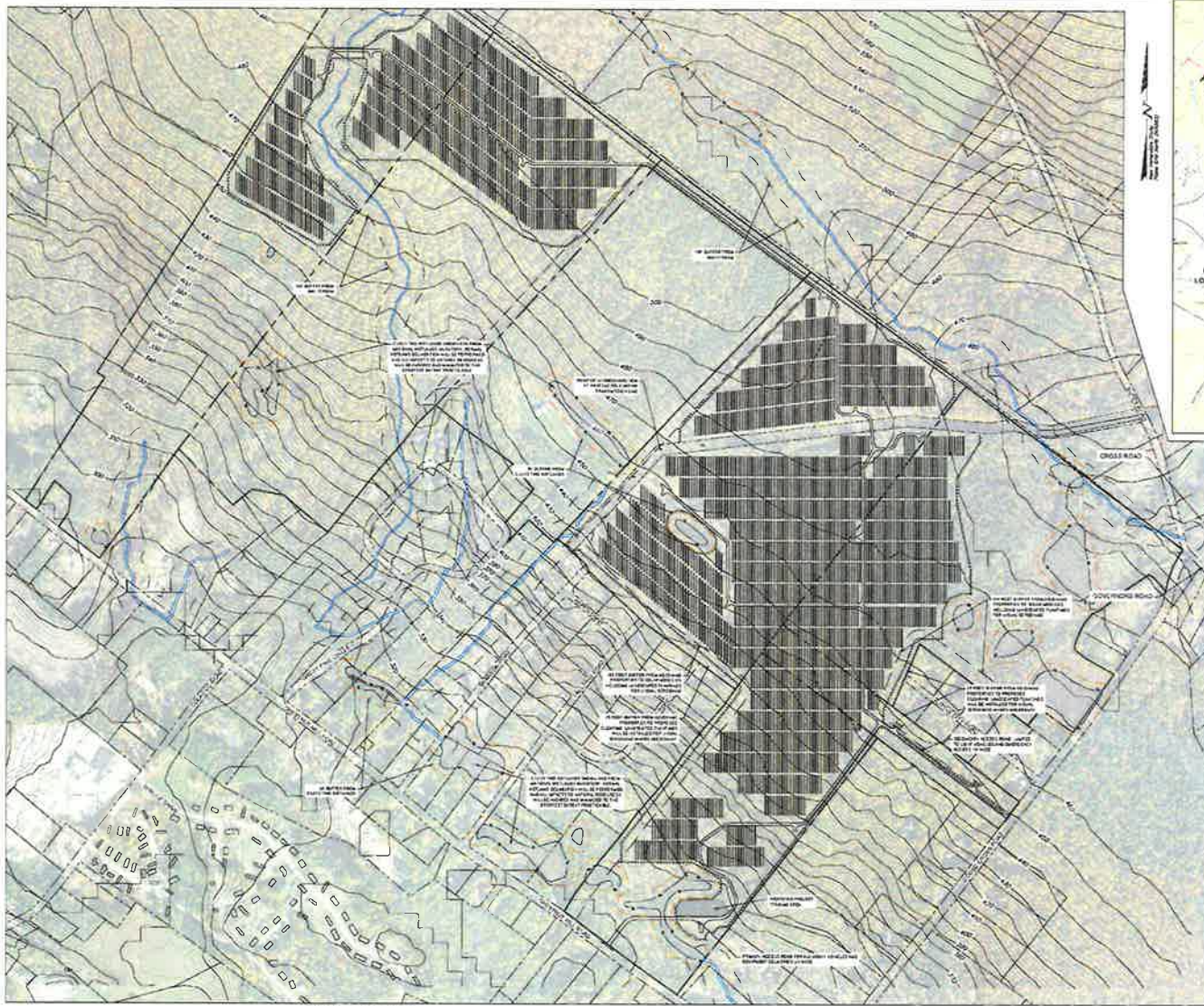


PROJECT		<b>WALDEN RENEWABLES DEVELOPMENT NUTES SOLAR, LLC FARMINGTON, STRAFFORD COUNTY, NH</b>	
TITLE		<b>PROJECT LOCATION</b>	
DRAWN BY	D. KEMWORTHY	PROJECT NO.	195-4
CHECKED BY	K. INKARSON	DATE	FEBRUARY 2023
SCALE		<b>FIGURE 1</b>	
			
