

<b>Document Name:</b>	<b>Planning Support Statement</b>	<b>Document Number:</b>	<b>JS0001</b>
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<b>Created:</b>	<b>19<sup>th</sup> August 2011</b>	<b>Amended:</b>	

## **Planning Support Statement**

<b>Project</b>	Chenderit PV Installation
<b>Site Address</b>	Chenderit School, Archery Road, Middleton Cheney, Banbury, Oxon, OX17 2QR
<b>Type of Application</b>	Full Planning
<b>Date</b>	22/08/2011
<b>Applicant</b>	James Constable & Shane Long, Northamptonshire County Council, Room 220, County Hall, Northampton, NN1 1DN
<b>Agent</b>	N/A

### **PURPOSE OF THIS DOCUMENT**

This statement is provided to explain the design and access considerations for the proposed solar photovoltaic (PV) system installation at Chenderit School, alongside outlining the planning policies from local to national level which the project satisfies, in order to gain planning permission for this scheme.

It is important to note that the proposed system for planning has not yet been procured. The information provided in this document details the system design which procurement will be required and evaluated against. All indicatives, red line plans and elevation drawings depict the system for which procurement is aimed at acquiring.

### **CONTEXT AND NEED FOR DEVELOPMENT**

Chenderit School are keen to promote awareness of environmental issues amongst both pupils and staff, whilst reducing its own energy demands and carbon footprint. Chenderit PV installation is a small-scale system designed to provide the maximum amount of the school's energy needs within the budget available.

### **USE**

It is estimated that the Chenderit PV installation will generate 19,343kWh/year with an annual CO<sub>2</sub> emission saving of 8.60t. This equates to a significant avoided cost in terms of energy for the school and will securitise the school against future energy cost increases.

### **DESIGN**

Chenderit PV installation will comprise of solar modules fixed on a section of the south-east facing flat roof of the single story building using fully ballasted mounting frames, with no other external development taking place. The mounting frames are designed specifically for

flat roofs and avoid having to penetrate the existing roof covering.

A full structural site survey has been carried out by accredited structural engineers. The outcome of the structural site survey has returned positive. For this reason the design of the solar PV system is responsible and will not negatively affect the structure of the school for at least the next 25 years of the project life.

#### **SCALE**

The drawings attached with this application show the scale of the Chenderit PV installation. The total area of the south-east facing roof is 1056.73m<sup>2</sup>, of which a maximum of 500m<sup>2</sup> will be covered with solar modules. The closest the array will be to the edge of the building is 0.5m.

The solar array will be positioned on the roof so that the modules are all orientated due south. The orientation and angle of the modules ensures that the energy generation of the system is maximised.

Each solar module in the installation has an individual mounting frame, which carries them in landscape orientation at an angle of 10 degrees, which means they do not protrude significantly above the roof scope.

The scale of the proposal and height of the panels will ensure that the development has minimal visual impact on the building. The profile height of the panels will not exceed the tallest point of the building and the system has been designed so as to have minimal visual impact.

#### **APPEARANCE**

The solar PV modules are dark-blue in colour with a small silver coloured metal frame around each. The modules have an anti-reflective coating; therefore no glare will be produced from this system that could impede on local residents and vehicles. The installation of a PV system will have negligible impact on the character, appearance and amenities of neighbouring or other land.

Indicative drawings of the installation are at Enclosure 3 to the Planning Support Statement. Indicative product details can be found at Enclosure 6, it is important to note when viewing product details that the Chenderit PV installation has not yet been procured, with the enclosed indicative product details highlighting the system components which procurement will be required and evaluated against.

#### **LANDSCAPING**

No trees will need to be felled or pruned for this installation.

#### **ACCESS**

The Chenderit PV installation will be positioned on the roof and therefore will have no effect on vehicle movements or parking. The roof is currently unused and is not accessible to the general public.

## NATIONAL PLANNING POLICIES

The Chenderit PV installation satisfies a number of planning policies from local to national level as outlined below. The most relevant Planning Policy Statements are PPS1: Delivering Sustainable Development, PPS22: Renewable Energy and PPS1 Supplement: Planning and Climate Change. All three statements encourage urgent action to promote the growth of renewable energy.

### **PPS1: Delivering Sustainable Development. (January 2005)**

<http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement1>

PPS1 sets out the Government's objectives for achieving sustainable development and this is identified as the core principle underpinning planning.

