
Design and Access Statement 160 Grayswood Avenue – CV5 8HQ Spirit Solar Ltd

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Introduction:

Spirit Solar Ltd has been instructed to prepare a planning application for the installation of solar photovoltaic panels on the South facing roof in order to maximise the benefit of solar power, reduce the reliance on non-renewable energy sources and decrease the Client's electricity bills as part of the councils overall strategy.

The purpose of this document is to ensure that the application process leading to the final application decision clearly illustrates all significant information in accordance with Coventry City Council's guidance on Design and Access statements. The application illustrates careful selection and positioning of the development while considering the contextual surroundings, environment, preservation of neighbouring resident's amenity and visual impact to the public.

The development size is well suited to the Clients current business operation and makes good use of the South facing roof in order to reduce the high on site consumption of electricity from the National Grid.

Furthermore, the development is in line with current Government targets, the development will become part of the overall ambition of 20GW of solar photovoltaic capacity by 2020.

This target could be met solely by using just 1.6% of commercial and industrial roof tops in the UK and thus this scheme demonstrates great potential for low carbon local development in the local area. Given current concerns over ground mounted developments visual impact, the need for 'sensitively-sited' solar schemes is a key factor addressed by this development.

Location:

This application is for the installation of solar photovoltaic (PV) panels to be mounted on south east facing roof of the property at 160 Grayswood Avenue – CV5 8HQ.

Use:

The solar PV system will be used to decrease the reliance on fossil fuels given the amount consumed on site for commercial activity. The installation of a renewable source of energy will help reduce the trust's carbon footprint, lower their annual usage of electricity from a non-renewable source and export excess renewable generation for others in the area to use.

Scale:

The proposed system consists of 6 x polycrystalline 275W panels mounted on south east facing roof detailed in the supporting documents. The panels themselves are mounted in portrait and angled at the incline of the roofs being 35 degrees.

Layout:

The layout will be installed on the largest available south facing roof face to maximise the power output.



Development Scale:

The proposed system is expected to produce about 1,594kWh a year creating an annual saving in CO² of 0.83 tonnes. The system is predicted to offset vast majority of the current day time electricity consumption from the National Grid.

Landscaping:

A visual survey of the site area was conducted to confirm that no trees or hedgerows surrounding the development site will be altered or affected by this installation.

Appearance:

The PV array can be seen from ground level. Reflection and glare – it is often perceived that solar panels produce glint and glare that can affect nearby vehicular traffic and aircrafts, this is somewhat unfounded

for the reasons below. The panels are black in appearance with black outer frames and have anti-reflective glass. The principle technologies behind the solar panels are to absorb as much light as possible to convert to electricity and thus there is no discernible reflection or glare produced as a by-product. This when compared to other reflective materials such as metal roof sheeting, polytunnels and greenhouses gives confidence in any adverse effects of the solar panels being negated.

Furthermore, the need to create an aesthetically appealing and less visually obtrusive development is of greater importance given its location. The panels selected are all-black in finish to aid in the aesthetic appeal. The panels are also mounted on the rear elevation, parallel to the pitched roof, and sit no more than 200mm off the surface of the roof to minimise the visual impact.

Access:

The development does not require any special means of access. All deliveries and works shall use existing public roads and the property has a driveway at the front of the building. As part of the on-going maintenance of the development, panels can be reached via the existing driveway should there be a need to clean or maintain them.

Policy

The National Planning Policy Framework (NPPF) supports the delivery of renewable energy and low carbon energy infrastructure. It states that this is central the economic, social and environmental dimensions of sustainable development. Paragraph's 97 and 98 of the NPPF state that to help increase the use and supply of renewable and low carbon energy that authorities should have a 'positive strategy' to promote energy from renewable sources. Furthermore it states that policies should be designed to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed such as visual impacts, something addressed by this application.

The UK's Department of Energy set out a 'UK Renewable Roadmap' promoting a steer towards a reduction in dependence on fossil fuels and provide a far greater focus on renewable solutions. Referring to paragraphs 2.48 it states "the Government believes that solar PV has the potential to form a significant part of the UK's renewable energy generation mix". It moves on to state "Solar PV benefits from being easy to install on domestic and commercial buildings, and on the ground. With 82% public support it has a role in connecting individuals, communities and businesses with future deployment of renewable energy and the transition to the low carbon economy".

Furthermore, the Planning Policy Statement 18 'Renewable Energy' under paragraph 6.1.10 states that the Department would encourage greater use of PV systems in new developments and the retrofitting or incorporation of such technology where appropriate.

Summary:

Given the current economic situation and concerns about climate change, the move towards a greener and more sustainable form of energy usage is essential. The proposed system will be able to supply the site with a significant amount of their daytime energy requirements.

This proposal will decrease the sites reliance on electricity from non-renewable sources. Local and national policies aim to have more sustainable development and increase the production of renewable energy without impacting on the heritage or visual amenities of the area.

Taking the above into consideration it is thought that this proposal will not have a detrimental impact on the ecology and visual amenities of the area and in line with the current policy.

Careful consideration has been taken throughout the feasibility of the scheme and final location to ensure that the proposed development in term of design, scale, location and layout has been satisfied and appropriate in context of the site in question.