FILE NO.		Walden_1950_NutSolar_LocationMap_11x17.mxd	









LOCATION MAP  
SCALE: 1/4" = 100'

LEGEND

- 15/100 EXISTING POWER POLE / PROPOSED POLE
- APPROXIMATE PROPERTY LINES
- APPROXIMATE PROJECT PERMITS
- APPROXIMATE TOWN LINES
- setbacks FROM SOLAR PANEL MODULES
- EXISTING GRASS CONTOUR LINES (FOOT-CANTER)
- EXISTING GRASS CONTOUR LINES (FOOT-INTERVAL)
- EXISTING GRASS CONTOUR LINES (FOOT-INTERVAL)
- PROPOSED LOCATION OF TRANSMISSION LINE BASEMENT
- EXISTING OVERHEAD POWER
- EXISTING DITCHES AND FENCES WITH LOCAL TOWN TOWNSHIP
- CLASS TWO WETLAND
- 40 FEET BUFFER FROM CLASS TWO WETLAND
- NEW SOLAR PANELS TWO W/ TRACKS
- 100' BUFFER FROM WETLANDS
- PROPOSED CLASSING UNITS

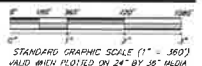
**NUTES SOLAR LLC**

Chestnut Hill Road,  
Farmington, New Hampshire



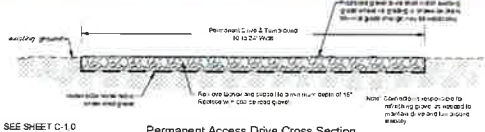
ISSUED FOR CLIENT REVIEW  
NOT FOR CONSTRUCTION

SOURCE DATA & LEGEND  
MAPPING SOURCE: DATA USED FOR PLAN COMPILED  
DATE: Engineering  
9500 and Lansing Consulting Engineers, Inc.  
150 Main Street, Suite 201  
Cochran, Vermont 05445



Proposed Solar Array

PROPOSED CAPACITY:  
20 MW AC



NOTES:

1. ASPECTS OF PLAN ARE APPROXIMATE AND DERIVED FROM AERIAL PHOTOGRAPHY.
2. THE HORIZONTAL COORDINATE SYSTEMS BASED ON NAD83 NEW HAMPSHIRE STATE PLANNED SURVEY FEET. ELEVATIONS ARE BASED ON THE NAD83 US SURVEY FEET.
3. EXISTING GROUND CONDITIONS (ELEVATIONS AND SHIELD CONDITIONS) DATA FROM THE NEW HAMPSHIRE OFFICE OF GIS.
4. UTILITIES ARE NOT WARRANTED TO BE COMPLETELY ACCURATE. CONFIRM BY LOCAL CONTACT OR CONDUCT FIELD SURVEY AND/OR CONSULTATION.
5. THIS IS IN NO WAY A BOUNDARY SURVEY. PROPERTY LINES ARE FROM PARCEL INFORMATION PROVIDED BY THE NEW HAMPSHIRE OFFICE OF GIS.
6. THIS IS AN ALTERNATIVE DESIGN PLAN. FINAL DESIGN WILL BE MODIFIED TO COMPLY WITH ALL REGULATORY AND LOCAL REQUIREMENTS. CONSULT WITH ALL REGULATORY AGENCIES TO DETERMINE ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS. CONSULT WITH ALL REGULATORY AGENCIES TO DETERMINE ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS. CONSULT WITH ALL REGULATORY AGENCIES TO DETERMINE ALL NECESSARY PERMITS AND REGULATORY REQUIREMENTS.

