APPLICATION NUMBER CB/11/00455/FULL

LOCATION Cotswold Farm Business Park, Millfield Lane,

Caddington, Luton, LU1 4AJ

PROPOSAL Construction of a solar energy farm, to include the

installation of solar panels transformer housings,

access track, security fencing, and other

associated works

PARISH Caddington

WARD South East Bedfordshire

WARD COUNCILLORS CIIr Ruth Gammons & CIIr Richard Stay

CASE OFFICER James Clements
DATE REGISTERED 09 February 2011
EXPIRY DATE 11 May 2011

APPLICANT Raybridge Corporation Ltd
AGENT Pegasus Planning Group

REASON FOR COMMITTEE TO

DETERMINE Departure from the Development Plan

**RECOMMENDED** 

DECISION Full Application - Granted

## **Site Location:**

The proposal site is within the South Bedfordshire Green Belt and is 100m to the east of the Chilterns AONB. The site is predominantly located on two fields measuring 11 hectares, located to the south and south east of Cotswold Business Park, to the east of Millfield Farm, 1-4 Millfield Mews and Cotswolds and to the south of Millfield House. The nearest residential properties to the east of the site are on Mancroft Road (no's 96-120) over 195m from the site on lower ground. Mardle Close is located on the eastern side of Mancroft Road on rising ground some 280m from the proposal. Heron Farm is approximately 300m to the east of the site. The village centre of Caddington is approximately 1km to the north east of the site. The site location redline plan includes access from Millfield Lane through the Cotswold Business Park.

The topography of the site falls 7 metres from north west to southwest but given the area of the site appears relatively level. Adjacent to the north east of the site the land falls away quite steeply down towards Mancroft Road and to a lesser extent adjacent to the southern boundary. There are a number of poorly drained areas in the northern part of the site.

The two fields forming part of the application have been 'set aside' land for 17 years and are classified 3a & 3b. There are approximately 70 individual and groups of trees on or near the site which are mainly. The fields are surrounded by existing hedgerows along the southern and parts of its eastern and western boundary. The only boundary without a hedge/tree line is on the north eastern corner of the northern field, although there are a few small gaps in the hedgeline in other areas. The boundary between the fields runs east-west and is characterised by a hedgeline

and a footpath.

On the northern boundary adjacent to the business park there is a small plantation of poplars (14m in height) alongside native woodland (average 12m). Adjacent to the southeast boundary is another wooded area and scrub (average 8-9m in height). Apart form the poplar plantation the tree species are predominately native species such as oak, ash, willow and hawthorn. The majority of the trees are young to semi-mature with a limited number of mature oak and ash trees associated with old hedgerows. In the northern field there are 3 mature oak trees. The hedgerows vary in height between 1&3 metres in height and are dominated by hawthorn, bramble, willow and rose species.

A farm track runs along the western boundary within the site. Public Footpath no.17 runs within the vegetated central belt. Footpath no.18 runs parallel to the eastern edge of the site. There are several informal paths throughout the site that have been created by walkers and connect with existing Public Rights of Way. Public Footpath no.16 is adjacent to the north east corner of the site and connects to Mancroft Road.

Overhead power lines cross the northern part of the northern field and there are telegraph poles in the in the southern field.

## The Application:

Planning permission is sought for the construction of a 3 to 4 megawatt solar energy farm, consisting of banks of solar panels (photovoltaic panels) arranged in linear lines (know as strings), inverter/transformer buildings, a substation, access track, security fencing, and other associated works.

The photovoltaic panels (PV) would laid out in an array with rows of panels running from east to west, orientated southwards to maximise the light received. Each array would be mounted on a metal frame and would be approximately 2m in height. The framework would be driven into the soil with metal screw piles removing the need foundations. The panels would be angled at 25 degrees to maximise efficiency.

