



VILLAGE OF ORLAND PARK

14700 Ravinia Avenue
Orland Park, IL 60462
www.orlandpark.org

Meeting Agenda

Plan Commission

Louis Stephens, Chairman

*Commissioners: Judith Jacobs, Paul Aubin, Nick Parisi, John J. Paul,
Laura Murphy and Dave Shalabi*

Tuesday, July 25, 2017

7:00 PM

Village Hall

CALLED TO ORDER/ROLL CALL

APPROVAL OF MINUTES

[2017-0045](#) Minutes of the July 11, 2017 Plan Commission Meeting

Attachments: [July 11, 2017 PC Minutes](#)

PUBLIC HEARINGS

[2017-0441](#) 15221 Cottonwood Court - Patel Solar Panels, Installation of 15.18 kW Solar Array as part of an Environmental Clean Technology (ECT) Review

Attachments: [Site Map](#)
[Patel_Proposed Plans](#)

NON-PUBLIC HEARINGS

OTHER BUSINESS

[2017-0046](#) Memo: New Petitions & Appearance Review

Attachments: [7-25-17 Plan Commission Memo](#)

ADJOURNMENT

DATE: July 25, 2017

REQUEST FOR ACTION REPORT

File Number: **2017-0045**
Orig. Department: **Development Services Department**
File Name: **Minutes of the July 11, 2017 Plan Commission Meeting**

BACKGROUND:

BUDGET IMPACT:

REQUESTED ACTION:

VILLAGE OF ORLAND PARK

*14700 Ravinia Avenue
Orland Park, IL 60462
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Meeting Minutes

Tuesday, July 11, 2017

7:00 PM

Village Hall

Plan Commission

Louis Stephens, Chairman

*Commissioners: Judith Jacobs, Paul Aubin, Nick Parisi, John J. Paul,
Laura Murphy and Dave Shalabi*

CALLED TO ORDER/ROLL CALL

The meeting was called to order by the Plan Commission Chairman, Mr. Louis Stephens, at 7:00 p.m.

Present: 5 - Chairman Stephens; Member Aubin; Member Parisi; Member Paul, Member Shalabi

Absent: 2 - Member Jacobs, Member Murphy

APPROVAL OF MINUTES**2017-0045 Minutes of the July 11, 2017 Plan Commission Meeting**

A motion was made by Commissioner Paul, seconded by Commissioner Shalabi to approve the minutes of the June 27, 2017 Plan Commission.

APPROVED

Aye: 5 - Chairman Stephens, Member Aubin, Member Parisi, Member Paul and Member Shalabi

Nay: 0

Absent: 2 - Member Jacobs and Member Murphy

PUBLIC HEARINGS**2017-0431 Carz N More - Special Use Permit**

MAZZA: Staff presentation made in accordance with written staff report dated July 11, 2017.

AUBIN: Swore in the petitioner Ricardo Rodriguez of Orland Park, Illinois

RODRIGUEZ: The presentation was good in covering all the details.

STEPHENS: Are you in agreement with all the conditions?

RODRIGUEZ: Yes.

PAUL: Has there ever been an issue with the previous facility?

MAZZA: Yes, the Police Department provided information on some violations related to unregistered vehicles on the premises which have all been resolved. This was why the Police Department was eager to speak with Mr. Rodriguez for the Special Use Permit. A meeting took place where information was provided to Mr. Rodriguez that if he is not holding up his end of the bargain, the Special Use permit could be rescinded meaning he would lose the opportunity to run that motor vehicle services in that location.

PAUL: So it sounds like it has been resolved.

MAZZA: Yes.

SHALAB: Based on previous commercial leasing experiencing in that 70th Court corridor, I have found that some of the mechanical work ends up getting done outside. Oak Forest homes are very close by and have expressed frustration in the past in automotive work being done outside. Secondly, parking has also become an issue. In your presentation you can see that there are vehicles on 70th Court being parked and double-stacked on both sides, 70th Court is a fairly narrow street. We should be very cautious that mechanical work is not being done outside. I am aware that if that is the case, it may rescind their permit. We also need to ensure parking isn't being hindered, and we are not causing a disruption to the residential neighbors that are within 250 feet. How many feet is it?

MAZZA: Its about 600 feet by my measurement.

AUBIN: Mr. Maaza, do the conditions that are attached to this motion cover any reservations the Commission might have?

MAZZA: We believe so. In addition, the Police Department has given extra scrutiny to this area especially in terms of these conditions today. The Police Department is aware of this project and is planning on gearing up their visits to this area to ensure compliance.

STEPHENS: I have nothing at this moment. At this point, we'll recommend a motion.

STEPHENS:

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated July 11, 2017,

And

I move to recommend to the Village Board approval of a Special Use Permit for Carz N More to locate a motor vehicle service facility at 15642 S. 70th Court, subject to the following conditions:

- 1) That no new or used automobile sales of any kind are allowed on premises;
- 2) That all work is conducted indoors;
- 3) That garage doors facing residential areas remain closed at all times except for the exchange of vehicles;
- 4) That vehicles parked outside for more than five (5) business days are considered outdoor storage and will require additional screening per Village requirements;
- 5) That no more than eight (8) vehicles are parked on premises at any time;

- 6) That no unlicensed an/or unregistered cars may be on the premises at any time;
- 7) That a triple basin is installed and inspected by the Village;
- 8) That the violation of any of these stated conditions or any Village of Orland Park statute may result in the revocation of the Special Use Permit associated with this project.

PARISI: Second.

RECOMMENDED FOR APPROVAL

Aye: 5 - Chairman Stephens, Member Aubin, Member Parisi, Member Paul and Member Shalabi

Nay: 0

Absent: 2 - Member Jacobs and Member Murphy

NON-PUBLIC HEARINGS

OTHER BUSINESS

2017-0046 Memo: New Petitions & Appearance Review

STEPHENS: I would like to make a comment regarding the hiring recommendation I made at the June 27th meeting regarding Nectarios Pittos. It was intended for the position for Planning Division Manager and not for Assistant Director of Development Services. I offer my apologies to our staff member Ed Lelo, who is currently serving as interim Assistant Director of Development Services and does an excellent job in that position.

ADJOURNMENT

STEPHENS: This meeting is adjourned at 7:12 p.m.

REQUEST FOR ACTION REPORT

File Number: **2017-0441**
Orig. Department: **Development Services Department**
File Name: **15221 Cottonwood Court - Patel Solar Panels, Installation of 15.18 kW Solar Array as part of an Environmental Clean Technology (ECT) Review**

BACKGROUND:

QUICKFACTS

Project

15221 Cottonwood Court - Patel Solar Panels, Installation of 15.18 kW Solar Array as part of an Environmental Clean Technology (ECT) Review
2017-0441 / AR-17-00436

Petitioner

Dr. Dhaval Patel

Purpose

The purpose of this petition is to install and maintain a roof-mounted solar panel system at a single-family residence located at 15221 Cottonwood Court.

