

CHK# 1962



A C O R N

ENGINEERING, INC.

Town of Windham Zoning Board of Appeals  
8 School Road  
Windham, ME04062

July 15, 2021

Subject: Zoning Board of Appeals Variance Request  
Solar Array Development – Freeman Hill

Dear Members of the Board:

Acorn Engineering, Inc. has been retained by Green Lantern Solar, an established renewable energy leader in New England, to provide civil engineering and permitting services for a proposed solar array development on a landlocked parcel located off Roosevelt Trail (Route 302). Due to the existing lot configuration and its lack of legal street frontage, the purpose of this application is to request a variance from the Town's dimensional standard requirement of 150 feet of public road frontage required for development in the Commercial 2 (C-2) zoning district. Given the parcel is landlocked, there is a practical difficulty to development on this lot with strict adherence to the existing dimensional standards. We believe this request meets the seven criteria listed in Section 1106.D under the Land Use Ordinance justifying the dimensional standard variance.

The 12.24-acre parcel is primarily located within the C-2 district with a portion of the rear property lying within the RL-Residential Limited zoning districts and will abide by a minimum 50-foot setback where it abuts residential uses. The site would be accessed by a private 50-foot access easement/right-of-way linking the site to Roosevelt Trail. To facilitate this renewable energy project, the variance from 150' of public street frontage to 0' of public frontage would not functionally affect the project as the site design will still feature a deeded access point with a hammerhead turnaround on site to accommodate emergency and maintenance apparatus. The private right-of-way would be privately maintained and seldom travelled upon.

Accompanying this letter is a package of materials intended to comply with the ZBA Application Checklist and requirements. If you have any questions regarding this application or the completeness of the materials, please contact us within the next five days.

Sincerely,

Samuel J. Lebel, P.E.  
Project Manager  
Acorn Engineering, Inc.

William H. Savage, P.E.  
Principal  
Acorn Engineering, Inc.

July 12, 2021

To Whom It May Concern,

As the landowner of Map 21, Lot 3 as identified on an ALTA/NSPS Land Title Survey prepared by Northern Survey Engineering (NORSE), I hereby authorize Acorn Engineering to request an application on behalf of Green Lantern Solar in order to request a variance before the Windham Zoning Board of Appeals for the minimum public street frontage dimensional standard.

TMC Holdings LLC  
6 Dominion Road  
Windham, ME 04062

Printed: Matthew Wright  
Signature: Matthew Wright  
Date: 7/12/21

Title: President

**APPLICATION FOR APPEAL  
TO WINDHAM ZONING BOARD OF APPEALS  
LAND USE APPLICATION**

**APPLICANT**

NAME: Green Lantern Solar [Developer]  
ADDRESS: PO Box 658, Waterbury, VT 05676  
TELEPHONE: (207)939-8615

**OWNER**

NAME: TMC HOLDINGS LLC [Landowner]  
ADDRESS: 6 DOMINION RD., WINDHAM, ME 04062  
TELEPHONE: \_\_\_\_\_

ADDRESS OF PROPERTY OR LOCATION 994 ROOSEVELT TRAIL / FREEMAN HILL  
MAP # 21 LOT # 3 PROPERTY IS ZONED C2-COMMERICAL/RI-RESIDENTIAL  
LOT WIDTH: 879 FT LOT DEPTH: 597 FT LOT AREA: 533,174  
EXISTING USE OF PROPERTY: UNDEVELOPED LAND

	<u>TYPE OF APPLICATION</u>
<u>X</u>	Variance from Ordinance
_____	Conditional Use
_____	Appeal from decision of Code Enforcement Officer
_____	Home Occupation 2

**PROPOSED USE:** Please describe in detail what you wish to do and what the use of any proposed structures will be. (Attach a letter of explanation if necessary :)

Construction of a solar panel array, access road, and associated infrastructure.

Why is Board of Appeals approval required?

To obtain a variance from the dimensional standard requirement of 150 ft. public road frontage due to the existing landlocked parcel.

Amount of variance required, if any: \_\_\_\_\_ 150 ft.

