

**PLAINFIELD ZONING BOARD OF ADJUSTMENT
NOTICE OF DECISION**

Joseph Paduda
29 Barker Road
Plainfield NH 03781

Case 21-01

You are hereby notified that the appeal by **Joseph Paduda** for special exception #24 Approved Solar Energy System to establish two ground mounted solar arrays (sun tracker type) on property described as #29 Barker Road (map 213 lot 214) has been **granted** by the affirmative vote of at least three members of the Zoning Board of Adjustment. In reaching this decision, the Zoning Board has relied on the representations made in the application, and testimony received at the June 14th public hearing.

As part of its review of this application the board made the following findings:

- 1) The lot is a relatively large Village Residential lot (3.8 acres) and is well screened.
- 2) No clearing of trees is anticipated, and the arrays are not expected to have significant effect on neighbors.
- 3) The application satisfies the general standards for granting a special exception found in section 5.6II of the zoning ordinance and the specific criteria found in section 3.18 Solar Energy Systems.

Approval Conditions:

- 1) A vegetative buffer suitable to maintain a visual screen from the array will be maintained along the property side and rear lines.
- 2) Any significant change to the array either in size, condition of or effectiveness of screening, as determined by the Zoning Administrator, will require a new hearing.



Richard Colburn, Chairman
Zoning Board of Adjustment

Date: *18 June 2021*

Attachment: list of master electrician subcontractors

Primary Electricians:

Alexander Cherington
NH: 2121M
VT: EM-02270
ME: MSS60018642
2209 Sawnee Bean Road
Thetford Center, VT 05075
(802) 356-5795

Gray Electric
30 Plateau Acres
Bradford, VT 05033
NH Lic # 0387C (Corporate License)
Robert Kruse - Master Electrician
(802) 222-1592 /
kruserobert25@gmail.com

Alternate electrical subcontractors:

Chris Snider
NH Lic # 13893M
Simple Energy
112 N. Main St.
West Lebanon, New Hampshire 03784
(603) 298-7200

OR

Richard Electric
NH Lic # 8366M
PO Box 999
Wilder, Vermont 05088
(802) 295-3894

OR

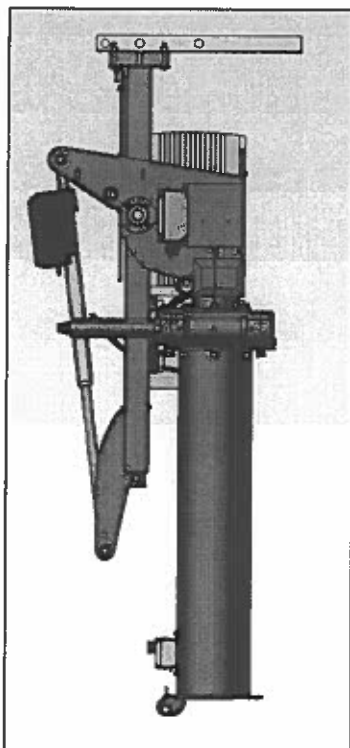
Reginald Cramer
Cramer Electric Co., Inc.
NH Lic # 4063M
VT Lic # EM-2325
461 Lake Morey Rd, #3
Fairlee, VT 05045
(802) 333-4144