Requested Actions: Appearance Review (Environmental Clean Technology)

Project Attributes

Address: 15221 Cottonwood Court

P.I.N.(s): 27-18-104-043-0000

Parcel Size: 23,040 SF

Building Size: 3,365 SF

Comprehensive Plan Planning District: Centennial Planning District

Comprehensive Land Designation: Single Family Residential

Existing Zoning: R-1 Residential District

Existing Land Use: Single Family Home

Surrounding Land Use:

North: R-1 Residential District - Single Family Home

South: R-1 Residential District - Single Family Home

East: R-1 Residential District - Vacant

West: R-1 Residential District - Single Family Home

Preliminary Engineering: A structural engineers report was submitted with this petition, which concluded that the roof structure can safely support the weight of the proposed solar panels.

PLANNING OVERVIEW AND BACKGROUND

Section 6-314.C of the Land Development Code requires that the petitioner seeking a renewable energy or environmental clean technology system first obtain an Environmental Clean Technology (ECT) review from the Plan Commission. Subsequent to such a review, this project will follow the standard development review process. A review will next take place at the Development Services and Planning Committee and then a final review and decision from the Village Board of Trustees.

On December 19, 2016, the petitioner received Board approval to install a geothermal renewable energy system in the front yard of the same house as the current petition.

PROJECT DESCRIPTION & CONTEXT

The petitioner is proposing to install and maintain 15.18 kW interactive solar array, comprised of forty-six (46) photovoltaic (PV) solar panels at a single family home located in the Arbor Pointe Subdivision. The solar panels will be located on the south and east facing gabled rooftops of a single-family residence located at 15221 Cottonwood Court. Energy captured by the proposed solar panels will be used for general household purposes, providing an overall general reduction in electricity costs for the homeowner. The solar panel system also includes an "Ironridge XR-100" racking system, inverters and other electrical service components.

The petitioner does not request any variances for this project.

The recommendation motion includes the following conditions:

1. That all building code related items shall be met;
2. That all building permits shall be obtained prior to construction;
3. That all utility conduits and systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

SITE PLAN

The petitioner submitted a plan set ("Plan and Construction Set") prepared by Ailey Solar Electric., dated 05/19/2017 detailing the location, dimensions and materials to be used for the installation of the proposed solar panels. The solar panels (collectively referred to as an array) will be located on the east and south-facing roofs of a single family house.

The proposal is for a 15.18 kW, grid-tied photovoltaic (PV) installation, comprised of (24) twenty-four "Panasonic 330W" modules (panels) arranged in four (4) groupings. The total area of the array will occupy approximately 840 SF, or 27% of the approximately 3,100 SF roof area. The array will be supported by a flush mounted racking system, which is a low-profile system that connects to roof rafters with structural screws.

Two (2) "Solaredge Inverters" will be used to convert incoming Direct Current (DC) to Alternating Current (AC) before entering the building. DC disconnects will be located at each inverter. All ground-level utilities will be screened from view from neighboring properties and from the street. Additional screening may be required after installation is complete to ensure adequate screening has been provided.

DETAILED PLANNING DISCUSSION

As a component of sustainability and stewardship, one of the goals of the Village's Comprehensive Plan is to reduce the dependence on non-renewable resources by "support(ing) private and public infrastructure upgrades that meet local energy demand using renewable sources (wind, solar, biomass/fuel, geothermal, fuel cells etc.)." The proposed project supports this and other sustainability goals of the Comprehensive Plan.

Section 6-314.E.1 of the Land Development Code permits the installation of solar panels on residential rooftops via an Environmental Clean Technology review provided that:

1. Solar panels do not increase the visual height of the building;
2. Solar panels do not extend beyond the edge of the parapet or roof; and
3. Solar panels are in line with the plane of the roof and shall not be attached to chimneys.
4. That no more than seventy-five percent (75%) of a residential rooftop may be covered by PV collectors or arrays.
5. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties, roadways or public right-of-ways.

ITEMS 1 - 4

The arrays are located on east and south facing rooftops to maximize solar reception, inset from roof eaves. The arrays will be in line with the plane of the roof, are not attached to any chimneys and will not increase the visual height of the building. The proposed array is approximately 840 SF in area while the rooftop is approximately 3,100 square feet, equaling 27% rooftop coverage.

ITEM 5

As there is a neighboring property in line with the solar panels on the south building elevation, the petitioner and contractor were asked to provide assurance that "concentrated solar radiation or glare shall not be directed onto nearby properties".

The petitioner subsequently provided the Village with a letter and documentation from the project contractor stating that in their professional experience, none of the solar arrays being planned for Mr. Patel's property should pose a solar reflection or glare risk to any of the neighbors, including the south facing array and the neighbor directly to the south. For additional assurance, they included a number of documents:

- A photo of the Patel home and the property to the south;
- A scale plan drawing showing the expected direction of reflected sunlight on the Summer Solstice (the highest point in the year the sun will appear);
- A scale plan drawing showing the expected direction of reflected sunlight on the Winter Solstice (the lowest point in the year the sun will appear).

The neighboring property with the most direct view of the array is to the south; the array would be approximately 60-feet from this property's main house. The provided scaled drawings showing the expected direction of reflected sunlight on the summer solstice (highest point in the year of that the sun appears) and winter solstice (lowest point in the year of that the sun appears) were provided by the petitioner's contractor. The drawings suggest that while solar panels will face the neighboring property, the angle at which they will be installed will preclude any direct solar reflection or glare on to the adjacent house.

The plan set submitted by the petitioner indicate that all of the Environmental Clean Technology

review criteria for this project has been met.

Overall, the project conforms to the Village's Comprehensive Plan, Land Development Code and policies for this area.

Land Use / Compatibility

The proposed land use is compatible with the R-1 Residential District and the Comprehensive Plan vision for this property.

Lot Coverage

No change to lot coverage has been proposed.

Mechanicals/Utility Conduits

All utility conduits and systems related to the solar energy system shall not be visible from the street and from neighboring residential properties. Additional screening may be required, as determined by the Development Services Department.