TYPE OF SEWAGE DISPOSAL SYSTEM: Present NA Proposed \_\_\_\_\_

STRUCTURAL DIMENSIONS: (Exterior length and width)

Existing: NA ft. By \_\_\_\_\_ ft. Number of Stories \_\_\_\_\_

Proposed: NA ft. By \_\_\_\_\_ ft. Number of Stories \_\_\_\_\_

NUMBER OF ROOMS IN PROPOSED STRUCTURE: NA

IS ADDITIONAL PLUMBING CONTEMPLATED? Yes \_\_\_\_\_ No X

If yes, please describe: \_\_\_\_\_

IF REQUIRED, HAS PLANNING BOARD APPROVAL BEEN OBTAINED?

Yes \_\_\_\_\_ No X Not Required \_\_\_\_\_

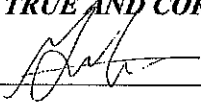
A location map and a scaled site plan must accompany this application. The site plan must show dimensions of the property, location of all buildings, yards, parking spaces and septic systems, and all existing and proposed setbacks.

An application fee of \$400.00 for residential appeals as well as for non-residential or multi-family is required upon application submission. *If the Code Enforcement Office determines that ordinary and customary expenses associated with review of the development are higher than the \$400.00 fee, then the applicant shall be billed and shall pay to the Town prior to the final approval said expenses, including, but not limited to cost associated with notification of abutters, advertising of public meetings, and all the time dedicated to review of the development.*

NOTE: Applicant or his/her representatives must attend board meetings. If a request is needed to be tabled, the applicant or his/her representative must attend meeting to ask to be tabled. (11/21/91).

**The right of any variance from the terms of this chapter granted by the Board of Appeals shall expire if the work or change permitted under the variance is not begun within six (6) months or substantially completed within one (1) year of the date of the vote by the Board.**

***I CERTIFY THAT THE INFORMATION CONTAINED IN THIS APPLICATION AND IN ITS SUPPLEMENTS IS TRUE AND CORRECT.***

Applicant's Signature  Date 07/15/2021

## ***Statement to Town of Windham Board of Appeals***

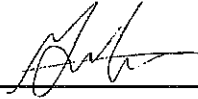
I acknowledge submitting my application to the Board of Appeals and signing this statement that I the undersigned:

State the proposed plan is to scale and reflects the true representation of the proposal requested.

I further understand that if the Board finds that it does not, then the Board has the right to table my application until I have met the requirements.

***Applicants***

***Signature***



***Date*** 07/15/2021



**A C O R N**

**ENGINEERING, INC.**

Town of Windham Zoning Board of Appeals  
8 School Road  
Windham, ME04062

July 15, 2021

Subject: ZBA Conditional Use Question Response

**Question:** Property Value. The proposed use will not depreciate the economic value of surrounding properties.

**Response:** The proposed development will be a low-volume, low traffic, low-height development with the panels treated as structures including a vegetated buffer and 50' setback along the northwest property line where the project abuts residential uses.

**Question:** Wildlife Habitat. The proposed use will not damage significant wildlife habitat or spawning grounds identified by the Maine Department of Inland Fisheries and Wildlife or by the Town of Windham's Comprehensive Plan.

**Response:** A professional wetland scientist and natural resource firm surveyed the site in early 2021 and it was determined that there are no identified natural resources such as wetlands or critical wildlife habitat on site. Various natural resources exist in the vicinity of the project, off site, which will not be negatively impacted by this project. Furthermore, fencing design will accommodate wildlife passage for small animals.

**Question:** Botanical Species. The proposed use will not damage rare or endangered botanical species as identified by the Maine Department of Conservation or by the Town of Windham's Comprehensive Plan.

**Response:** There are no mapped botanical species by the State or Town, nor identified by the natural resource investigation by Flycatcher LLC.

**Question:** Potable Water

- (a) The proposed use has access to potable water,
- (b) The proposed use will not burden either a groundwater aquifer or public water system.

**Response:** Not applicable. Water is not necessary.

**Question:** Sewage Disposal. The proposed use has adequate capacity to dispose of sewage waste. A change from one use to another use must show that either:

- (a) The existing sewage system has adequate capacity for the proposed use, or
- (b) The existing system will be improved, or a new system will be installed to provide adequate waste disposal capacity.