SEE SHEET C-10 FOR NOTES  
Permanent Access Drive Cross Section

DATE of issue: 02/09/2023	Drawn by: EJP	Checked by: JL
Project No: 23726	Scale: 1" = 200'	Sheet No: 1 of 2
<b>C-1.0</b>		



# Walden Renewables Development Company Background Presentation

for

**Town of Farmington  
Board of Selectmen**

**March 1, 2023**



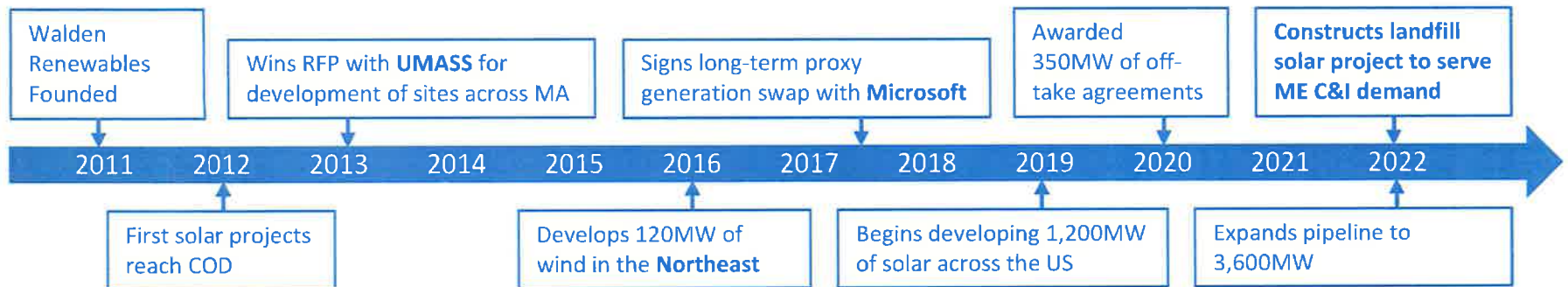


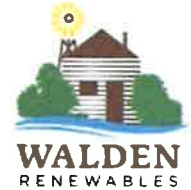
# Company Introduction

**Walden is a proven, experienced, multi-technology renewable energy developer that has been active in US markets since 2011.**

**Walden has grown the business from its base in New England. A long history of success in the region helps Walden overcome challenges and deliver high value projects.**

**Walden projects maximize production and efficiency, thereby delivering the highest value to communities and landowners, while minimizing environmental and visual impacts.**





## Walden Management Team



**Henry Weitzner, CEO and Founder**, started Walden Renewables in 2011 to develop renewable energy projects. Henry founded WGE, a sister company to focus on utility scale wind projects in the Northeast backed by RWE. Prior to Walden, Henry was managing director at Barclays Capital where he ran Natural Gas and Power trading, managing a team of over 30 professionals. Henry spearheaded numerous complex financing transactions, from natural gas storage inventory monetization to LNG off-take agreements, numerous PPAs and heat-rate options.



**Jack Kenworthy, CDO and Founder**, before joining Walden Renewables Jack was founder and CEO of Eolian Renewable Energy, a New England based wind development company. Eolian successfully developed several wind projects in some of the most challenging locations and was named a top 5 startup to watch. Prior to Eolian Jack was founder and CEO of Cape Systems, Ltd., which developed the first commercial biodiesel production facility in the Caribbean, and constructed the first grid-intertied solar PV systems in The Bahamas.



**Olga Borovkova, CFO**, before joining Walden Renewables, Olga was a director in the Investing and Lending group at Barclays Investment Bank, where she managed a multi-billion-dollar loan portfolio spanning renewables, power/utilities and natural resources. She also served as a voting member of the bank's capital commitment committee. Previously, Olga worked in Barclays' Commodities-Linked Finance group, where she structured numerous transactions such as heat-rate options, volumetric production payments and inventory monetizations.



**Ed Cherian, Managing Director** guides all aspects of Walden's growth, from greenfield development to permitting, to construction and operation. Prior to Walden, Ed served as VP of Development at Competitive Power Ventures, driving utility-scale development in PJM and ISO-NE. At General Electric Solar, Ed developed through COD over 40 solar projects. Prior to that Ed was the New England Development Director for Iberdrola Renewables (Avangrid), developing multiple utility-scale wind farms, including New Hampshire's first wind farm.

## New England Team

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**Dale Knapp**, Head of Development in New England.