BUDGET IMPACT:

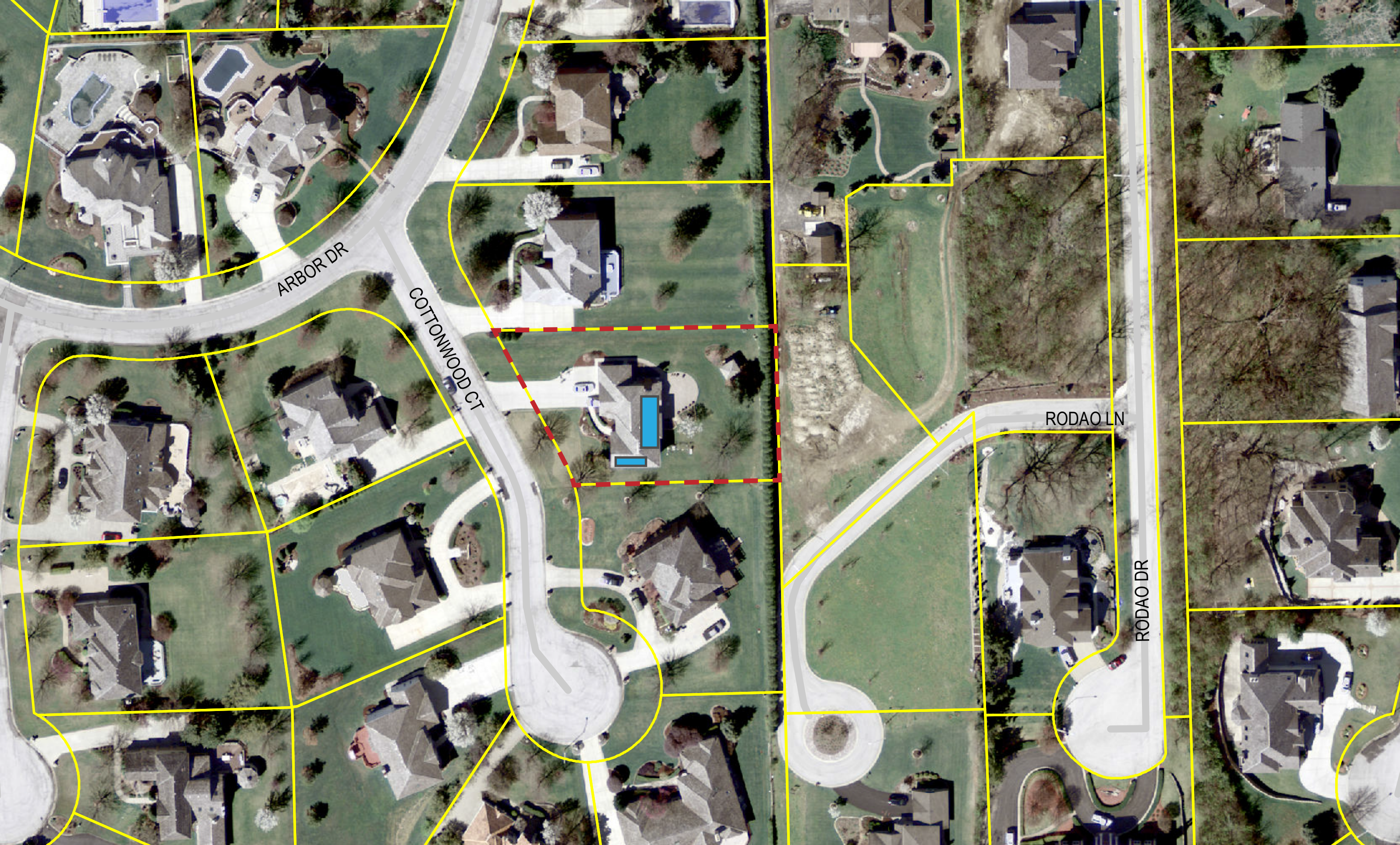
REQUESTED ACTION:

I move to accept as findings of fact of this Plan Commission the findings of fact set forth in this staff report, dated July 25, 2017,

And

I move to recommend to the Village Board to approve the Environmental Clean Technology review for a roof-mounted solar energy system at 15221 Cottonwood Court as depicted on the plan set "Plan and Construction Set" prepared by Ailey Solar Electric, dated 05/19/2017, subject to the following conditions:

1. That all building code related items shall be met;
 2. That all building permits shall be obtained prior to construction;
 3. That all utility conduits and systems related to the solar energy system shall not be visible from any adjacent street and from neighboring residential properties;
 4. That additional screening of any utility conduits and systems related to the solar energy system may be required after installation has been completed, as determined by the Development Services Department.
-



ARBOR DR

COTTONWOOD CT

RODAO LN

RODAO DR

John Martin

Structural Engineering, Inc.
Mokena, Illinois 60448

9221 April Lane

Phone (708) 479-8133

Dhaval Patel
15221 Cottonwood Court
Orland Park, Illinois 60462

1 May 2017
Job #17-079

**RE: 15221 Cottonwood Court, Orland Park, Illinois
Visual Inspection of Roof Structure to Support Photovoltaic Solar Panels**

On Tuesday, April 25, 2017 I went to the above-referenced site and made a visual inspection of the roof structure. The purpose of the inspection was to assist in the determination as to whether or not the roof can support the weight of proposed photovoltaic solar panels.

The building in question is a two-story, single-family residence. The roof is "stick-built" with 2x8 rafters spaced at 16" o.c. The maximum rafter span is approximately 14'-6". The roofing is cedar shakes. I have also reviewed product information for the proposed solar panels and the proposed solar panel layout, which is attached to this report for reference. My calculations indicate that the solar panels weigh approximately 2 ½ PSF.

Based on my observations and calculations it is my opinion that the roof structure can safely support the weight of the proposed solar panels.

This report is based on the visual inspection of the area of the structure as described above. We cannot guarantee that all problems have been discovered and/or resolved. Our recommendations represent our opinion as to the best solutions to the problems presented based on the information that we currently possess. No other warrantee is given nor implied. We should be contacted immediately if conditions are discovered to be other than as described in this report or if there are any questions about our recommendations.

We appreciate the opportunity to provide this inspection and report for you. If you have any questions about this report or are in additional need of our services, please feel free to call me.