**Response:** Not applicable. Sewer is not necessary.

**Question:** Traffic. The proposed use has adequate sight distance as established by current Maine DOT Highway Entrance and Driveway Rules.  
Sec. 500 Performance Standards Land Use Ordinance Town of Windham

**Response:** The development will generate little to no daily traffic. The private right-of-way will abut Roosevelt Trail at a 90-degree angle with sufficient sight distance in each direction meeting local and state regulations. At this location, Roosevelt Trail features a relatively minor slope with wide shoulders and a straight horizontal alignment which are all ideal for large sight distances.

**Question:** Public Safety. The proposed use will not overburden police, fire and rescue services, as determined by response time, accessibility to the site of the proposed use, and numbers and types of emergency personnel and equipment presently serving the community.

**Response:** No burden is anticipated as part of this project. In the event of an emergency, a large hammerhead turnaround is proposed on site to facilitate the reversal of a fire apparatus.

**Question:** Vibration. The proposed use will not produce inherently and recurrently generated vibrations that exceed a peak particle velocity greater than 2.0 at the closest "protected structure," as defined by the Maine Department of Environmental Protection.

**Response:** The project will not create vibrations in exceedance of a peak particle velocity of 2.0 as measured at the closest protected structure.

**Question:** Noise. The proposed use shall meet the noise standards in Section 812.S. of the Site Plan Review Ordinance.

**Response:** Given the equipment area will be approximately 300' from the nearest house, the maximum decibel levels outlined in Section 812.S will be complied with.

**Question:** Off-Street Parking and Loading. The proposed use meets the parking and loading standards of Section 812.C. Site Plan Review.

**Response:** Not applicable. No dedicated parking is required or proposed.

**Question:** Odors. The proposed use will not emit noxious or odorous matter in such quantities as to be offensive at the lot boundaries.

**Response:** The project will comply with this standard.

**Question:** Air Pollution. No emission of dust or other form of air pollution is permitted which can cause any damage to health, to animals or vegetation, or other forms of property, or which can cause any excessive soiling at any point, and in no event any emission, from any activity permitted composed of any solid or liquid particles in concentration exceeding three-tenths (0.3) grain per cubic foot of the

conveying gas or air at any point.

**Response: The project will comply with this standard.**

**Question: Water Pollution.** No discharge at any point into any private sewage disposal system or stream or into the ground of any materials in such nature or temperature as to contaminate any water supply or otherwise cause the emission of dangerous or objectionable elements is permitted.

**Response: The project site will be seeded with meadow grasses to attenuate stormwater runoff. As defined by the Maine DEP, the panels do not constitute impervious area. The site's runoff will not be discharged to the sewer or stream, nor will there be notable concentrations of contaminants. The project will comply with Maine DEP best practices for solar projects.**

**Question: Erosion and Sediment Control.** The proposed use will not cause water pollution, sedimentation, erosion, nor contaminate any water supply, nor reduce the capacity of the land to hold water, so that a dangerous or unhealthy condition may result.

**Response: Clearing and construction will be subject to Maine DEP standards under a Maine Construction General Permit and/or Stormwater Permit-By-Rule. The project will not result in erosion or sedimentation, neither during or after construction.**

**Question: Hazardous Material.** No use shall for any period of time discharge across the boundaries of the lot wherein it is located toxic and noxious matter in concentrations so that a dangerous or unhealthy condition may result.

**Response: The project will not store on site nor release hazardous materials.**

**Question: Zoning District and Performance Standards.** The proposed use meets the applicable zoning district standards in Section 400 and the applicable performance standards of Section 500. Town of Windham Land Use Ordinance Sec. 500 Performance Standards 5 – 11.

**Response: With the exception of the public street frontage, the proposed use meets all applicable Town zoning and performance standards. Should the Zoning Board of Appeals grant the practical difficulty variance, the proposed project would then apply for a Site Plan Permit with the Planning Board.**

**Question: Solid Waste Management.** The proposed use shall provide for adequate disposal of solid wastes. All solid waste must be disposed of at a licensed disposal facility having adequate capacity to accept the project's wastes.