Through-out his 20 years of professional experience in natural sciences and permitting, Dale has played a key role in the development and permitting of 17 operational wind projects, over 100 grid scale solar projects, and 15 high voltage transmission lines in New England alone. Dale will soon receive his Doctorate Degree from the University of New England at the end of 2022.



**Matt Kennedy**, Project Developer.

From his years as an environmental consultant, Matt brings expertise in project siting and permitting. In the past few years, Matt has played a key role in the development and permitting of over 50 utility-scale solar projects across Maine and Massachusetts. He holds a Bachelors Degree in Environmental Studies and Biology from Tufts University.



# Walden Team

## Management

<b>Henry Weitzner</b> Founder and CEO	<b>Jack Kenworthy</b> Founder and CDO	<b>Olga Borovkova</b> CFO	<b>Ed Cherian</b> Managing Director
PJM and Southeast Development	New England Development	Transmission and Interconnection	Operations, Finance and Control
<b>Jonathan Willson</b> Head of PJM and SE Development	<b>Dale Knapp</b> Head of New England Development	<b>Brad Pierson</b> Head of Transmission and Interconnection	<b>Bob Greene</b> Finance and Control
<b>Robert Evans</b> Developer	<b>Matt Kennedy</b> Developer		<b>JC Nierle</b> Operations Manager
<b>Thomas Hudzik</b> Developer			
<b>Michael Nenon</b> Developer			

**Walden's team has industry-leading expertise across the full spectrum of project origination, development, finance, structuring ,construction and operation.**





# Walden Value Proposition

Track record of success

Walden has been successfully building, financing and managing renewable energy projects in New England since 2011.

Well capitalized

Walden has solid access to capital and has demonstrated strong and consistent growth.

Established market presence

Walden has deep roots in the New England, with 10 projects currently under development across Maine and New Hampshire.

Positive community impact

Walden projects generate strong tax revenues in the community, create high-paying quality construction jobs in renewable energy, and benefit local landowners and businesses.

EPC and procurement

Walden contracts with best-in-class vendors for all major components and engages highly qualified EPC firms, ensuring timely, safe and efficient project execution.



## Walden partners with best-in-class companies

Construction /  
Environmental /  
Engineering Partners

**CIANBRO**

 **TRC**

 **Flycatcher**  
LANDUSE / SCIENCE / PEOPLE

 **DEPCOM  
POWER®**

Off-Take and Electricity  
Buying Partners

 **Microsoft**

 **PARTNERS  
HEALTHCARE**

 **NEW HAMPSHIRE  
Electric Co-op**

 **UMASS**

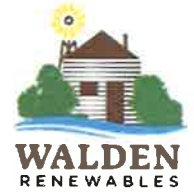
Equipment Partners



**SIEMENS**

 **CanadianSolar**

**Trina**solar

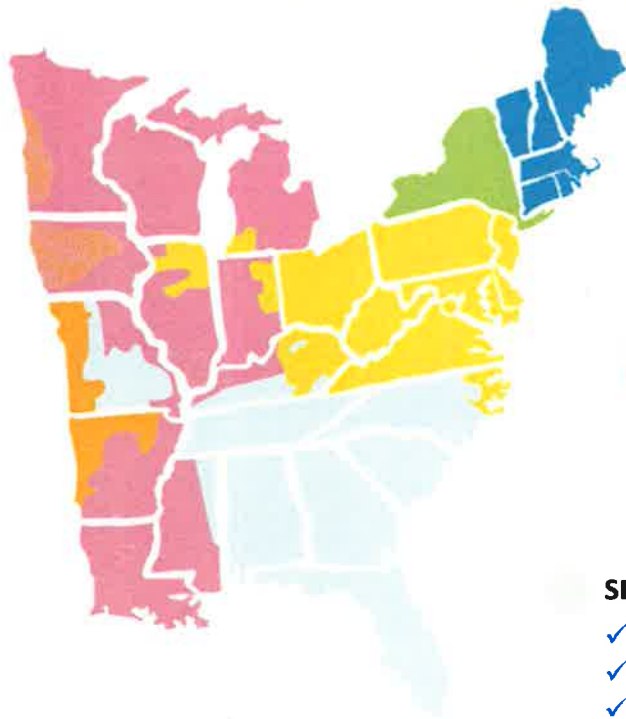


# Walden's Projects

**Walden has a pipeline of over 3,600 MW across 4 Power Markets**

**ISO-NE: 10 Projects, 364 MW**

- ✓ More modest sized projects given landscape and grid limitations
- ✓ The region has very strong regulatory support for green power and RPS goals.
- ✓ Challenges on the grid and environmental permitting have thinned out the competition, allowing Walden to use its expertise to develop the highest quality projects.