Photovoltaic technology converts solar radiation directly into electricity. The panels are constructed from wafer thin silicone cells laminated together and placed on a substrate, covered in with protective glass and inserted into an aluminium frame to form a single module. Each panel has around 36 individual cells wired in series producing around 12 volts. The individual solar cells are arranged in long rows as it builds and increases current. The nature of photovoltaic panels is to absorb, rather than reflect, sunlight. The PV panels do not create a noise.

It is proposed to erect a 7ft high fencing within each field to protect the panels from theft or vandalism. The fence would be green weld mesh and would be set back within the fields,12-28m from the Public Rights of Way.

The direct current (DC) generated by the PV panels would be converted to alternating current (AC) by Inverters/transformers and fed directly into the electric transmission network. The inverter/transformer buildings would be located in 5 strategic location across the site: two in the southern field and three in the northern field; the building closest to residential properties on Millfield Lane would be some 90m distance with all other inverters 190-280m in distance. The buildings would be located between 40&50m within each security fence and would measuring 2.9m in

height, 6.5m in length and 3m in width and would be constructed in pre-cast concrete with a flat roof and coloured green. The inverter/transformer buildings would link to a new substation which would be located north of the poplar plantation adjacent to the Cotswold Business Park. The substation would measure 6.8 in length, 3.9m in width, 2.690 to eaves and 3.56m to ridgeline, and would be constructed with a green render finish with a pitched roof. The substation would link to an existing electric transmission line to the north of the site.

Vehicle access to construct and service the scheme would be from the existing access through Cotswold Business Park. It would be necessary to provide a vehicular link from the Business Park to the north and south field.

In order for the site to operate effectively, overshadowing of the solar panels will need to be kept minimum. It will be necessary to control the height of some existing trees and hedge lines and It is proposed to remove three mature oaks from the northern field.

The construction of the solar farm is likely to be split into two phases. The first phase of the construction would consist of earthworks, construction of the frames, the delivery and installation of the inverter cabinets, caballing, transformers, fencing and control room. The final phase would be the installation of the panels.

The reports submitted with the application include:

Planning Statement
Design and Access Statement
Statement of Community Involvement;
Transport Assessment
Ecological Assessment - Phase 1 Habitat Surveys;
Landscape and Visual Impact Assessment
Heritage and Archaeological Assessment;
Arboricultural Assessment;
Flood Risk Assessment;
Solar Glare Report;
Electric and Magnetic Field Report;
Photovoltaic Technical Description.

## **Environmental Management Plan**

An Environmental Management Plan has also submitted with the application which sets out a vision for environmental and socio-economic benefits of the scheme. Objectives include:

- To improve and enhance the landscape features and character of the site; Extensive landscaping, planting and management of existing trees/hedges are proposed. Three mature oak trees will be removed and replacements planted at the northern side of the site. A hedge would be planted on the open part of the northern field facing Mancroft Road/Wardle Close.
- To implement a range of on-site habitat improvements to encourage wildlife;
- To contribute to improvements that will that will improve the ecology and visual

amenity of the site and the surrounding area;

- To contribute to initiatives to help improve community facilities; This would include the provision of additional 'furniture' along the public rights of way and would include a proposed amphitheatre, interpretation boards and benches:
- To improve the Public Rights of Way (link footpaths No's 16&18) and create a permissive circular walk;
- The solar farm will provide an opportunity to create species rich grassland through extensive mowing regimes between each string of solar panels.
- To introduce interpretation and educational resources to encourage a better understanding of the area's environmental heritage and understanding of the solar farm, renewable energy and sustainable development.
- To help encourage recreational activities.
- The Public Footpaths through the site will be kept open throughout and after construction works.