**Response: The project would not generate solid waste. Any de minimis waste would be disposed of at a licensed disposal facility off site.**



Thank you for your review. Please let us know if you have any questions or comments relating to these items.

Sincerely,

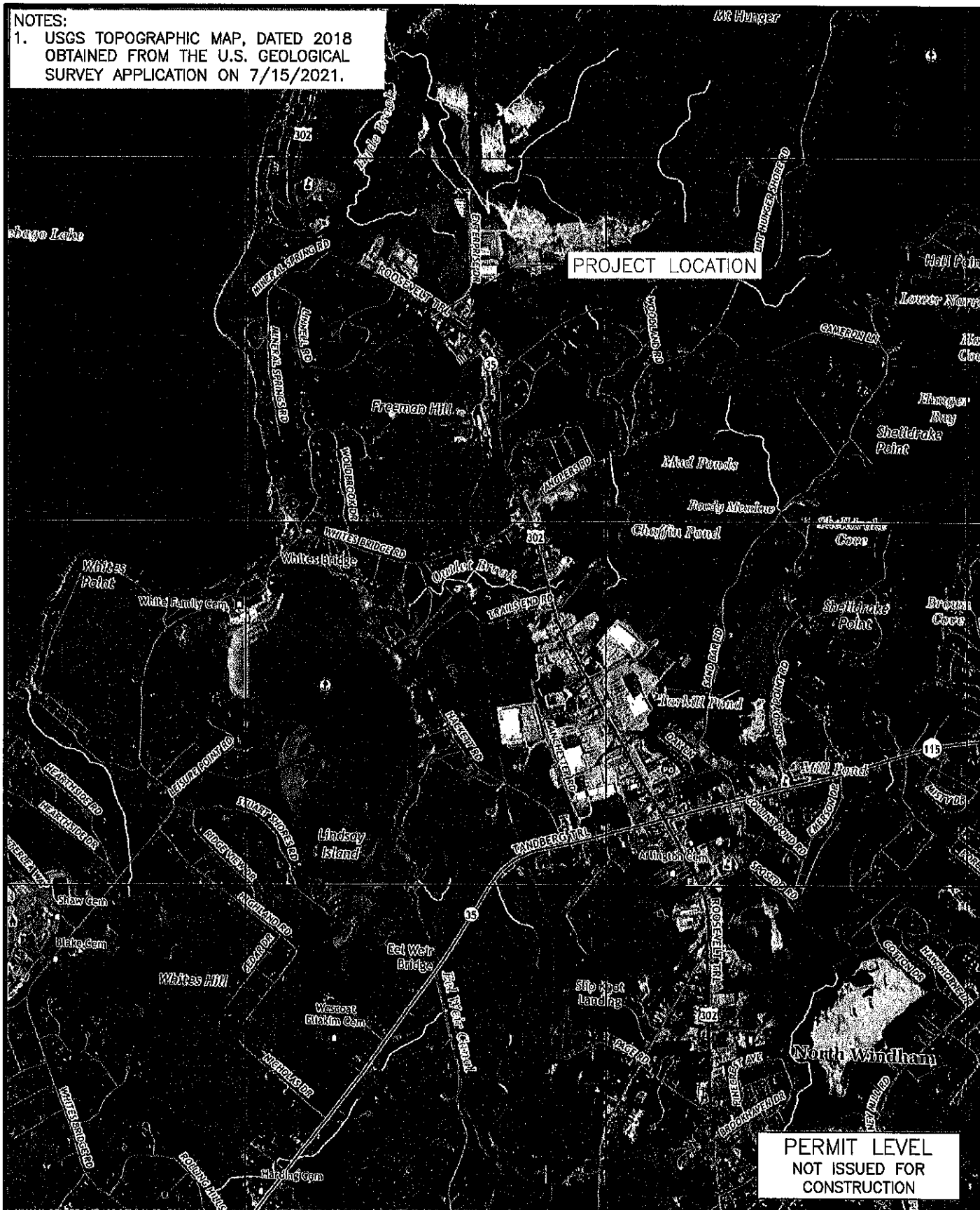
A handwritten signature in cursive script, appearing to read "Sam Lebel".

Samuel J. Lebel, P.E.  
Project Manager  
Acorn Engineering, Inc.