Respectfully submitted,
John Martin Structural Engineering, Inc.
License No. 184-002643

John M. Gorski, President

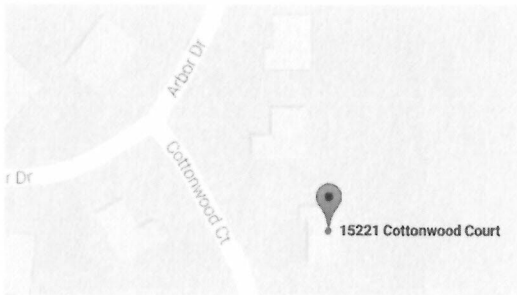


SOLAR PV INSTALLATION PROJECT

REFERENCED CODES AND ACTS

**15221 Cottonwood Court, Orland
Park, IL 60467**

**PLAN AND CONSTRUCTION SET
05/19/2017**



PROJECT SUMMARY:

- 15.18 kW Grid Interactive Solar Array
- Panasonic (46) 330W Modules
- 1 Solar Edge SE7600A-US Inverter and 1 Solar Edge SE5000A-US Inverter, IEEE-1547 AND UL-1741 COMPLIANT
- Ironridge XR-100 racking, 90° and 180° azimuth
- Inverter output: 240V, 1 ϕ , 3W
- Building Service: 200A, 240V, 1 ϕ , 3W

SHEET INDEX:

[PROJECT SUMMARY:](#)

[ARRAY AND RACKING PLAN - OVERVIEW](#)

[ARRAY AND RACKING PLAN - EAST ROOF](#)

[Aerial View](#)

[ARRAY AND RACKING PLAN - EAST ROOF](#)

[ARRAY AND RACKING PLAN - EAST ROOF](#)

[ARRAY AND RACKING PLAN - SOUTHROOF](#)

[EAST ELEVATION](#)

[SOUTH ELEVATION](#)

[SINGLE LINE DIAGRAM](#)

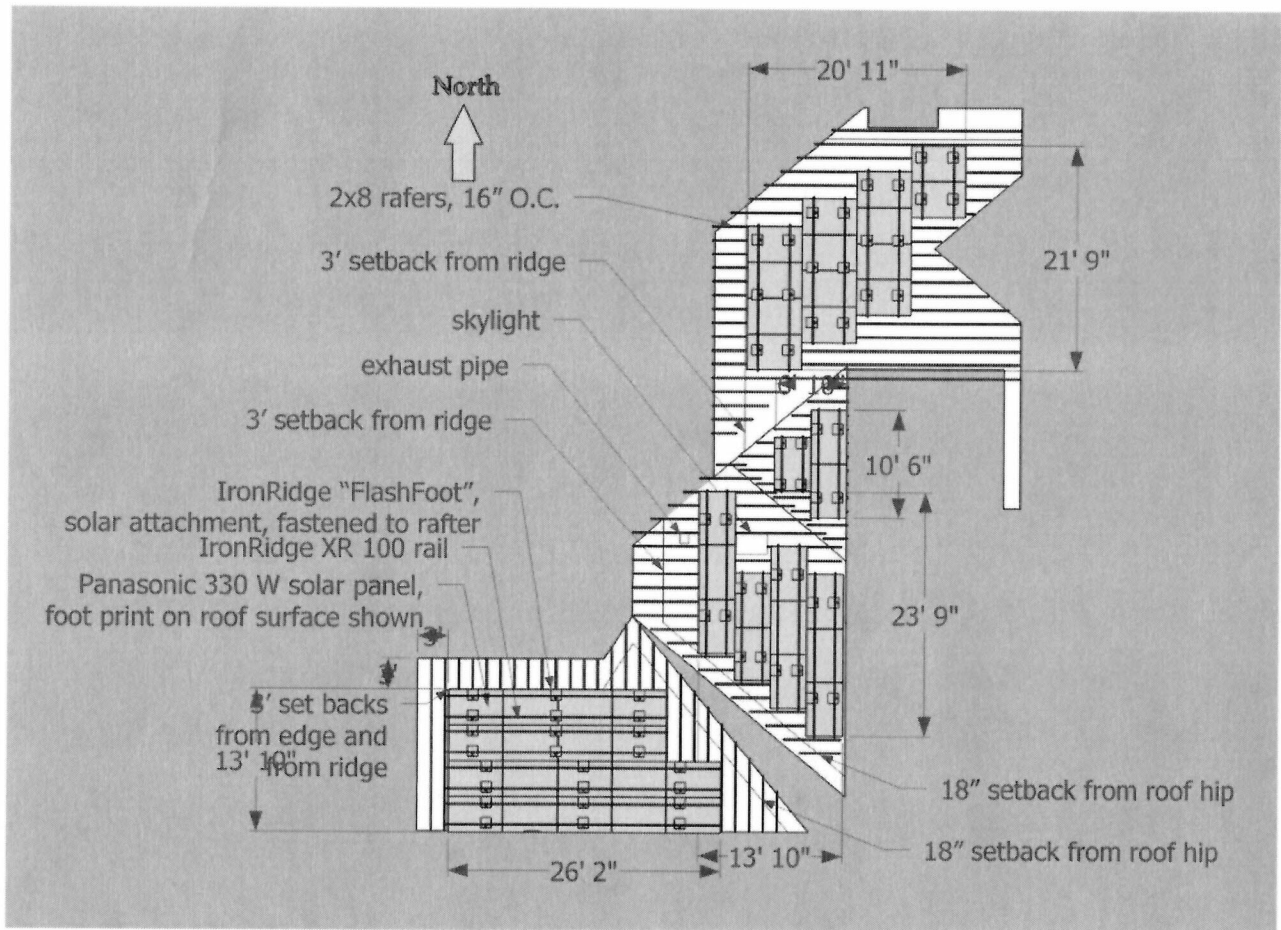


PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467

SHEET NUMBER: 1 VERSION: 5/16/2017 Drawn: JL-M Checked: DB

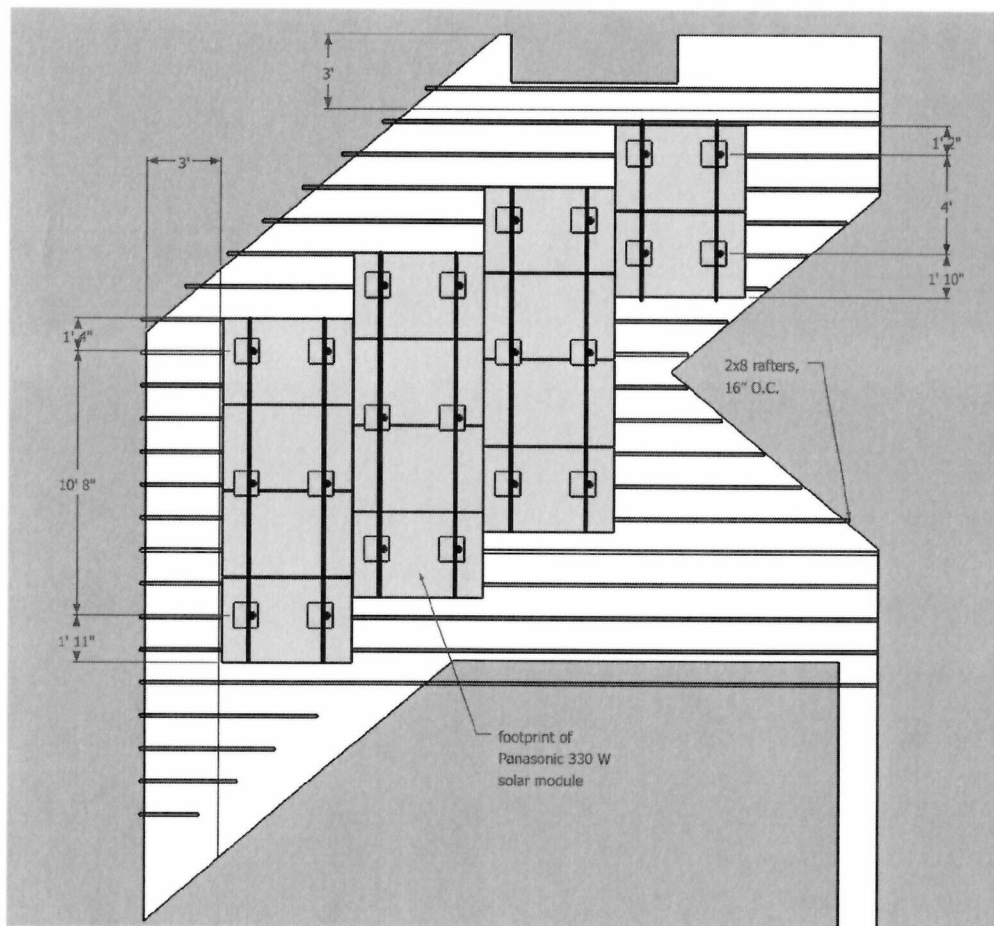
Ailey Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@ailaysolar.com