# **Section 106 Legal Agreement**

A Heads of terms for a s106 Legal Agreement has been submitted with the application, stating:

- As soon as practicable after the commencement of the development a Community Fund Panel and Constitution shall be established. This is expected to involve members of relevant community groups including the local schools.
- Once established the Community Fund Panel shall receive a 'Community Benefit Contribution' from the developers, which is to be held in a Community Fund Account.
- An Annual Payment of £3,500 per megawatt of installed capacity calculated during the 12 months preceding the payment shall be paid by the developer to the Community Fund Account.
- The Community Benefit Contribution and Annual Payment shall be used to promote, develop, support and deliver initiatives and projects determined by the Community Fund Panel as being of benefit to the local community and focused on the provision of renewable energy, and improvements to energy efficient buildings.
- The Annual Payment shall be made until the permanent cessation of the generation of electricity from the development or 25 years after the generation commences whichever is sooner.

The application has been submitted so that it can benefit from the Government's Feed-in-Tariff (FITs). In April 2010 the Department of Energy and Climate Change (DECC) used powers in the Energy Act 2008 to introduce a system of feed-in tariffs to incentivise small scale (less than 5MW), low carbon electricity generation.

Through the use of FITs the government aims to encourage deployment of additional low carbon electricity generation, particularly by organisations, businesses, communities and individuals who are not traditionally engaged in the electricity market. This "clean energy cashback" will allow many people to invest in small scale low carbon electricity, in return for a guaranteed payment both for the electricity they generate and export.

In March 2011 the Government went out to consultation to reduce the tariff for stand alone PV schemes between 250kW - 5MW from 30.7p/kwh per unit of electricity produced to 8.5p/kwh, which would come into effect on 1st August. To enable the scheme to benefit from FITS the scheme will have to be ready to connect to the grid before the 1st August.

## **Community Involvement**

A community involvement event publicising the proposed Caddington solar farm took place towards the end of 2010 at Caddington Working Men's Club, with over 75 people attending.

## **Environmental Impact Assessment Screening Opinion**

An Environmental Impact Assessment Screening Opinion was submitted to the Council in 2010 for the proposed Solar Farm. It was considered that the proposed development did not require an Environmental Impact Assessment.

#### **RELEVANT POLICIES:**

## **National Policies (PPG & PPS)**

Planning Policy Statement 1: Delivering Sustainable Development (2005)

Supplement to Planning Policy Statement 1: Planning and Climate Change (2007)

Planning Policy Guidance 2: Green Belts

Planning Policy Statement 4: Planning for Sustainable Economic Growth (2009)

Planning Policy Statement 5: Planning for the Historic Environment (2010)

Planning Policy Statement 7: Sustainable Development and Rural Areas (2004)

Planning Policy Statement 9: Biodiversity and Geological Conservation (2005)

Planning Policy Statement 22: Renewable Energy (2004)

Planning Policy Guidance 13: Transport (2001)

Planning Policy Guidance 24: Noise (1994)

Planning Policy Statement: Consultation – Consultation on a Planning Policy

Statement: Planning for a Low Carbon Future in a Changing Climate (2010)

The UK Low Carbon Transition Plan (2009)

The UK Renewable Energy Strategy (2009)

Draft Overarching National Policy Statement for Energy (EN-1) (2009)

Draft National Policy Statement for Renewable Energy Infrastructure (EN-3) (2009)

# **Regional Spatial Strategy**

## East of England Plan (May 2008)

SS1 - Achieving Sustainable Development

ENV2 - Landscape Conservation

ENV3 - Biodiversity and Earth Heritage

ENV7 - Quality in the Built Environment

ENG1 - Carbon Dioxide and Energy Performance

**ENG2 - Renewable Energy Targets** 

### **Bedfordshire Structure Plan 2011**

None

## South Bedfordshire Local Plan Review Policies

BE8 - Design and Environmental consideration

NE10 - Rural Diversification

# **Supplementary Planning Guidance**

SPD Planning Obligations Strategy

## **Planning History**

CB/10/03708/SCN SB/91/00231	Screening opinion for a solar farm Permission - Demolition of existing buildings and erection of new offices without complying with condition 7 of SB/90/00762 (operating hours)
SB/90/00762	Permission - Demolition of existing buildings and erection of new offices
SB/90/00478	Permission - Removal of agricultural occupancy condition
SB/90/00246	Permission - Demolition of existing buildings and erection of new offices
SB/89/01164	Permission - Refurbishment of existing buildings
SB/89/00457	Permission - Use of existing buildings for business purposes (Class B1)
SB/88/00040	Refused - Change of use of redundant pig farm buildings to light industrial use (retention)