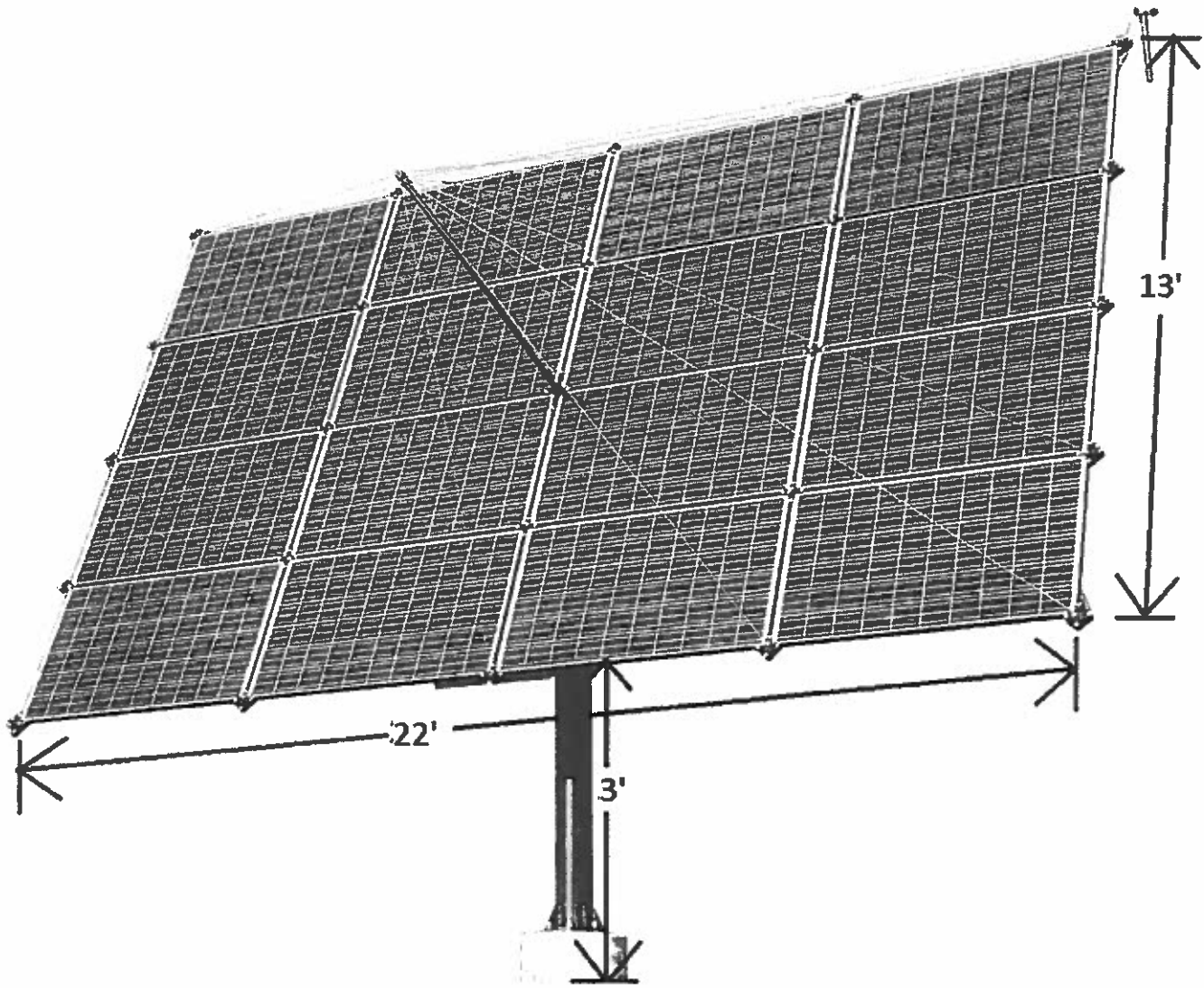
TECHNICAL SPECIFICATION

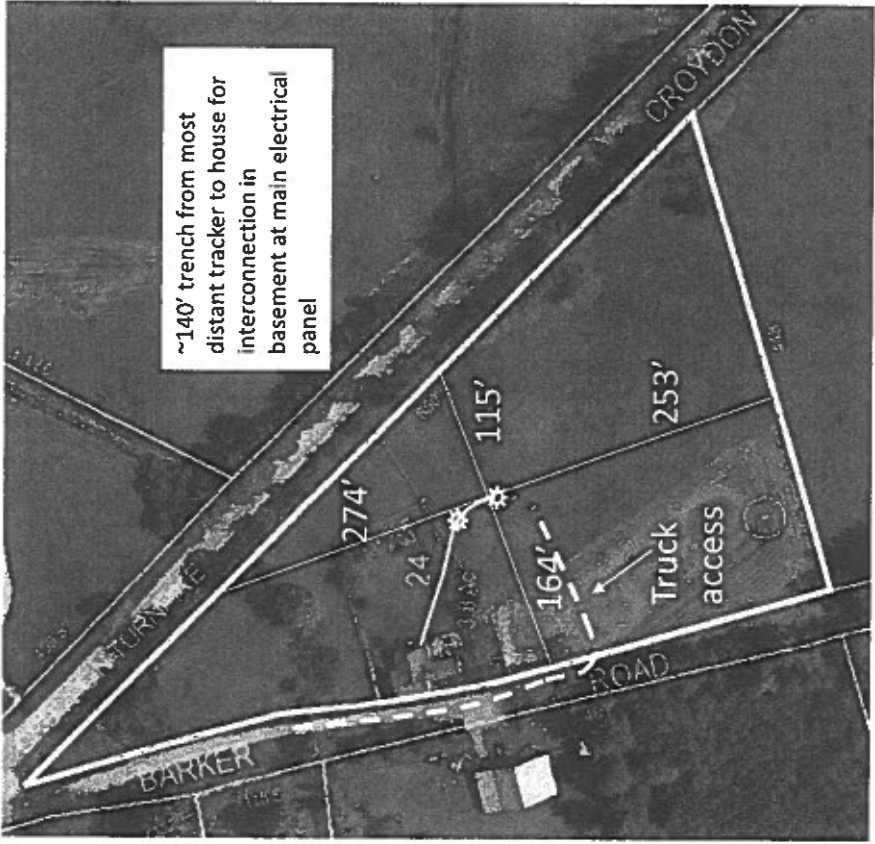
Residential

Commercial

Output	6.0kW DC, 240 V AC single-phase	4.08 kW DC, 208/480 V AC three-phase
Inverter (single tracker)*	Fronius Primo 6.0-US (6 kW AC)	n/a
Inverter (multi-tracker)*	Fronius Primo 6.0-US (6 kW AC)	SolarEdge SE10KUS (10 kW AC) and SE20KUS (20 kW AC)
Modules*	16 LG380A1C-V5 PV Modules	16 CanadianSolar C56P-255P (255 W)
Optimizer*		8 SolarEdge P600 (600W)
Power monitoring	or Fronius Monitoring portal (website)	
Tracking type	Dual axis with automatic wind stow (>20 mph)	
Drive system	LINAK LA37 sealed electric linear actuator (IP66, maintenance free), Kinematics Manufacturing ZKE9C sealed electric slew drive zero-backlash (IP66, maintenance free)	
Control system	Solaflect Tracking Controller utilizing NREL Solar Position Algorithm, network enabled	
Materials	Powder coated steel, reinforced concrete	
Dimensions	Height 17 ft, swing radius 11.5 ft	
Maximum wind speed[^]	105 MPH Ultimate Wind Speed	
Codes and standards	NEC, UL, NEMA, CE, FCC	
Patents	Patents and patents pending	
*Flexibility in module and inverter choice, please inquire at info@solaflect.com		
[^] Inquire about specifics at info@solaflect.com		