ARRAY AND RACKING PLAN - OVERVIEW



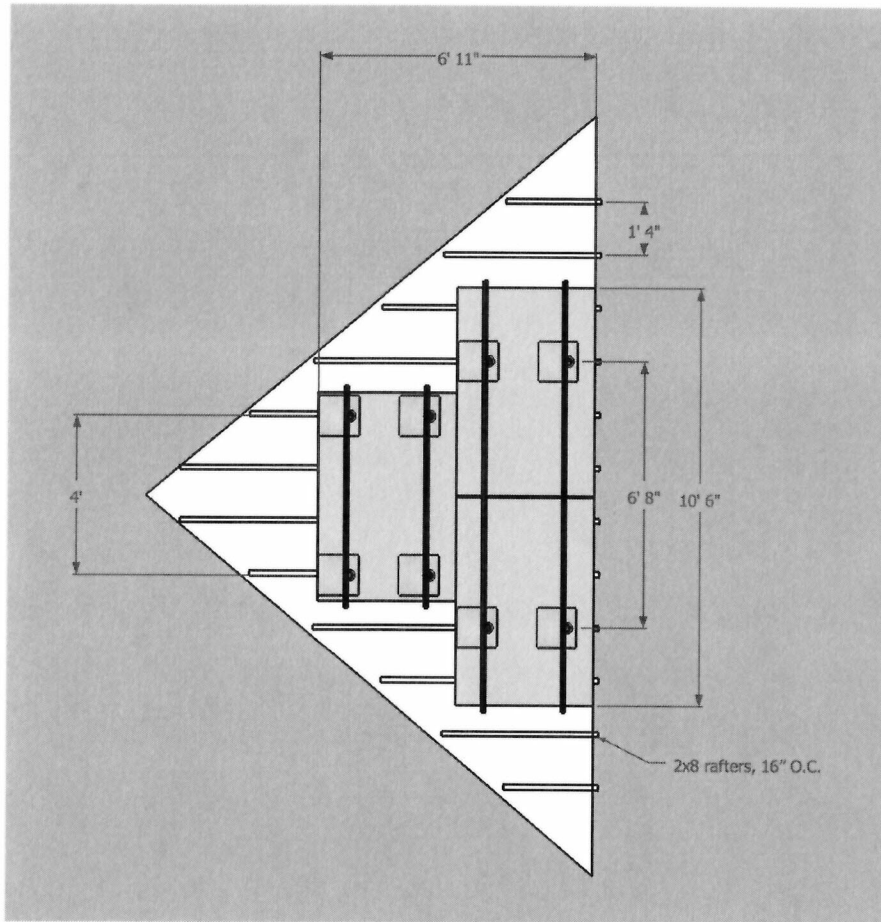
PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
 SHEET NUMBER: 2 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
 Alley Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@alleysolar.com

ARRAY AND RACKING PLAN - EAST-NORTH ROOF



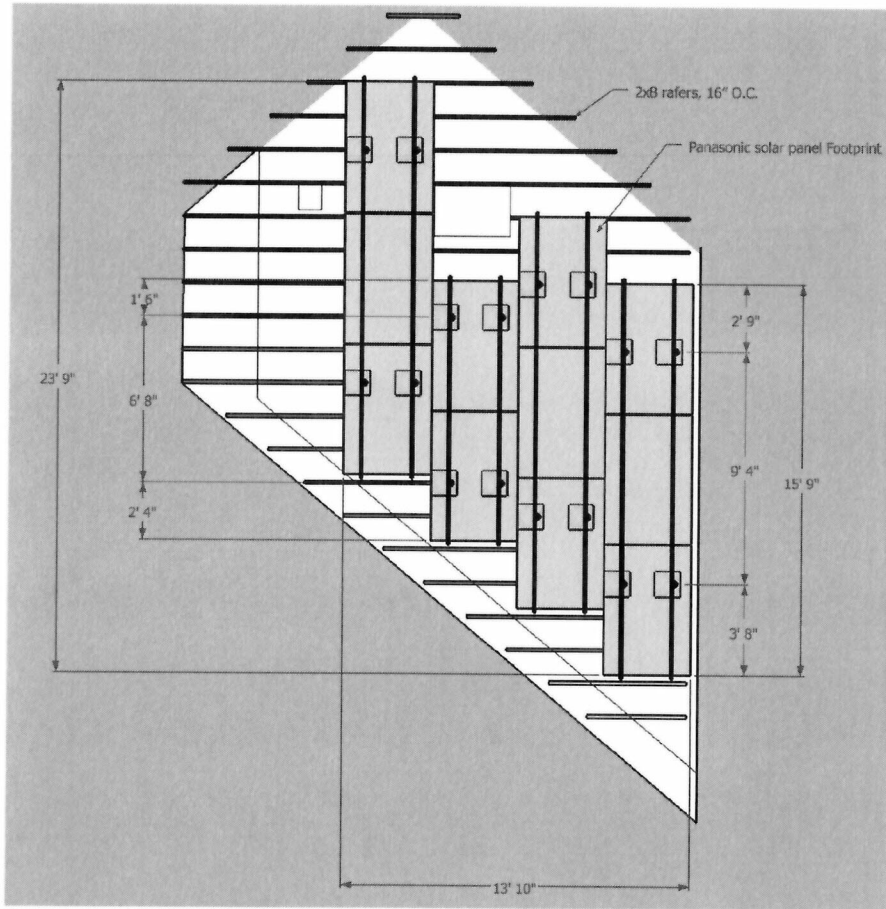
PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
 SHEET NUMBER: 3 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
 Ailey Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@aileysolar.com

