

**MINUTES**  
**FOX CHAPEL BOROUGH PLANNING COMMISSION MEETING HELD APRIL 18, 2022**

PRESENT: Harrison S. Lauer, Chairperson; Wesley Posvar, Nanette Bennett, Members; Dante Moretti, Zoning Administrator; Shawn M. Peterson, Borough Secretary

ALSO

PRESENT: Bradley Harrison, Sarah Hanna, Mandy Steele, Andrew C. Bennett, Councilmembers; Gary J. Koehler, Borough Manager; Michael Pohl, resident

VIA ZOOM: Jeffrey Todd, Member; A. Bruce Bowden, Esq., Borough Solicitor; Ian Smith, Residential Solar Consultant Manager from Independent Energy Solutions; three other attendees

ABSENT: James Royston, Member

Mr. Lauer called the meeting to order at 5:32 PM

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Mr. Todd moved that the October 18, 2021, meeting minutes be approved. The motion was seconded by Mr. Posvar and passed by a unanimous vote.

Conditional Use Approval Application No. 22-1 – 314 Olde Chapel Trail

The Borough received a request for Conditional Use approval from Mr. and Mrs. Wesley Kurdziolek to install solar panels on the front-facing roof of their home located at 314 Olde Chapel Trail. The Conditional Use review and approval process require that the Planning Commission recommend acceptance or rejection of the application with or without conditions to Borough Council; Borough Council conducts a public hearing; and Borough Council votes to authorize or deny the Conditional Use, with or without additional safeguards or conditions.

The property is located at 314 Olde Chapel Trail and is located in the "C" Residential District. Solar panels are permitted on the front-facing roof as a Conditional Use in the "C" Residential District if, after review and recommendation of the Planning Commission and a public hearing, Borough Council determines that the applicant has demonstrated by competent evidence that the requirements of Section 400.14 (H), including H.(10) (a) thru (f), of the Borough of Fox Chapel Zoning Ordinance have been met.

Ian Smith from Independent Energy Solutions was present to answer questions regarding the application. The answers provided by Mr. Smith are found in **bold** print below.

Section 400.14(H) Solar Panels.

- H.(1) The definition of "solar panels" appears in Code §400-5(54) and reads as follows: A solar photovoltaic panel, or solar hot air or water panel collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer stored heat. **The system to be installed is of the photovoltaic variety, which will generate electric power for the Kurdziolek residence. It will be grid-interactive, connected to the home's electrical power system at the service panel, such interconnection being governed by an interconnection agreement with the utility, Duquesne Light. Its design is based upon prevailing industry standards and is governed by the U.S. National Electrical Code (NEC) and subject to the Borough's electrical inspection requirements and process.**

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- H.(2) Repair and replacement of existing solar panels are exempt from this Part 1 provided that there is no expansion in the rooftop area covered by the solar panels. **N/A**
- H.(4) Solar panels shall be in the least visibly obtrusive location where panels would be functional. **Solar is most efficient facing south. This house faces south, with a portion of the roof over the driveway facing east. The remaining roof areas have north-facing slopes or are heavily shaded, so the front and driveway sides are the only viable roof areas for solar. Based on the orientation alone, the north-facing roof would be 40% less effective on an annual basis than the front roof, but it would be even greater due to the shade from the large chimney on the rear roof. In winter, the efficacy gap grows to over 70% between the rear and front roofs. To meet the home's energy needs, both of these areas need to be utilized, with the front roof having an efficacy advantage of about 19% over the side roof. Placing the panels on the rear roof would make the project not economically viable. Both roof areas are visible from the street, although the surrounding vegetation limits visibility from many angles. Due to the visibility, we chose a sleek, all-black module that blends well with the dark grey roof, which the client had replaced last year. We are also relocating several plumbing vent stacks to maintain a continuous array without gaps in the panels, which is an additional expense for the homeowner for improved aesthetics.**
- H.(5) Solar panels and associated equipment shall meet setback and height requirements for the zoning district in which they are located. **The panels will be roof-mounted following the slope of a portion of the home residing only a few inches above the existing roof surface without overhanging the roof. It will comply with all existing setback and height requirements.**
- H.(6) Solar panels and associated equipment shall not block required parking. **N/A**
- H.(7) Nonfunctioning solar panels shall be removed within three months of becoming nonfunctional. **As stated above, this is an installation of new equipment with a 25-year warranty. Any nonfunctioning panels will be repaired or replaced as quickly as replacement equipment is available and weather permits. Estimated three months.**
- H.(8) Solar panels exceeding two square feet in area are not permitted in any front yard, on any face of a building or structure facing a street unless integrated with the ordinary construction of said building or structure, and/or in view of any adjacent street, except roof-mounted solar panels as set forth below. **N/A**
- H.(9) Ground-mounted solar panels shall: **N/A**
- (a) Be located in a side or rear yard only.
  - (b) Not exceed eight feet in height above the ground.
  - (c) Be fully screened from adjacent properties by fencing or a combination of evergreen and deciduous planting.
  - (d) For ground-mounted solar panels, all exterior electrical lines must be in conduit, and plumbing lines must be buried.
- H.(10) Roof- or wall-mounted solar panels.
- (a) Roof-mounted solar panels shall, upon application to and approval by the Code Compliance Officer, be a permitted accessory use in all zoning districts in the Borough; provided, however, that such panels must be on a side- or rear-facing roof surface unless such location would cause the panel so located to be inefficient (converting less than 20% of sunlight into usable electricity). Pruning or removal of vegetation is permitted in order to achieve efficiency so long as it does not rise to the level of an environmental disturbance as defined in Code §363-