# Representations: (Parish & Neighbours)

Parish/Town Council

In principle accept the location for the proposed solar farm. We do have reservations; The land should be retained as Green Belt and protected for 25 years; All footpaths need to be protected. Existing hedgerows should be retained at their current height and thickness to protect the visual aspect; Concern that the development could pull electrical storms over to Caddington; Feel that the Community Fund is a fantastic opportunity with the first payment going to the Caddington Village School for solar panels. The annual payment should then be used to reduce the Parish Precepts. If used for lagging and community buildings this would not benefit everyone in the community; Concerned about construction traffic using Millfield Lane and ask for a form of traffic control by phone or radio; Will their be measures in place to reduce noise

form wind around the solar panels?

Neighbours Cotswold, Millfield Lane

Does not object to the principle but feel further research is required. The energy produced by the panels is stored in batteries which will be rectified into 415V AC which will be sent back to the grid. On a huge scale like this is there any research into the long-term effects of houses being so close to the installation as there could be current leakage and eddie currents produced as two examples. Would there be any noise generated? Would the panels generate noise on a windy day?

The Old Grannary, Millfield Lane

My house backs directly onto the one of the fields for this proposed development which will result in me being directly effected during construction due to invasion of privacy and noise. Millfield is a small single track lane and construction traffic up and down the lane will effect residents who need to use the lane frequently for access to and from their properties and result in further damage to a lane which his already in need of repair. The proposal calls for a 7ft high fence with CCTV surrounding the installation which will result in not only visually unsightly from my property but also result in potential loss of privacy.

Millfield House

Request confirmation that the solar farm will not create any noise at all including wind noise around the units or from the new buildings. Need clarification on all building work and any access disruption to my property resulting from this development. Millfield Lane is very narrow and unprepared, i.e. all mud. I have concerns that if heavy lorries will be using the lane it will very quickly be completely churned and will driving difficult, in addition there are few passing places and those that exist are heavily churned up. Any new generators must be built as far from my property as possible. I need confirmation that the panels will not produce glare.

## Consultations/Publicity responses

Archaeologist

No objection to this application on archaeological, grounds.

**Ecologist** 

Design and access statement 3.2 states that the site is currently agricultural set-aside, and it is referred to as species poor grassland. 6.2 of the EMP proposes that the solar farm will provide an opportunity to create species rich grassland through extensive mowing regimes with all arrisings removed, whilst this sounds an ideal option I am sceptical as to how removal of arrisings will be undertaken within such tightly spaced panel rows. I doubt a tractor and baler would fit and consequently this would require

removal by hand which is a massive task over such an area. To initially achieve a species rich sward will take a number of years of such management and to maintain the sward will require continued management for the lifetime of the project (25 years).

Loss of the mature oak trees is a great shame, from the photographs in the EMP they appear to be fine healthy specimens which no doubt provide a rich ecological resource. However, I am pleased to see in 6.9 retention of standing deadwood, this will benefit bats but also other species such as woodpeckers.

I approve of the recommendations mentioned in the Ecological Assessment in relation to birds, bats and reptiles and these should be followed.

Landscape Officer

The existing character of the application site is consistent with and integral with the surrounding landscape including the AONB to the west - medium to large agricultural fields defined by hedgerows, hedgerow trees and wooded copse.

Having studied the photomontages and accompanying LVIA I generally agree that the existing boundary planting supported by additional hedgerow planting will screen or filter most views to the solar arrays. There a few locations where the solar panels could be visible and where additional planting may be necessary.