ARRAY AND RACKING PLAN - EAST-MIDDLE-ROOF



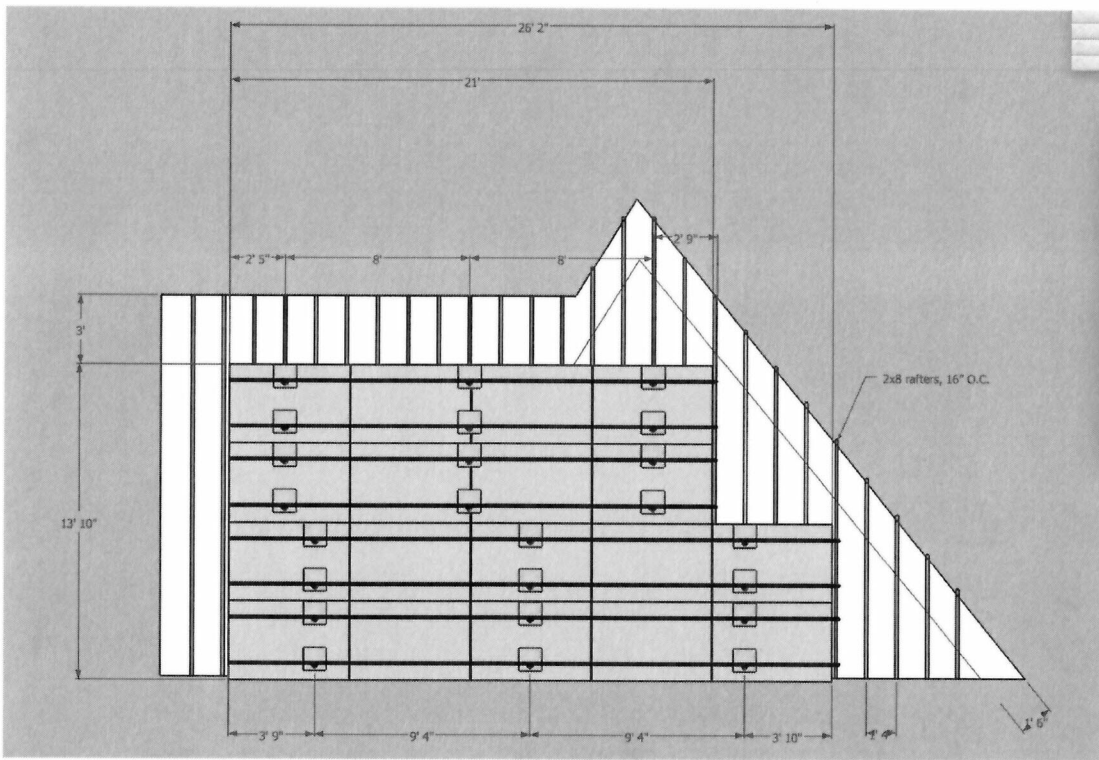
PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
SHEET NUMBER: 4 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
Alley Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@alleysolar.com

ARRAY AND RACKING PLAN - EAST-SOUTH-ROOF



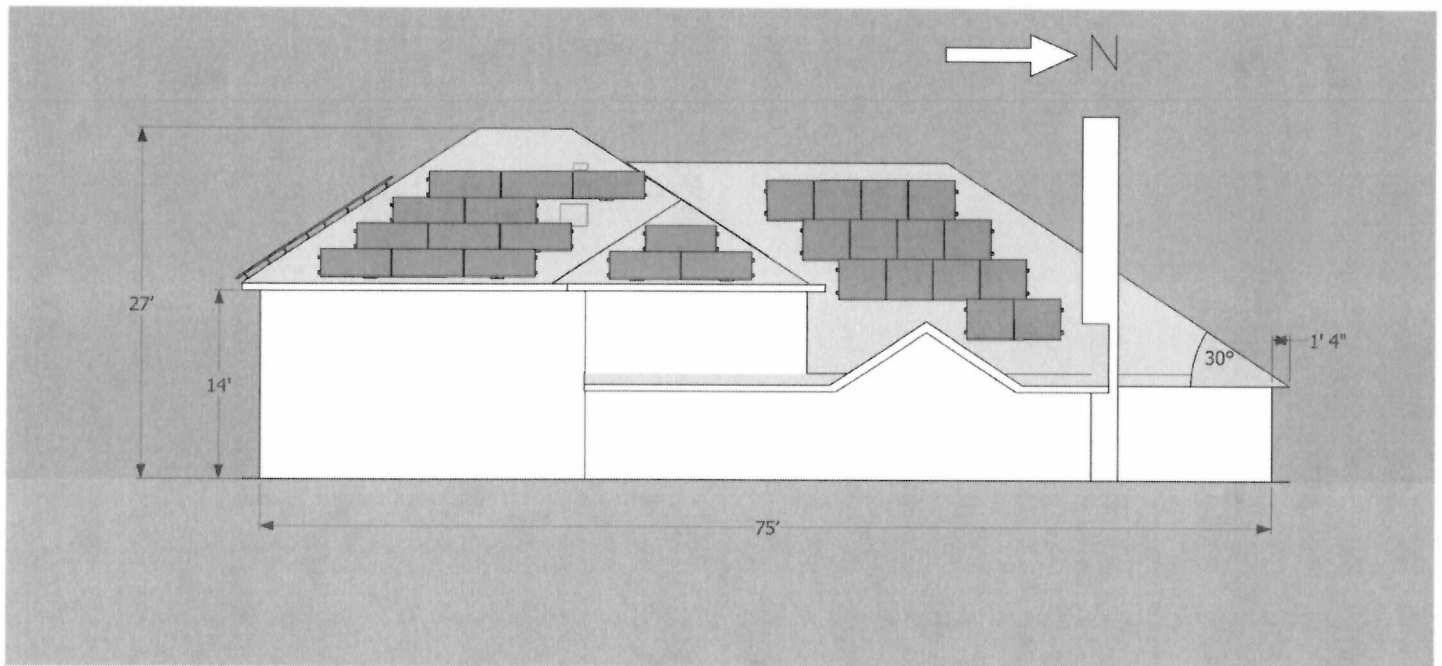
PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
SHEET NUMBER: 5 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
Ailey Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@aileysolar.com