- **Para 13(ii)** - *Regional planning bodies and local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change – through policies which reduce energy use, reduce emissions..., promote the development of renewable energy resources, and take climate change impacts into account in the location and design of development.*

- **Para 20** - *Development plan policies should take account of environmental issues such as: mitigation of the effects of, and adaptation to, climate change through the reduction of greenhouse gas emissions and the use of renewable energy...*

- **Para 22** - *Regional planning authorities and local authorities should promote ... small scale renewable and low carbon energy schemes in developments*

The installation of a PV system at Chenderit School is fully compliant with the Principles of Sustainable Development as outlined in PPS1. PV systems are a highly sustainable means of generating energy and are a key resource in tackling the effects of climate change. The proposed system will lead to an estimated annual CO<sub>2</sub> emission saving of 8.60t and it will not produce any gaseous emissions. It is intended that the proposed system will be used to promote renewable energy resources amongst staff, pupils and members of the local community.

### **PPS22: Renewable Energy Planning Policy Statement. (August**

**2004)** <http://www.communities.gov.uk/publications/planningandbuilding/pps22>

Planning Policy Statement 22 (PPS22) sets out the Government's policies for renewable energy, which planning authorities should have regard to when preparing local development documents and when taking planning decisions.

- **Para 1(vi)** - *Small scale projects can provide a valuable contribution to overall outputs of renewable energy and to meet energy needs both locally and nationally.*

The installation of a PV system at Chenderit School will provide a significant amount of the site's daily electricity demand. Excess energy generated by the system, for example on weekends or during school holidays, will be exported to the national grid, thereby increasing

the percentage of national grid energy generated from renewable sources. As the policy empathises; whilst only a small development, it is important to consider the cumulative effect of such proposals can have at a local, regional and national scale.

- **Para 1(vii)** - *Local planning authorities...should ...seek to promote the knowledge of and greater acceptance by the public of... renewable energy developments.*

The installation of a PV system at Chenderit School will significantly increase awareness amongst pupils, staff and local community members of renewable energy and will also serve to promote Northamptonshire County Council's commitment to a sustainable future.

- **Para 1(viii)** - *Development proposals should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures.*

The Chenderit PV installation will have minimal environmental and social impacts, as the profile height of the panels will not exceed the tallest point of the building and no glare is produced from the PV modules.

## **REGIONAL PLANNING POLICIES**

### **East Midlands Regional Plan (March 2009)**

[http://www.gos.gov.uk/497296/docs/229865/East\\_Midlands\\_Regional\\_Plan2.pdf](http://www.gos.gov.uk/497296/docs/229865/East_Midlands_Regional_Plan2.pdf)

- **Policy 2: Regional Priorities for Energy Reduction and Efficiency** states that *the layout, design and construction of new development should be continuously improved, including in terms of reducing CO<sub>2</sub> emissions and providing resilience to future climate change, by... securing energy from decentralised and renewable or low carbon technologies.*

- **Policy 39: Regional Priorities for Energy Reduction and Efficiency** Para 3.3.78 states that *a reduction in electricity consumption of around 1.5% pr year in the East Midlands [is required].* Para 3.3.79 promotes the use of small scale renewable electricity generation, such as photovoltaics to reduce energy demand from the grid and carbon emissions.

The Chenderit PV installation will reduce the amount of electricity imported from the national grid onsite, thereby contributing to a reduction in electricity consumption in the East Midlands. Using the government recommended SAP calculations, it is estimated that the installation will generate 19,343kWh/year and will provide resilience to future climate change by reducing annual carbon emissions by 8.60t.

- **Policy 40: Regional Priorities for Low Carbon Energy Generation** Para 3.3.84 states that *renewable energy makes a minor contribution to the Region's capacity (approximately 2%) and the east Midlands lags behind the other English regions.*

The proposed system can also contribute to redressing the minor contribution which renewable energy makes to the East Midlands capacity compared to other English regions.

### **Regional Energy Strategy Part 1 (March 2004)**

<http://www.emregionalstrategy.co.uk/write//Regional-Energy-Strategy-part1-March2004.pdf>

- **Policy ENG10B:** *To ensure that an increasing amount of the electricity used is generated from renewable sources.*
- **Policy ENG11:** *To promote and support a growing market in renewable energy electricity generation.*
- **Policy ENG13:** *To encourage the uptake of domestic and small scale community owned or run renewable energy schemes.*

The proposed Chenderit PV installation fully supports the Regional Energy Strategy Part 1. The system will increase electricity generated by renewable sources in the region by an estimated 19,343kWh annually. Increasing awareness amongst staff, pupils and local community members will make a significant contribution to promoting and supporting a growing market in renewable energy electricity generation.