STRUCTURAL GENERAL NOTES - APPLICABLE TO ALL CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS

A. GENERAL REQUIREMENT:

1. PSE recommends that the construction be performed by a licensed contractor who has at least 5 years of remodeling experience with similar projects. Contractor shall submit a list of similar projects to the owner before proceeding with construction.
2. Furnish all labor, materials, and equipment necessary to complete the work shown or inferred by these drawings.
3. Where construction details are not shown or noted for any part of the work, such details shall be the same as for similar work shown on the drawings.
4. Notes and details on the drawings take precedence over the general notes and typical details in case of conflict.
5. Pipes, ducts, sleeves, chases, etc. shall not be placed in slabs, beams, or walls unless specifically shown or noted.
6. Locate and protect underground or concealed conduit, plumbing or other utilities where new work is being performed.
7. The contract drawings and specifications represent the finished structure and do not indicate methods, procedures or sequence of construction. The contractor shall take necessary precautions to maintain and insure the integrity of the new and any existing structures during construction. The design stresses shall not be exceeded during construction based on the age of each element. Neither the owner nor Architect/Engineer will enforce safety measure regulations. Contractor shall design, construct and maintain all safety devices, including shoring and bracing for the new and any existing structures and shall be solely responsible for conforming to all local, state and federal safety and health standards, laws and regulations.
8. Obtain prior written approval for any changes to the drawings.
9. The contractor shall review and compare the structural drawings with all other Construction Documents, such as Architectural, Mechanical and Electrical drawings, specifications, etc. Do not scale drawings. The contractor shall verify dimensions, elevations and all information. Report, in writing, any inconsistencies, errors, or omissions to the Architect/Engineer of record before proceeding with the work.
10. All existing constructions, if any, are shown schematic only. Contractor is responsible to verify actual conditions and allow for them in his bid. Notify the Architect/Engineer, in writing, in case of any discrepancy between actual conditions and what is shown on the structural drawings before proceeding with the work.
11. See Architectural, Mechanical, Electrical and other drawings for embedded items.
12. Shop drawings:
 - a. Any detail on the shop drawing that deviates from the Construction Documents shall be marked with the note "This is a change"
 - b. Shop drawing submittals processed by the Structural Engineer are not Change Orders.
 - c. Shop drawings shall be submitted to the Architect/Engineer prior to fabrication and construction regarding all structural items including:
 - + Bamboo roof framing plan
 - + All bamboo roof, wall and floor panels
 - + Bamboo trusses
13. All communication shall be in writing. No verbal communications, decisions, instructions or approvals shall be valid.

B. FOUNDATION

1. The building shall bear on a soil with minimum allowable bearing capacity of 1500 PSF. contractor to verify. Due to the lack of specific geotechnical information for this site, a geotechnical soil investigation is recommended. PSE is not responsible for any future defects resulting from unreported condition mitigating the above assumption.
2. Soft soil shall or fill material shall be removed and replaced with competent granular engineering fill. The new fill shall be compacted in 8" layers to gain 98% of its maximum dry density according to ASTM D-698 standard proctor, and be capable of supporting the above bearing capacity.
3. Footing shall be stepped as required to maintain minimum required frost depth, FD, below finished grade.
4. When the finished crawl space elevation is lower than the outside finished grade, or when it is required by the Geotechnical Investigative report, or the building department, provide 4 inch diam perforated drain pipe below the top of the footing. Encase the pipe in 18X18 inches free-drain crushed stone and fabric at the perimeter of the crushed stone.

C. INSPECTION:

1. All construction shall be inspected by the building officials according to the above Code.
2. It is recommended that the owner or contractor hire Precision Structural Engineering or other Qualified Licensed Inspectors to provide inspection during construction.