**PJM: 10 Projects, 970 MW**

- ✓ Region offers the most diversified revenue sources including capacity, RECs, and reactive power.
- ✓ As the largest RTO in the US, there is insatiable demand from C&I customers and outstanding liquidity to source highly credit worthy off-take.
- ✓ Most of Walden's projects are in energy intensive regions that will benefit from recent IRA legislation.

**MISO: 4 Projects, 819 MW**

- ✓ Large scale projects in a region that is poised to see explosive solar development.
- ✓ Growing demand from large C&I customers for off-take is pushing PPA prices higher.
- ✓ Projects offer multiple revenue sources including capacity and reactive power.

**SE: 4 Projects, 1,484 MW**

- ✓ Large scale projects in region with strong solar irradiance.
- ✓ Highly credit worthy off-take for long term busbar PPAs.
- ✓ Large, low risk projects creates highly financeable opportunities.

## Project Highlight #1: Antrim Wind 28.8 MW Antrim, NH

- Walden shepherded this complex project through a multi-year state level permitting review – to bring the environmental and economic benefits of the project to fruition.
- The electricity from this project was delivered to New Hampshire Electric Coop and Partner Healthcare, the largest operator of hospitals in the New England region.
- In close coordination with the EPC firm and our owner’s engineer, Walden maintained the highest standards of safety controls, including keeping workers safe and protecting the environment through a complex construction process.



- Walden secured broad public support for this project from environmental group such as The Nature Conservancy, New England Forestry Foundation and Sierra Club, as well as the host community.

## Project Highlight #2: Big Level Wind 90 MW Potter, PA

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- Walden permitted and installed the tallest onshore turbines to date in the US. At 667 feet to tip height, these turbines are essential to maximize the resource value from this moderate wind site.
- Walden overcame challenges in deploying latest generation turbine technology to satisfy regulators and the host communities.
- Walden developed Big Level quickly with enthusiastic support from the host community. The project is operational and generated significant community benefits.



- Walden won a competitive process to sell the output of this project to Microsoft under an innovative Proxy Generation swap that Walden helped make market standard.



## Project Highlight #3: Littlefield Solar - ME

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- Walden leases the Littlefield site from the Town of Wells. The project reinforced an outdated landfill cap, generating significant environmental, health and financial benefits to the community.
- Off-take for the project is spread over 15 small to large Maine based C&I customers, taking advantage of Maine's tariff rate net metering program.
- Walden managed construction of the project which reached COD in July '22. The EPC firm -- with strong oversight from Walden and our OE -- is meeting the highest standards for safety controls.



## Project Highlight #4: Hubbardston Solar - MA

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- Walden won a competitive RFP to sell virtual net metering credits to UMASS. This contract was one of the earliest tax equity compliant net metering credit contracts in the market, helping UMASS meet carbon reduction goals and locking in financing for other Walden solar projects.
- This project not only generates attractive tax payments to the community, but also helps fund a scholarship at UMASS.
- As an early project in the Massachusetts SREC regime, this project helped set the standard for best-in-class development.