A handwritten signature in cursive script, appearing to read "Will Savage".

William H. Savage, P.E.  
Principal  
Acorn Engineering, Inc.

1. USGS TOPOGRAPHIC MAP, DATED 2018  
OBTAINED FROM THE U.S. GEOLOGICAL  
SURVEY APPLICATION ON 7/15/2021.



PERMIT LEVEL  
NOT ISSUED FOR  
CONSTRUCTION

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

DRAWING NO.  
VICINITY

FILE:	1136.4_CML
JN:	1136.4
SCALE:	1"=2500
DESIGN BY:	SJL
DRAWN BY:	AWG
CHECKED BY:	WHS



ACORN ENGINEERING, INC. P.O. BOX 3372  
PORTLAND, MAINE 04101 (207) 776-2655

**DRAWING NAME:**

### SITE LOCATION MAP

**PROJECT NAME:**

ROOSEVELT TRAIL SOLAR

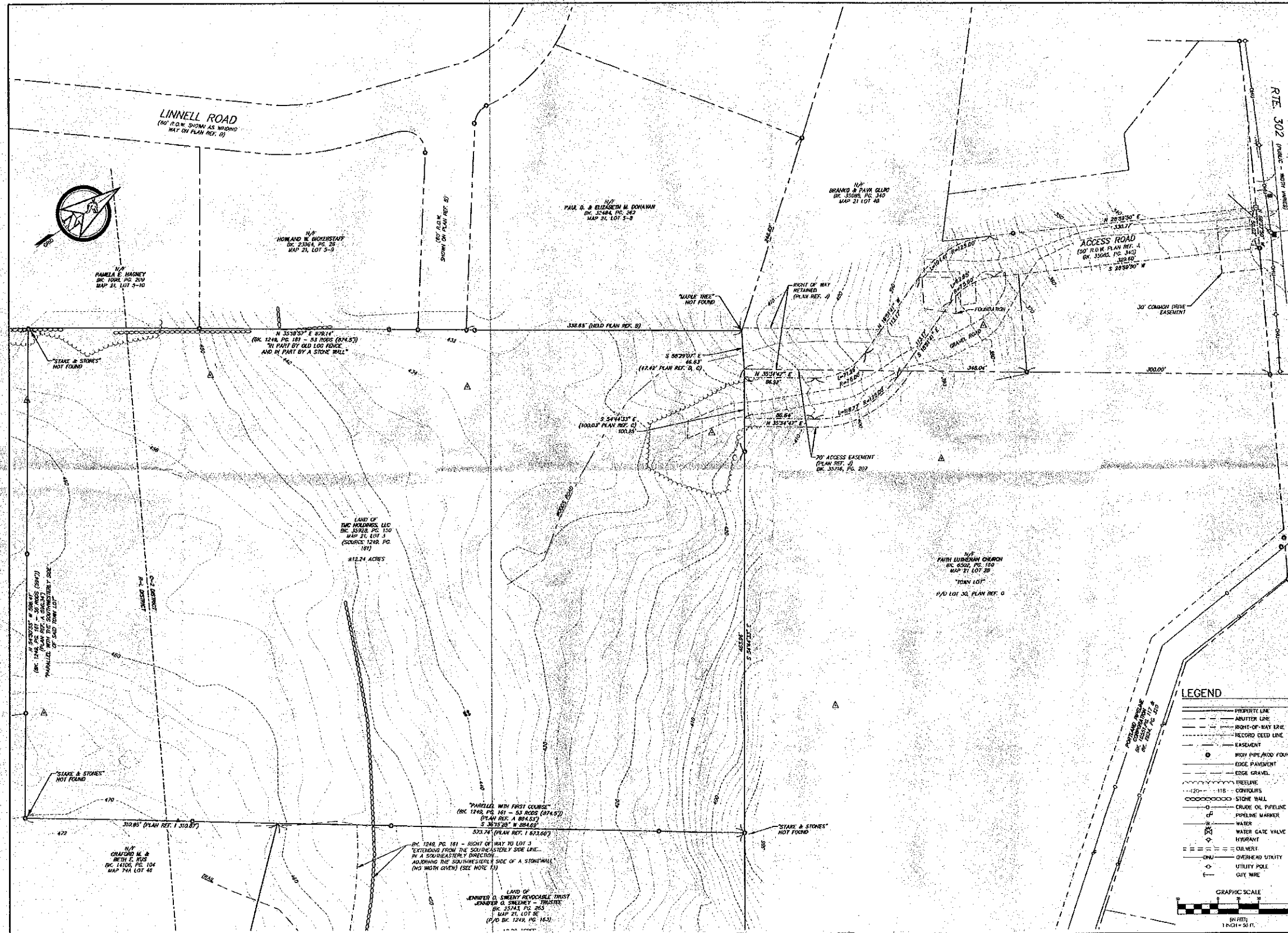
