PROPOSED SOLAR FARM

ROTHERFIELD PRIMARY SCHOOL

RETROSPECTIVE PLANNING APPLICATION BY

DESIGN AND ACCESS STATEMENT

JUNE 2014

Introduction

1. This statement has been prepared in support of a retrospective planning application for the installation of roof mounted solar panels at Rotherfield Primary School. The proposal is for installation of 36 No 250W Solar Poly-crystalline Modules which will generate 9.0kW of renewable electric.

2. The statement assesses the design and access arrangements, and how they relate to their context. This statement has been prepared in accordance with Circular advice.

3. The proposal is shown on the following drawings:-

   ABDS Ltd drawing: E/RP/14/006
   Ethical Power solar panel layout drawing and technical specification sheet

Permitted Development Criteria

4. The installation of solar PV on non-domestic buildings falls within Class A works of the Town and Country Planning (General Permitted Development) Order2012 and generally allows the installation of solar pv on buildings subject to the following:-

   "Development is not permitted by Class A if:-
   (a) the solar PV or solar thermal equipment would be installed on a wall or pitched roof and would protrude more than 200mm beyond the wall or the roof slope when measured from the perpendicular with the external surface of the wall or roof slope;
   (b) the solar PV or solar thermal equipment would be installed on a flat roof where the highest part of the solar PV or solar thermal equipment would be higher than 1m above the highest part of the roof (excluding any chimney)
   (c) the solar PV or solar thermal equipment would be installed on a roof and within 1m of the external edge of that roof.
   (d) the solar PV or solar thermal equipment would be installed on a wall and within 1m of a junction of that wall with another wall or with the roof of the building.
   (e) in the case of a building on article 1(5) land, the solar PV or solar thermal equipment would be installed on a wall or roof slope which fronts a highway
   (f) the solar PV or solar thermal equipment would be installed on a site designed as a scheduled monument;or
   (g) the solar PV or solar thermal equipment would be installed on a listed building or on a building within the curtilage of a listed building.

   Conditions
   Development is permitted by Class A subject to the following conditions:-
   (a) solar PV or solar thermal equipment must, so far as practicable, be sited so as to minimise its effect on the external appearance of the building
   (b) solar PV or solar thermal equipment must, so far as practicable, be sited so as to minimise its effect on the amenity of the area; and
   (c) solar PV or solar thermal equipment no longer needed for microgeneration must be removed as soon as reasonably practicable."

5. Planning Practice Guidance stipulates:-
"Active solar technology, (photovoltaic and solar water heating) on or related to a particular building is often permitted development provided the installation is not of an unusual design, or does not involve a listed building, and is not in a designated area.

Where a planning application is required, factors to bear in mind include:
·the importance of siting systems in situations where they can collect the most energy from the sun;
·need for sufficient area of solar modules to produce the required energy output from the system;
·the effect on a protected area such as an Area of Outstanding Natural Beauty or other designated areas;
·the colour and appearance of the modules, particularly if not a standard design."

This design and access statement suggests that although planning permission is required by virtue of the solar PV design breaching the requirements of A.1(c) of the permitted development act in although other respects the installation complies with the general principles of Planning Practice Guidance:-

- The roof slope faces south
- Sufficient roof area is provided
- Although Rotherfield is located within the High Weald Area of Outstanding Natural Beauty the extent of solar PV installed to the roof slope is of extremely small scale and therefore the effect of the panels will not have a detrimental effect of the ANOB

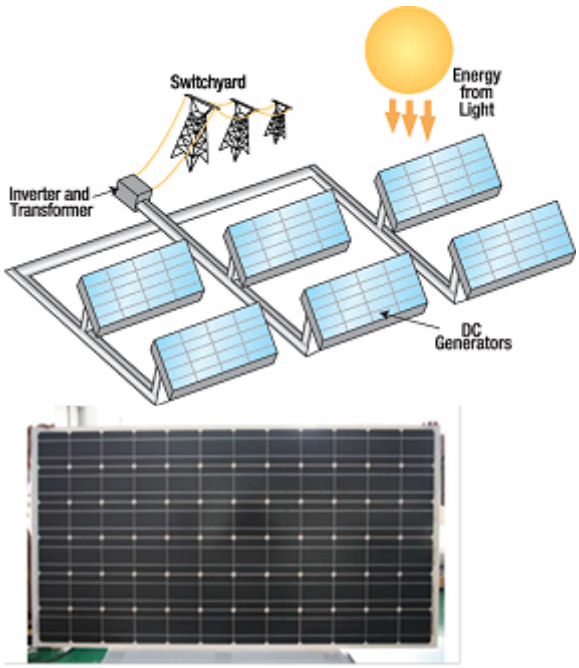
Pre-Application Discussions

5. No pre-application discussions have taken place with the local planning authority with regard to this planning application. However Ethical Power advise that discussions have taken place with the Local Planning Authority who have indicated that the existing panel installation is not in accordance with current Permitted Development Rights and therefore a retrospective planning application is necessary.