The proposed management of existing and proposed hedgerows to the site boundaries is to maintain these to 5m in height. I am concerned that this management regime will introduce regular, formal hedgerows, impact on the capacity of hedgerow trees to mature and introduce boundary hedgerows which are not in keeping with local landscape planting structures. Existing and proposed hedgerows / hedgerow trees must be managed to maintain the natural variation in form and height, which enables trees to mature, and continues the character of local planting structures.

Any associated structures need to careful considered and located in areas to reduce impact. There should be no lighting of the scheme.

Tree & Landscape Officer

No objection - I confirm that the scrub management has been clarified and that the treescape character and associated screening value will be retained. I also understand that the three Oaks will be replanted in the area beyond the Poplar plantation to the north of the site.

**Chilterns Conservation** 

No objections but have the following comments:

**Board** 

Though the application as presented is not considered to have a detrimental impact on the Chilterns AONB and its enjoyment, it should be borne in mind that certain factors could change this. The key ones to note are the possible loss of trees or shrubs within the belts that exist to the west, south and north of the site and the possibility that lighting might be installed on site. These scenarios would lead to the development being much more visible in the landscape, particularly from within the AONB to the west and as such the Council should ensure that the current belts of trees are properly maintained. management should be achieved with the imposition of a condition requiring a management plan to be in place, if this has not been considered already. Secondly the Council should ensure that lighting is not introduced, also by suitable condition. Any security fencing should be suitably screened (this is likely to be the case with the amount of planting that is already in place). A traffic management plan should be in place to ensure that the rural character of Millfield Lane is not affected (this is guite narrow in places to the south of the site and heavy goods vehicles making deliveries could cause significant damage if not properly routed).

**Natural England** 

The exposed landscape means that open. any development has the potential to be highly visible, although this may be in the context of other development and so would not necessarily have a high visual impact. That the proposed solar farm comprises low lying (photovoltaic panels is therefore in its favour, being sited away from the ridgetop, and not breaking the skyline. This also means that immediately local views of the site can readily be screened by existing or enhanced hedgerow screening. Such measures would meet the landscape management guidelines to restore and improve the condition and structure of hedgerow boundaries. That existing hedgerows will be used for screening does also meet the objective to conserve historic field patterns (although note above comment). The lack of vertical prominence will also help to blend with the smooth and open slopes of the Yer valley.

We have some concerns that the new security fence may exacerbate the urban fringe feel of this area. We suggest that this be careful designed, and integrated within existing hedgerow or softening with climbing plants to blend well. The same applies for the lighting regime. Should the planning authority be minded to grant planning permission, they should ensure that the measures set out in the supporting documents, in particular provision of new hedgerow planting and associated maintenance and management of existing vegetation screening the site from

the AONB, and lighting regime, are secured by a suitably worded planning condition or other legal agreement.

The planning authority should ensure that existing public rights of way are conserved and enhanced. The ecological assessment submitted with the planning application reports limited biodiversity on the application site. Features of note include commuting paths for badger, trees with potential for bat roosts, habitat for nesting birds, and peripheral areas of suitably habitat for native reptiles. Natural England supports the measures proposed by way of mitigation, particularly access through (or under) the security fence to maintain access for badgers to forage on the site, and the felling of trees with bat roost potential 'soft' fell techniques (this should target the September – October period preferably).. We also support the recommendation to clear breeding bird habitat outside the breeding season (March - August), or otherwise preceded by a survey for active nests by a suitably qualified ecologist. We support the use of habitat manipulation techniques (outside of the hibernation period) to avoid killing or injuring reptiles, for the restricted area of works to facilitate access between fields. These measures should be secured via a suitably worded planning condition or other legal agreement

Environmental Health Officer

No objection – The applicant has addressed glare and glint which is potentially the only matter that the service could deal with.