CHEN J

GREEN LANTERN SOLAR  
PO BOX 658 WATERBURY, VT 05676

ISSUED FOR  
PRE APP

BY  
DATE  
WHS  
4/18/03

**007-2742**



SEAN P. PIERCE, PLS 2017

DATE: 03/15/21  
STATUS: AS SHOWN  
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION  
ANY ALTERATIONS AUTHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK.

**NORSE**  
NORTHERN SURVEY ENGINEERING

RECORD OWNER:  
TMC HOLDINGS, LLC  
BOOK 35522, PAGE 50

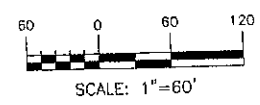
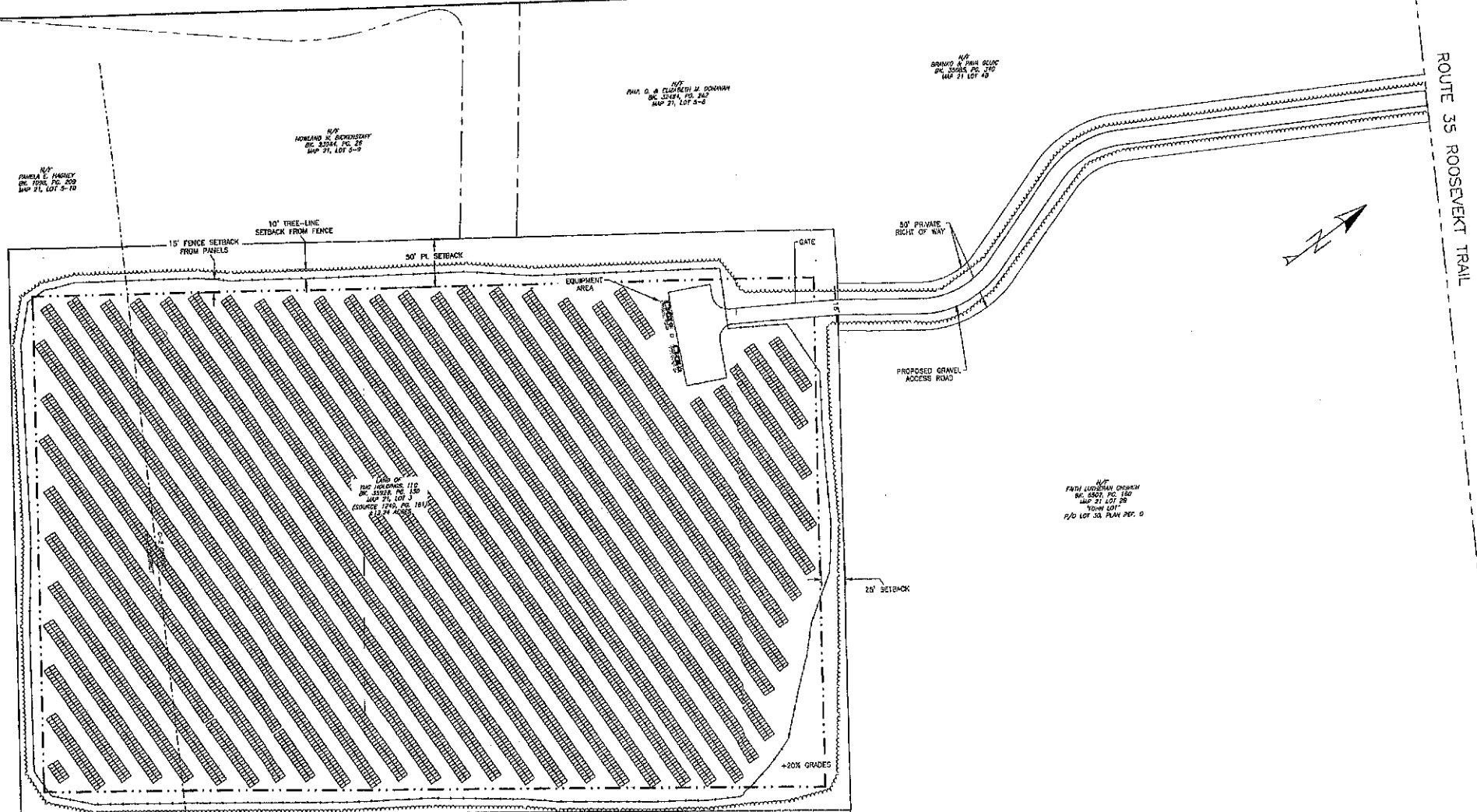
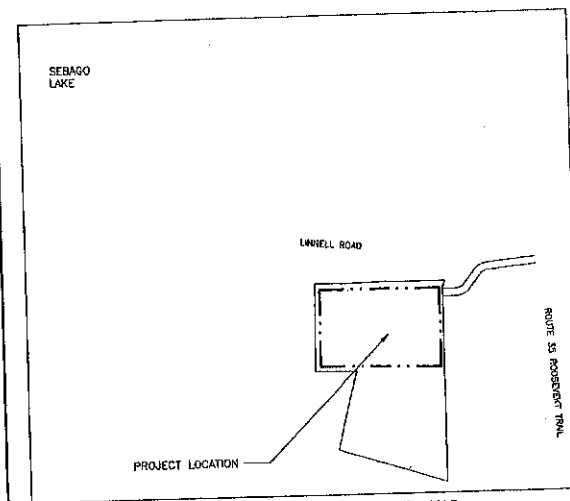
EXISTING CONDITIONS DETAIL  
OF:  
PROPOSED SOLAR DEVELOPMENT  
884 ROOSEVELT TRAIL, FREDMAN HILL  
WINDHAM, VERMONT 05642