D. CONCRETE:

1. MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE IS 4000 PSI.
2. All concrete work shall conform to the American Concrete Institute's Standard Building Code Requirements for Structural Concrete, ACI 318, in the above Code. Place concrete in accordance with ACI 301.
3. Materials shall comply with:
 - (a) Cement, ASTM C150 Type I or II
 - (b) Water, Potable.
 - (c) Aggregate, ASTM C33
4. All exterior concrete work shall contain the proper admixtures to obtain 5% to 7% Air Entrainment. All interior concrete work shall contain 2% to 4% Air Entrainment.
5. Reinforcing Steel:
 - (a) All reinforcing steel shall be ASTM A615 Grade 60.
 - (b) Where welding of rebar is required by these drawings, steel shall be pre-heated or steel grade 80-W, ASTM A706 shall be used.
 - (c) Bars marked continuous and all vertical steel shall be lapped 55 bar diameters at splices UO/N on the drawings.
 - (d) Vertical bars shall be doweled to supporting members with the same size and spacing of reinforcement shown in the drawing or general notes.
 - (e) All reinforcing in grade beams shall be continuous. Lap top steel at midspan. Lap bottom steel at supports.
 - (f) All reinforcing bars shall be in the correct place, tied and secured prior to concrete placement. Use chairs, spacers and sand plates as required.
6. Erection:
 - (a) All concrete is reinforced concrete unless specifically called out as "Unreinforced". Reinforce all concrete not otherwise shown with some steel as in similar sections or areas.
 - (b) Standard concrete cover of bars unless otherwise noted shall be:
 - (i) Where earth formed: 3 inches.
 - (ii) Board formed then permanently exposed to earth or weather: 2 inches.
8. Slump shall not be more than 4 inches.
9. Water/Cement ratio shall not exceed 0.45.
10. All concrete shall be consolidated with mechanical vibrators.
11. The unit of pour for foundation walls and footings shall not exceed 80 linear feet in any one direction.
12. Construction joints shall be detailed and keyed.
13. No Aluminum or galvanized steel items shall be in contact with the reinforcing steel.
14. Practice for Curing Concrete, ACI 308, ACI 318 and as approved by the Engineer.
15. When air temperature is above 80 degrees Fahrenheit, Hot Weather Concrete, ACI 308R shall apply. When the average air temperature is below 40 degrees Fahrenheit, Cold Weather Concrete, ACI 308R shall apply.

E. ABBREVIATIONS:

AB	ANCHOR BOLT	FD	FROST DEPTH	PSF	POUND PER SQUARE FOOT
ADDL	ADDITIONAL	FF	FLOOR SHEATHING	PT	PRESSURE TREATED
ALT	ALTERNATE	FN	FINISHED FLOOR	REF	REFERENCE
APA	AMERICAN PLYWOOD	FE	EDGE FINISHING	REN	ROOF SHEATHING
ASSOC	ASSOCIATION	FN	FIELD/INTERMEDIATE NAILING	REIN	EDGE NAILING
ARCH	ARCHITECTURAL	FTG	FOOTING	RFT	RAFTERS
BLKC	BLOCKING	GALV	GALVANIZED	SCHD	SCHEDULE
BN	BOUNDARY NAILING	HORZ	HORIZONTAL	SM	SIMILAR
BOF	BOTTOM OF FOOTING	ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	SN	WALL SHEAR NAIL
CJ	CONSTRUCTION JOINT OR CONTROL JOINT	LGST	LIGHT GAUGE STEEL	SPEC	SPECIFICATION
CL	CENTER LINE	MAX	COLD-FORMED STEEL	SW	SHEAR WALL
CLR	CLEAR	MFR	MANUFACTURER	TD	TYPICAL DETAILS
CONT	CONTINUOUS	ND	NUMBER	T&G	TONGUE & GROOVE
DM	DIMENSIONS	OC	ON CENTER	TN	TOENAIL
DWG	DRAWING	OH	OPPOSITE HAND	TOP	TOP OF FOOTING
E	EXISTING	OSD	ORIENTED STRAND BOARD	TOW	TOP OF WALL
EA	EACH	OSV	ON SITE VERIFY	TYP	TYPICAL
EF	EACH FACE	PL	PLATE	UBC	UNIFORM BUILDING CODE
EL	ELEVATION	PSE	PRECISION STRUCTURAL ENGINEERING	UO/N	UNLESS OTHERWISE NOTED
EMBED	EMBEDMENT			VERT	VERTICAL
EQ	EQUAL			W/	WITH
ES	EACH SIDE			W/O	WITHOUT
EW	EACH WAY			WEN	WALL EDGE NAIL



Project

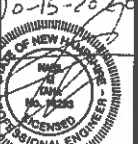
FOUNDATION WALL ASSY

See 111-1000-101

Client

SOLALECT ENERGY

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