ARRAY AND RACKING PLAN - SOUTHROOF



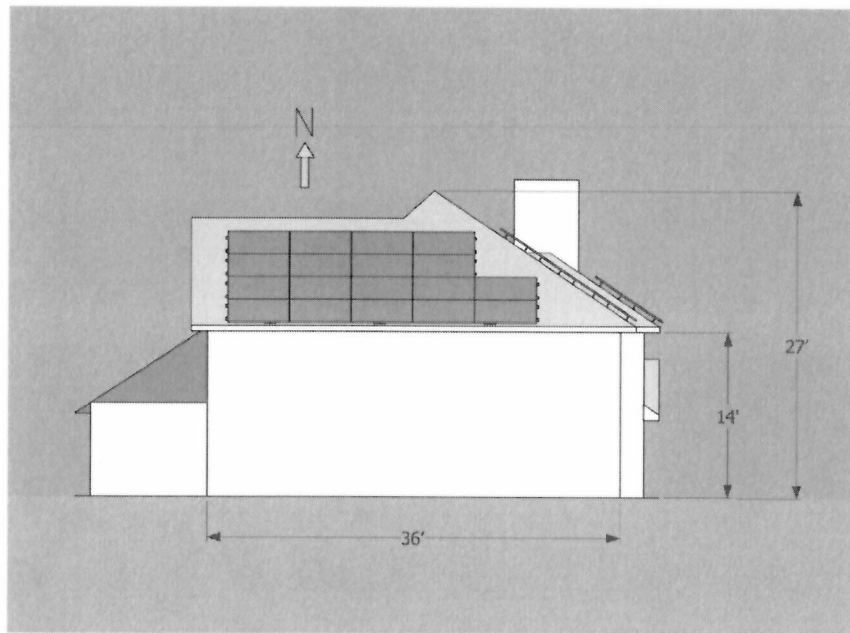
PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
SHEET NUMBER: 6 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
Ailey Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@ailleysolar.com

EAST ELEVATION



PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
SHEET NUMBER: 7 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
Alley Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@alleysolar.com

SOUTH ELEVATION



PROJECT/ADDRESS: 15221 Cottonwood Court, Orland Park, IL 60467
SHEET NUMBER: 8 VERSION: 5/16/2017 Drawn: JL-M Checked: DB
Alley Solar: 1965 W. Pershing, Chicago, IL 60609 | (773) 245-3912 | info@alleysolar.com



Mike Mazza, ASLA
6/19/17
Planner I
Development Services
14700 Ravinia Avenue, Orland Park, IL 60462

RE: possibility for solar reflection at Patel Residence.

Dear Mr. Mazza,

Thank you for your email of June 16 to Dr. Patel where you request assurance from the contractor that solar reflection from the south array should not pose a glare problem. Your note is here:

7) SES collector panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties, roadways or public right-of-ways.

However, as there is a neighboring property in line with the solar panels you plan on installing on your south elevation, I was hoping you could work with your contractor to provide some type of assurance that "concentrated solar radiation or glare shall not be directed onto nearby properties". I ask this knowing the solar panels don't really reflect light, which would be contrary to their intended purpose of absorbing sunlight. But based on experience from a previous solar project, in which neighbors attended the Plan Commission meeting and wanted assurance that glare would not be an issue, I would like you to provide the Village with a letter or other documentation stating that your project will be in compliance with #7 above, which could be backed up by the professional experience of the contractor you are working with.

In our experience, none of the solar arrays being planned for Dr. Patel's property should pose a solar reflection or glare risk to any of the neighbors, including the south facing array and the neighbor directly to the south - so the installation will be in compliance with #7 above. For additional assurance, we have included a number of additional items below:

- A link to an industry article discuss solar reflection:
<http://solarprofessional.com/articles/design-installation/evaluating-glare-from-roof-mounted-pv-arrays#.WUgzcvyujC>
- A photo of the Patel home and the property to the south.
- A scale plan drawing showing the expected direction of reflected sunlight on the Summer Solstice (the highest point in the year the sun will appear).
- A scale plan drawing showing the expected direction of reflected sunlight on the Winter Solstice (the lowest point in the year the sun will appear).

Please don't hesitate to contact me if you or any homeowners have any questions or concerns.