# Select Pipeline Projects

**Walden has successfully grown its pipeline to over 3,600 MW across the Eastern US.**

	Project Name	State	RTO	MW	Technology	Site Control	IX	Permits	NTP
NTP- ready	Potter	PA	PJM	35	PV	100%	Complete	Complete	Q2 '23
	Ridgeway	PA	PJM	120	PV	100%	Complete	Complete	Q2 '23
	Leeds	ME	ISO-NE	20	PV+BESS	100%	Complete	Complete	Q2 '23
Late-stage	Madison	ME	ISO-NE	20	PV	100%	Complete	Complete	Q2 '23
	Squab	PA	PJM	90	PV	100%	Q1 '23	Pending	Q4 '23
	Walker	PA	PJM	80	PV	100%	Q1 '23	Pending	Q4 '23
	Mousam	ME	ISO-NE	20	PV	90%	Complete	Pending	Q4 '23
	Channel Cat	AL	SOCO	170	PV+BESS	100%	Q2 '23	Pending	Q2 '24
	Needmore	AL	SOCO	420	PV+BESS	100%	Q2 '23	Pending	Q2 '24
	Roxanna	AL	SOCO	245	PV+BESS	100%	Q2 '23	Pending	Q2 '24
	Nutes	NH	ISO-NE	20	PV	90%	Q2 '23	Pending	Q2 '24
	Goose	ME	ISO-NE	40	PV	50%	Complete	Pending	Q2 '24
	Jasper	MS	MISO-S	350	PV+BESS	90%	Q2 '23	Pending	Q3 '24
Mid-stage	Attala	MS	MISO-S	200	PV+BESS	100%	Q2 '23	Pending	Q3 '24
	Gator Point	MS	MISO-S	150	PV	90%	Q2 '24	Pending	Q3 '25
	Iron Mountain	MO	MISO-C	120	PV	100%	Q2 '24	Pending	Q3 '25
	Halo	WV	PJM	210	Wind	75%	Q2 '26	Pending	Q2 '26
	Clarke Run	PA	PJM	100	PV	75%	Q2 '26	Pending	Q2 '26
	Shelocta	PA	PJM	100	PV	75%	Q2 '26	Pending	Q2 '26
	Breezeway	PA	PJM	60	PV	100%	Q2 '26	Pending	Q2 '26
Early-stage	Oyster	ME	ISO-NE	30	PV	75%	Q1 '24	Pending	Q2 '26
	Iron Bridge	PA	PJM	100	Wind	100%	Q2 '26	Pending	Q2 '26
	Seward	PA	PJM	76.5	Wind	75%	Q2 '26	Pending	Q2 '26
	Ketchen	TN	TVA	204	Wind	75%	Q2 '26	Pending	Q2 '26



# MSDS REPORT

## MATERIAL SAFETY DATA SHEET

### SECTION 1- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PV Crystal silicon module

Company Identification: Changzhou Trina Solar Energy Co., Ltd.

Address: No.2 Trina Road, Trina PV Park, New District, Changzhou, Jiangsu, P.R.China213031

Postal Code: 213002

Telephone: +86-0519-85482008

Emergency Telephone number : +86-0519-85176110

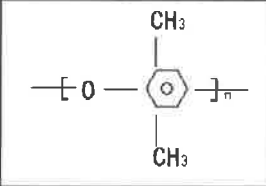
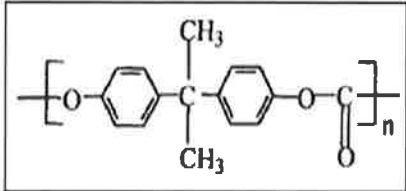
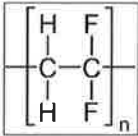
Fax: +86-0519-85187444

Mail address: mail.trinasolar.com

### SECTION2- COMPOSITION, INFORMATION ON INGREDIENTS

#### INGREDIENTS CONTENT:

Material Item	Chemical Name of Composition	Formula & Model
Frame	Aluminum	AL
	Alumina	AL <sub>2</sub> O <sub>3</sub>
	Manganese	Mn
Cell	Silicon	Si
	Phosphorus	P
	Boron	B
	Silicon nitride	Si <sub>3</sub> N <sub>x</sub>
	Silver	Ag
	Aluminum	AL