GREEN LANTERN DEVELOPMENT  
884 ROOSEVELT TRAIL, FREDMAN HILL  
WINDHAM, VERMONT 05642

DRAWN	CHECKED
SPP	DJP
PROJECT NO.	DATE
21016	03/15/21
SHEET SIZE	SCALE
24" X 36"	1" = 50'

SHEET 2 OF 3

SPACE AND BULK STANDARDS		
	REQUIRED	PROPOSED
C-2 ZONE DIMENSIONAL STANDARDS:		
MIN. LOT AREA	NONE	12.24 AC
MINIMUM FRONTAGE	150 FT	0 FT
MIN. PRINCIPAL BUILDING FRONT SETBACK	10-20 FT	N/A
MIN. ACCESSORY BUILDING FRONT SETBACK	30-40 FT <sup>1</sup>	N/A
MIN. SIDE SETBACK	10 FT	25 FT
MIN. REAR SETBACK	10 FT	25 FT
RESIDENTIAL ZONING BUFFER	50 FT <sup>2</sup>	50 FT
<sup>1</sup> ACCESSORY BUILDING FRONT SETBACK INCLUDES PRINCIPAL BUILDING SETBACK PLUS AN ADDITIONAL 20 FT AT A MINIMUM.		
<sup>2</sup> LOTS ON WHICH NON-RESIDENTIAL USES ARE LOCATED SHALL REQUIRE A FIFTY FOOT BUFFER FROM ALL PROPERTY LINES THAT ADJUT A RESIDENTIAL ZONING DISTRICT.		



PERMIT LEVEL  
NOT ISSUED FOR  
CONSTRUCTION

ISSUED FOR	BY
EBA REVIEW	DATE
SITE PLAN	
ROOSEVELT TRAIL SOLAR	
WINDHAM, ME 04992	
GREEN LANTERN SOLAR	
PO BOX 658 WATERBURY, VT 05676	
DRAWING NO.	
C-10	