#### **LOCAL POLICIES**

##### **South Northamptonshire Local Plan (September 1997)**

[http://www.southnorthants.gov.uk/adopted\\_local\\_plan\\_september\\_2007\\_chapters\\_1-12.pdf](http://www.southnorthants.gov.uk/adopted_local_plan_september_2007_chapters_1-12.pdf)

- **Policy G3A:** *Planning permission will normally be granted where the development is compatible in terms of type scale, siting, design and materials with the existing character of the locality.*
- **Policy G3D:** *Planning permission will normally be granted where the development will not unacceptably harm the amenities of any neighbouring properties.*

The scale of the proposed Chenderit PV installation will ensure that the development has minimal visual impact on the building. The profile height of the panels will not exceed the tallest point of the building. The south-east facing section of the roof also has good visual separation from neighbouring properties.

- **Policy G3E:** *Planning permission will normally be granted where the development is neither of a hazardous nature nor likely to cause problems of pollution, noise, vibration, smell, smoke, discharge or fumes.*

The proposed Chenderit PV installation is not of a hazardous nature and it does not produce exhaust fumes, noise, smell or vibration.

#### **SUPPORTING DOCUMENTS**

Enclosures:

1. Regulation 3 Local List 26: Renewable Energy and Climate Change Impact Statement
2. Regulation 3 Local List 32: Utilities Statement
3. Indicative Drawings
4. Red Line Plan
5. Elevations
6. Indicative Product Details

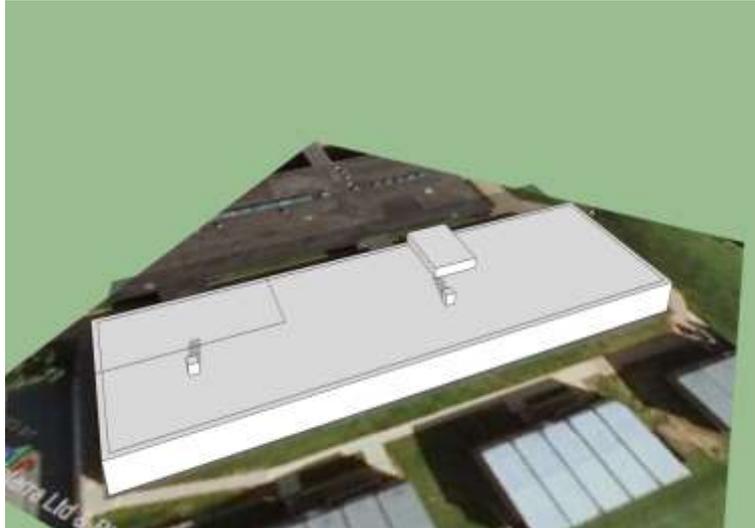
## **Renewable Energy and Climate Impact Statement**

The installation of a 25.16 kWp PV system at Chenderit School will contribute directly to reduce the Region's carbon footprint. Using the government recommended SAP calculations, it is estimated that the installation will reduce carbon emissions by 8.60t per year.

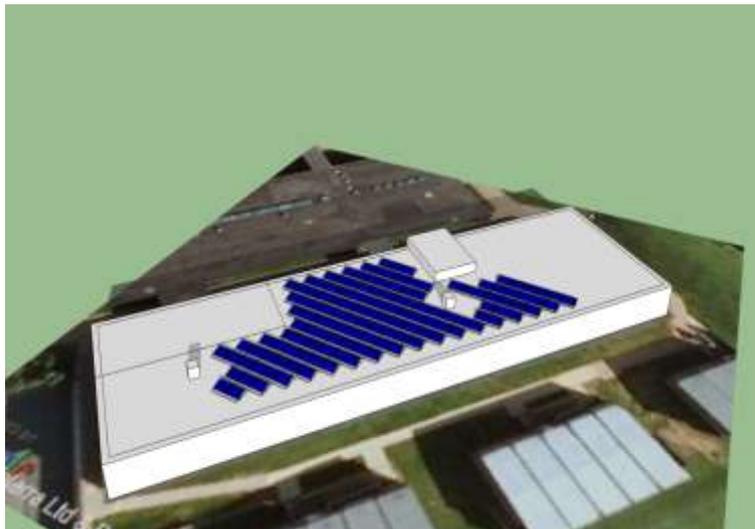
## **Utilities Statement**

The installation will require a G83 certificate to allow it to be connected to the National Grid. This permits the export of excess energy to the National Grid during, for example, school holidays.

## Indicative Drawings



**Proposed location of the Chenderit PV installation on the south-east facing roof of the single storing building.**



**Proposed Chenderit PV installation on the south-east facing roof of the single storing building.**