Solar Technology

7. Solar photovoltaic (or 'PV') technology is the process of collecting solar irradiation and converting it into electricity. Its common application is to individual properties – solar panels on the roof.

PV panels silently convert sunlight to electrical energy. They generate direct current (DC) that is converted to alternating current (AC) to be used by the electricity grid. There are various forms of PV technology (thin film, and crystalline) however these provide the same basic function. Regardless of the PV configuration, inverter hardware and transformers are required to change the direct current PV output to useable AC power for the grid. PV may be connected to the distribution network at the domestic level of 240V or at higher voltage, depending on the size and location of the generating plant.



Typical PV panel

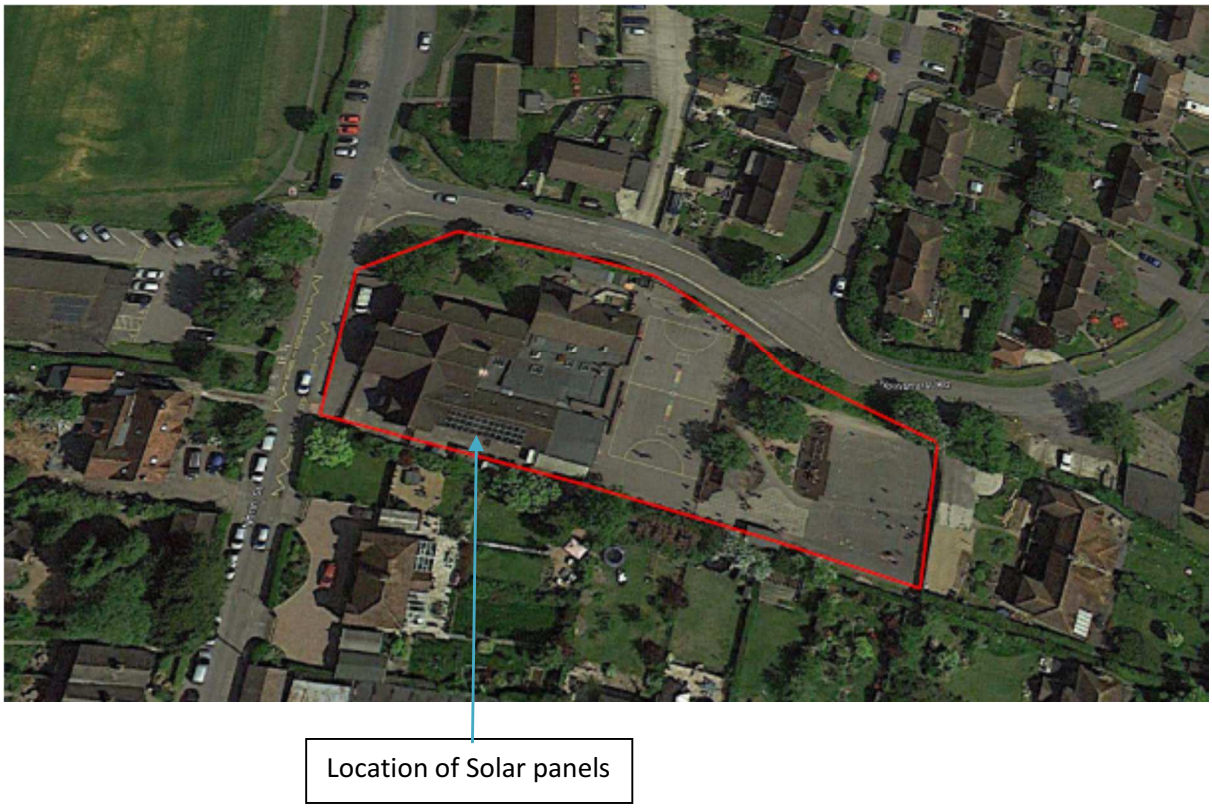
8. The technology is in fact over 100 years old.
Ethical power has installed a 9.0kW solar pv array on one pitched roof slope at Rotherfield Primary School with a total of 36 No 250W Polycrystalline modules installed on a mounting system to the existing roof structure.