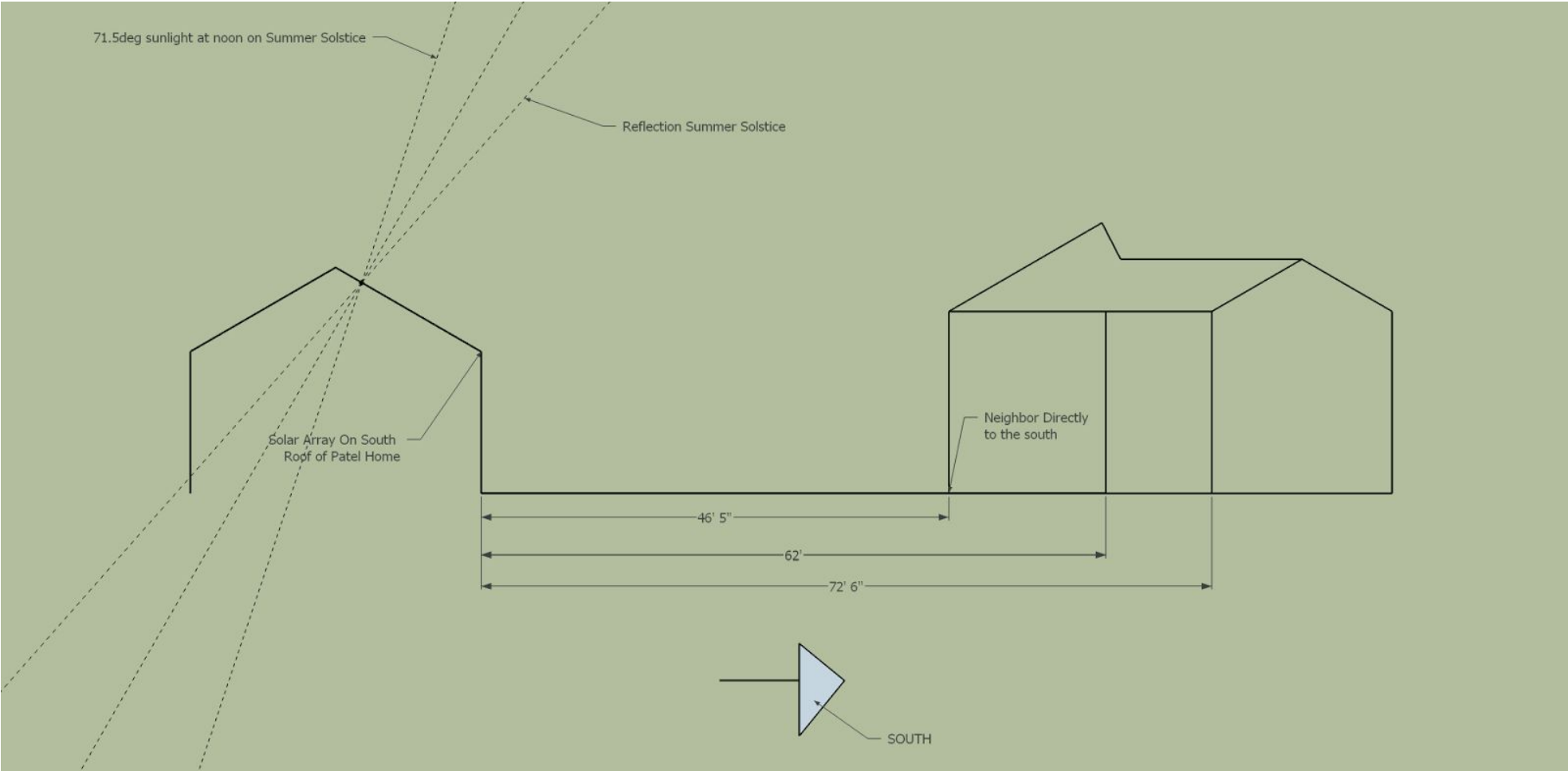
Sincerely,

Dorian Breuer
Co-Owner
[Ailey Solar](#)

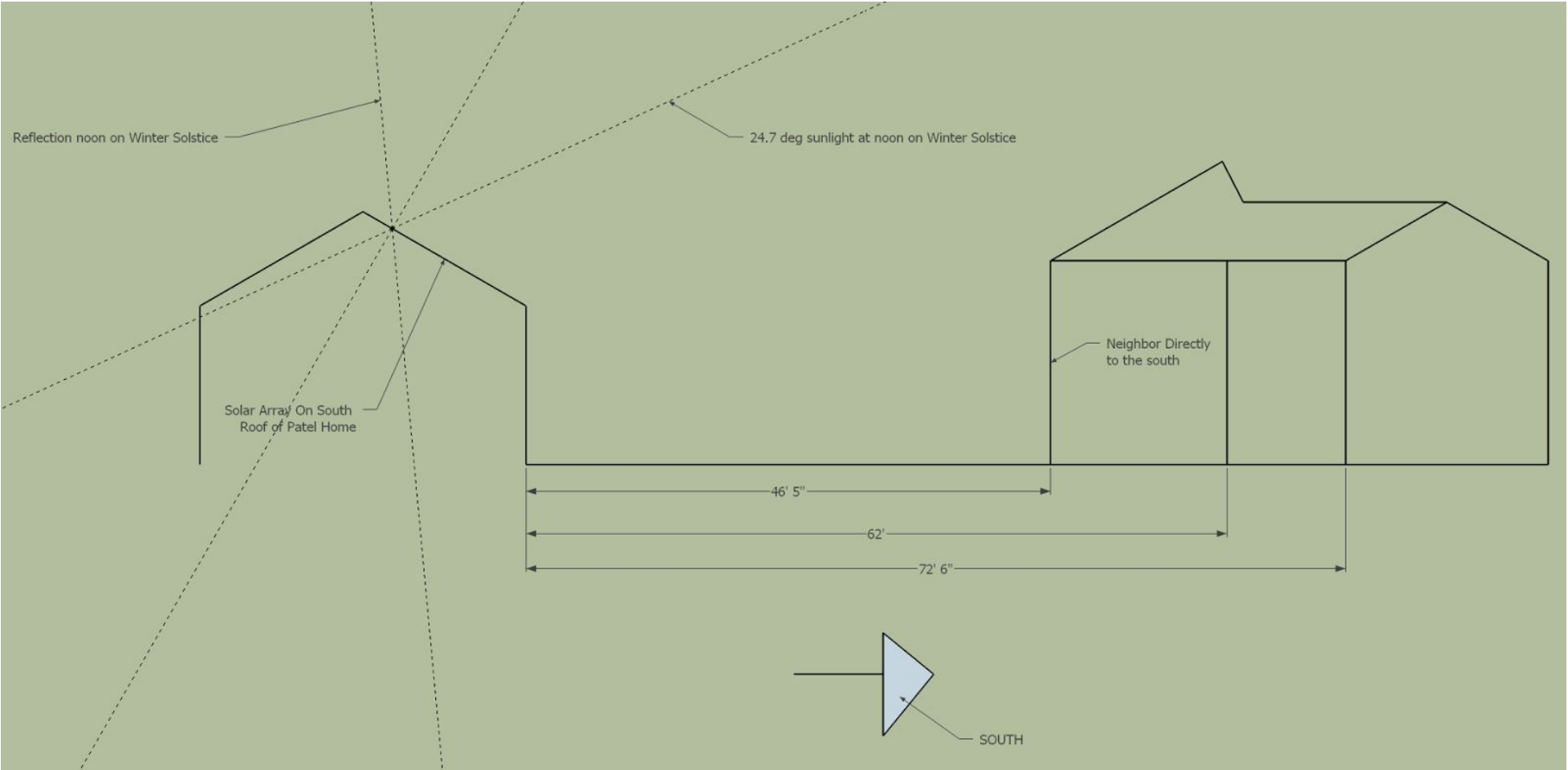
A photo of the Patel home and the property to the south.



A scale plan drawing showing the expected direction of reflected sunlight on the Summer Solstice (the highest point in the year the sun will appear).



A scale plan drawing showing the expected direction of reflected sunlight on the Winter Solstice (the lowest point in the year the sun will appear).



DATE: July 25, 2017

REQUEST FOR ACTION REPORT

File Number: **2017-0046**
Orig. Department: **Development Services Department**
File Name: **Memo: New Petitions & Appearance Review**

BACKGROUND:

BUDGET IMPACT:

REQUESTED ACTION:



Memorandum

To: Plan Commission

From: Nectarios Pittos, Interim Planning Division Manager

Date: July 25, 2017

Subject: New Petitions & Appearance Reviews

Below, please find a summary of recently petitioned projects and appearance reviews. Petitioned projects are currently under review by staff and may or may not be on a future Plan Commission agenda. These projects have been petitioned to the Village but may not have obtained all the approvals required to begin work. Projects sometimes are terminated without moving forward for a variety of reasons. Appearance reviews are reviewed and approved administratively. The below list also does not include cell tower co-location or expansion projects. Please contact me with any questions regarding the below projects.

Appearance Review Petitions

Bank Financial Light Poles – 48 Orland Square Drive
Upgrading existing light fixtures in parking lot

Ashley Furniture – 180 Orland Park Place
Façade alteration for new tenant

Certificate of Appropriateness Petitions

Development Petitions