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14 [Subsection B(8) of the definition], in which case it will be subject to review under the Natural Resources Assessment and Protection Ordinance. The chart set forth in Attachment 1 to Code Chapter 400 is hereby amended to reflect this additional accessory use. **We have already provided notes of compliance regarding this applicable set of requirements separately; additional information is provided below.**

- (b) Permitted roof-mounted solar panels shall include integrated solar panels as the surface layer of the roof structure with no additional apparent change in relief or projection (the preferred installation) or separate flush-mounted solar panels attached to the roof surface. **The proposed array will be flush-mounted, using Unirac FLASHKIT PRO mount flashing and Unirac mounting system. Each of these products is specifically designed and engineered for the use of mounting solar to that style of roof covering. Information about these products is included as supplemental information.**
- (c) Separate flush-mounted solar panels shall be located on a rear- or side-facing roof, as viewed from any adjacent street, unless such installation is proven to be ineffective or impossible. The removal of potential obstructions such as interceding vegetation shall not be sufficient cause for permitting a front-facing roof installation. **The proposed array will be mounted on the front-facing roof of the home, as seen from 314 Olde Chapel Trail, Pittsburgh, 15238. Please see the multiple images showing the array placement from street view and overhead.**
- (d) Separate flush-mounted solar panels installed on a building or structure with a sloped roof surface shall not project vertically above the peak of the roof to which it is attached or project vertically more than five feet above a flat roof installation. **The solar arrays will be attached to the sloped roofs of the home, will not project past the peak of the roofs, and will be flush-mounted roughly 3" off of each roof while following the slope of the roof.**
- (e) For rooftop or wall-mounted solar panels, all exterior electrical lines shall be in conduit and painted in a color scheme that matches as closely as reasonably possible the color of the structure and materials adjacent to the conduit (i.e., the conduit on walls should be painted the color of the structure or the wall while conduit on roof should be the color of the roof). **We typically use a gray-colored conduit that matches most utility companies' conduit. We will follow best building practices and guidance from all applicable codes in choosing the path of all conduit runs. Best efforts will be made in concealing the conduit.**
- (f) For rooftop or wall-mounted solar panels, all exterior plumbing lines must be painted in a color scheme that matches as closely as reasonably possible the color of the structure and materials adjacent to the plumbing lines. **Included as supplemental information are:**
  - **Spec Sheet for the proposed solar panel – REC Alpha 400W mono panel and SolarEdge Inverters. Unirac FLASHKIT PRO mount flashing, Unirac mounting installation guide – showing the mounting system. Images of the proposed location showing both a street view and overhead describing where the proposed array will be located.**

Mr. Lauer stated that Section 400.14(H)(4) says that solar panels shall be in the least visibly obtrusive location where panels would be functional. For 314 Olde Chapel Trail, solar is most efficient facing south. The house faces south, with a portion of the roof over the driveway facing east. The remaining roof areas have north-facing slopes or are heavily shaded, so the front and driveway sides are the only viable roof areas for solar.

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Independent Energy Solutions provided data to show that solar panels on the north-facing slopes are not economically viable. The north-facing roof would be 40% less effective on an annual basis than the front roof. In winter, the efficacy gap grows to over 70% between the rear and front roofs.

Mr. Smith stated that the solar panels would pay for themselves within 10.6 years versus twenty-five to thirty years if the panels were on the back of the home.

Mr. Lauer asked if the conduit could be painted to match the surrounding structure of the house or roof. Mr. Smith stated that there would be no exposed conduit on the roof. The conduit will run down the western side of the home, which is the utility side and is screened with vegetation and not visible to the road. He agreed to have the exposed conduit painted to match the home.

Mr. Lauer stated that the Borough should reconsider the language in the new Code Section 400.14(H)(a) "...such panels must be on a side- or rear-facing roof surfaces unless such location would cause the panel so located to be inefficient (converting less than 20% of sunlight into usable electricity)." Mr. Bowden agreed.

Mr. Lauer moved to recommend approval of the Conditional-Use application 22-1 subject to the best efforts on the part of the applicant to paint the conduit to match the adjacent structures. Mr. Posvar seconded the motion. Following discussion, the motion was passed by a unanimous vote.

### Planning Commission Member Reappointments

It was moved by Mr. Lauer to recommend the reappointment of Wesley Posvar to another four-year term expiring on December 31, 2026. The motion was passed with Mr. Posvar abstaining from voting due to a conflict of interest.

It was moved by Mr. Lauer to recommend the reappointment of Jeffrey Todd to another four-year term expiring on December 31, 2026. The motion was passed with Mr. Todd abstaining from voting due to a conflict of interest.

There being no other business to come before Council, the meeting was adjourned at 6:16 PM.

SHAWN MARIE PETERSON  
Borough Secretary