Junction-Box	Polyphenylene oxide (PPO)	
	Tin	Sn
	Copper	Cu
	Polyethylene (PE)	$n\text{CH}_2=\text{CH}_2 \rightarrow -[\text{CH}_2-\text{CH}_2]-$
	Polycarbonate (PC)	
Glass	Tin	Sn
	Tempered glass	SiO <sub>2</sub>
Silica Gel	Silicon substrate	(SiO <sub>2</sub> ) <sub>m</sub> • (H <sub>2</sub> O) <sub>n</sub>
	Silane coupling agent	KH550
Bus bar	Copper	Cu
	Tin	Sn
	Isopropyl alcohol	C <sub>3</sub> H <sub>8</sub> O
Back sheet	Polyvinylidene fluoride (PVDF)	
	Polyethylene terephthalate (PET)	-OCH <sub>2</sub> -CH <sub>2</sub> OCOC <sub>6</sub> H <sub>4</sub> CO-
	Polyethylene (PE)	$n\text{CH}_2=\text{CH}_2 \rightarrow -[\text{CH}_2-\text{CH}_2]-$
Laminate material	EVA	Ethylene vinyl acetate copolymer

SECTION3- HAZARDS IDENTIFICATION

Emergency Overview: warning, non-demolition, not exposed to flame or fire. There is the risk of explosion and burn under fire conditions.

Do not short-circuit, squeezing, burning, or removing the module.

Potential health hazards

Risk Categories: None

Invasive Ways: None

Environmental Hazards: None

Health Hazards: None

Explosion Hazard: Tempered glass has a 1/10000 explosion risk.

The inverter device does not meet the provision, the flaws on system design, the quality problem of the junction box, the hot spot effect will be the reason of spontaneous combustion of this product.

#### SECTION4- FIRST AID MEASURES

Eye contact: No damage found on eye contact, no special provisions.

Skin contact: No skin contact injury found. It is proposed to wash hands before and after touch back sheet. If molten polymer contacts skin, immediately cool it with cold water, and do not directly peel them from the skin, go to hospital for treatment by burns drugs.

Ingestion: No damage found, no special provisions.

Inhalation: No damage found, no special provisions. If you have overheating or fire hazard, be away from heat. Go to hospital if any discomfort.

#### SECTION5- FIRE FIGHTING MEASURES

In general: during normal operation, this product is not prone to burning.

Hazardous Combustion Products: CO, HF,

Extinguishing Media: The hydrogen produced under the using of water may be mixed with air to form an explosive mixture if the module is burning. For small fires, carbon dioxide, dry powder or foam extinguishing agent are preferred medium.

But they may not work to the burning module until the combustion module will be completely burned out. LITH-X (powdered graphite) or copper powder extinguisher, sand, dried, pulverized dolomite or soda ash can also be used, and these materials can be used as a smothering agent.

Extinguishing Note: transfer people to a safe area in the upwind air, wear respirators, protective gloves and fire fighting clothing. If large amounts are inhaled, give emergency medical treatment.

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**SECTION6- ACCIDENTAL RELEASE MEASURES**

Emergency treatment: solid normally, NA.

**SECTION7- HANDLING AND STORAGE**

Handling Precautions:

Outline

- 1, In strict accordance with the requirements of the specification to install modules, and are not free to install, maintain.
- 2, Do not strongly illuminate module artificially(artificial sunlight is unavailable)
- 3, The system DC voltage exceeds 100V, operation must be done by specialized electrician.
- 4, It is potentially dangerous to contact a voltage of 30V or above.
- 5, Junction boxes, cables, brackets, etc should be matched with modules during installation of electrical systems.
- 6, Installation of all accessories must follow safe working practices (other accessories must also comply with the security provisions of operation)
- 7, The installation should be in accordance with local, national and international standards.
- 8, Module installation should be operated by professionals.

Safe handling

- 1, Properly packed before installation of modules.
- 2, Do not directly holding the junction box to handle the modules
- 3, Not drop modules or obstacles fall on it.
- 4, Handle it gently, especially angular point.
- 5, Do not disassemble the modules and move any part of the modules or label after installation.
- 6, Do spray paint or stick other items on the back of the modules.
- 7, Do not drill on the glass and module border.
- 8, Do not place the module without bracket or not an unsafe place
- 9, The module cannot be used after glass is broken.
- 10, To operate with dry tool in the clean environment.

Install security

- 1, Do not allow the children to close during installation.
- 2, Module cannot be installed in high winds.