Typical Mounting system.

9. A major advantage of PV technology is that the panels convert sunlight to electrical energy without any noise output. The only noise generation will be from the inverter panels but on this scale the noise output is virtually silent. A total of 2 inverters are installed.

The Site and its Context

10. The roof panels are located on a south facing roof slope of the established Rotherfield Primary School, located on North Street, Rotherfield.



Aerial photograph of Rotherfield Primary School.

Planning History

11. No relevant planning history exists for the site.

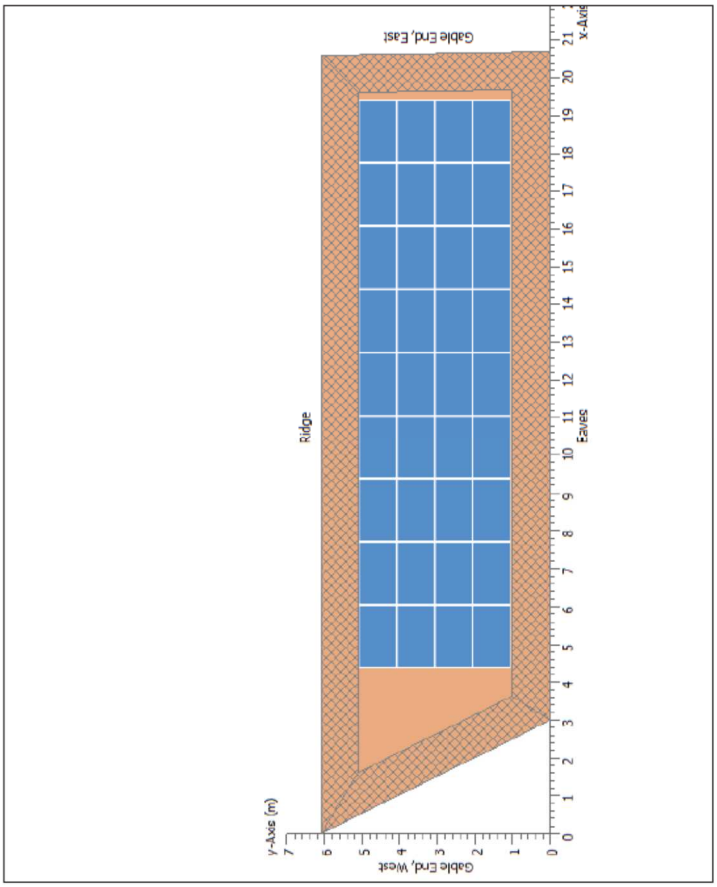
Policy

12. In formulating the scheme, regard has been paid to Government guidance on design contained within paragraph 97 and 98 of the National Planning Policy Framework (NPPF).

Paragraph 97 stipulates that LPA's should have a positive strategy to promote energy from renewable or low carbon sources, and that schemes which draw its energy supply from decentralised renewable or low carbon energy supply systems should be supported. Paragraph 98 goes on to state that applications for renewable energy projects should be approved if its impacts are or can be made acceptable.
This application is minor in nature and has no adverse impacts. The proposal makes a small contribution to meeting UK renewable energy targets and should therefore be supported.

Amount of Development

13. The total roof slope area is approximately 16m x 6m with the proposed panel area equating to approximately 14.5m x 4m



Layout

14. The Panels are laid out in landscape pattern and are fixed to the roof structure with a galvanised steel roof mounting system.

Scale

15. The application seeks permission retrospectively for a modest installation of 36 photovoltaic panels. The panels do not form an obtrusive appearance on the character of the school building and have extremely limited impact on adjacent properties.

Key Considerations

16. This development is proposed to assist the UK in meeting is stated renewable energy objectives renewable energy. A detailed technical data sheet forms part of this application providing details on annual electricity produced by the development. The proposal therefore supports both Energy Security and Climate change considerations.

17. The deployment will not result in the loss of any existing buildings or structures.

18. The proposed development will not introduce new building structures. The panels are located discretely on an existing roof structure.

19. The development proposal will have no impact on the local highway network.

20. The development proposal will not generate noise pollution. It has no moving parts and does not therefore generate any safety concerns in operation. It will not generate any electro-magnetic interference and will not cause glare issues.

Rev A: 26.6.2014 – Clarifications made