3, Appropriate Installation methods and safety equipment should be used in the installation site to prevent the falling of modules.

4, Do not touch the wire or connection port when the installation of the modules or the modules are exposed to the sunlight.

5, Do not wear metal jewelry during the installation.

6, Do not disconnect the line or unplug the connection plug when circuit is working.

#### Fire safety

1, Roof structures and installations that may affect the fire safety of the entire building, unreasonable installation will aggravate to the severity of the fire.

2, The modules should be installed on the fire isolation layer, in order to improve security

3, Module installation on the rooftop and ground should be the same, with insurance device and circuit fuse.

4, Do not install the modules near the storage equipment and place of flammable gas.

#### Electrical Installation

1, Avoid the risk of electric shock during installation, wiring, module operating.

2, The module of different specifications cannot used in the same array.

3, The open circuit voltage of module is less than the maximum voltage of standard system.

4, All of the modules no matter how much voltage should be grounding.

5, The cable is to be placed where the children and animals cannot touch.

6, Cables and junction boxes may overheat at high current.

7, Make sure junction box and wire can go through the short-circuit current.

8, Make sure the positive and negative polarity of the cable and terminal during connection.

9, Grounding line is provided.

#### Mechanical Installation

1, Fix the modules with the installation tools and special bracket to support modules

2, Make sure the module can still work carrying a certain load, which is not affected by the impact of the snow load or thermal expansion and contraction

3, Make sure that the modules can still work in the ambient temperature within the variable range of -40 to +80 °C / -40 to 176 °F

4, Off-grid power generation system installed in large areas of snow, require module position lower and bracket narrower

5, Providing install mounting holes for frame modules which can withstand a certain degree of mechanical strength.

6, All four position holes on the module are used for installation.

7, Be well-ventilated behind the module. (5 cm / 2 inch gap)

8, Be away from the other items behind the modules.

**Storage:**

Use wooden boxes (carton) packaging and store it in a cool, well-ventilated place, be away from heat and fire sources.

#### SECTION8-EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

Engineering Controls: NA

Eye protection: NA

Skin contact: NA under normal conditions, if the module is damaged, please wear appropriate protective gloves.

Clothing: NA under normal conditions, if the module is on fire and burst, please wear appropriate protective clothing.

Respirator: NA under normal conditions

#### SECTION9- PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Odor: None

Voltage: different specifications, different voltage

Weight: 19.5 kg

Solubility in water: insoluble in water

#### SECTION10- STABILITY AND REACTIVITY

Stability: Stable under normal storage and operating conditions.

Conditions to avoid: fire, high temperature, high humidity, salt spray

Substances to be avoided: strong oxidizing agents.

Hazardous decomposition products: fire conditions may produce hazardous decomposition products.

Hazardous Polymerization: No information available.

#### SECTION11- TOXICOLOGICAL INFORMATION

Acute poisoning: under normal conditions, the product will not cause any abnormal emergency injury

Irritation: None

#### SECTION12- ECOLOGICAL INFORMATION

Ecological toxicity: the proper use and disposal of the module will not cause harm to the environment. Disposal of waste modules, be away from the water, rain and snow.

#### SECTION13- DISPOSAL

Disposal: Should refer to national and local laws and regulations before disposal.

#### SECTION14- TRANSPORT INFORMATION

Dangerous Goods Code: No information

UN Number: information

Packing mark: no information

Packaging category: Z01

Packing method: No information available.

Transportation Note: Package should be complete before transportation, and loading should be safe. To ensure that the container does not leak, not fall, not damaged during transportation. Do not be together with oxidizing agents, alkalis, food chemicals. Goods should be anti-exposure, rain, anti-high temperature during transportation.

#### SECTION15- REGULATORY INFORMATION

Regulatory Information: Refer to local, domestic, EU / international regulations

#### SECTION16-OTHER INFORMATION

MSDS Preparation date: November 15, 2012

The information of this MSDS is just based on our current related information, which have been prepared only for the description of the goods health, safety and environmental requirements, to enable all interested parties to better understand and trust this product. This information is only available to you for consideration, study and confirmation. Some description of hazard prevention measures is not unique. Without any implied guarantees, description or expression

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