NATS

Does not conflict with NATS safeguarding criteria

Sustainability Officer

- The proposed development of solar farm is supported by the UK national planning guidance on sustainable development and renewable energy.
- The project would contribute towards achieving UK's renewable energy generation and carbon emission reduction targets.
- It is welcomed that the developer proposes to open the solar farm for educational purposes to schools and provide an information board to wider public.
- It is welcomed that the developer made a commitment to pay annually £3500 per MW of energy generated on site to a Community Fund to be used on community renewable and energy efficiency projects.

Countryside Access & Rights of Way Officer

Footpath no. A16 and public footpath no. 17 were lying particularly wet and as a result were in some sections rather difficult to use. We note that this has to some extent

already been acknowledged as an issue and the surfacing of public footpath no. 17 through the site is referred to in the Design and Access Statement of the application.

A contributory factor to the poor surface drainage of the paths may be related in part to the fact they are rather enclosed between the existing hedge and scrub belt and are restricted in terms of light and air reaching the surfaces to dry them out. The paths should be 2 metres wide useable mown grass paths with 2 metre verge buffers on either side before planting so that they remain open, useable and are not encroached upon by vegetation. In this regard, we are not overly keen on the proposal for 3 metre high scrub planting alongside the public footpaths in such close proximity. Although i accept that the proposed function of the scrub planting is to screen views, the 'Typical Sections' submitted, do raise my concerns that the paths will become and feel even more enclosed.

We welcome the addition of the new public footpath proposed to link public footpaths A16 and 16 along the proposed new hedge and this would create something of a short circular walk around the field for walkers. We would suggest the landowner entering into permissive path agreement with the Council perhaps for a period of 20 years with maintenance and liability for the path remaining with the landowner.

Fully support the additional 'furniture' along the public rights of way and would welcome further details in due course with regard to the exact location and design of the proposed amphitheatre, interpretation boards and benches.

**Environment Agency** 

Objection - The FRA submitted with this application does not comply with the requirements set out in Annex E, paragraph E3 of Planning Policy Statement 25 (PPS 25). The submitted FRA prepared by Woods Hardwick and dated January 2011 does not therefore, provide a suitable basis for assessment to be made of the flood risks arising from the proposed development.

Highway Officer

No objection subject to some junction improvements on to the business park and the junction with Dunstable Road.

Ramblers Association

It is not clear from the documentation that the Rights of Way passing through the site will be maintained both during construction and when in operation.

London-Luton Airport

Does not conflict with safeguarding criteria.

Bedfordshire & Luton fire & Rescue Service

No adverse comments at this stage.

# **Determining Issues**

The main considerations of the application are;

- 1. Policy Background
- 2. Impact of the proposal on Landscape Character, Openness of the Green Belt and Visual Amenities of the Green Belt
- 3. Ecology
- 4. Agricultural Land
- Countryside Access and Rights of Way
- 6. Highway Issues
- 7. Impact on residential amenity
- 8. Electromagnetic Fields Review
- 9. S106 Legal Agreement
- 10 Flood Risk
- 11. Other Issues
- 12. Conclusion

#### Considerations

## 1. Policy Background

Sustainability and climate change and the need to increase renewable energy generation and reduce carbon emissions are key components of current planning policy, which must carry considerable weight in determining this application.

The development would contribute towards the renewable energy and carbon reduction targets for the East of England and Central Bedfordshire and should be encouraged in accordance with the national, regional and local policies specified. Tackling climate change is a key Government priority. Accordingly, the planning policy context, at all levels, is supportive of renewable energy schemes.

## **PPS 22: Renewable Energy**

PPS 22 specifically deals with renewable energy. It promotes and encourages the development of renewable energy resources and it notes that small-scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally. Planning authorities should not therefore reject planning applications simply because the level of output is small.

Under the heading of Key Principles PPS 22 states, "The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission" and that "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".

"When located in the Green Belt, elements of many renewable energy projects

will comprise inappropriate development which may impact on the openness of the Green Belt. Careful consideration will therefore need to be given to the visual impact of projects, and developers will need to demonstrate very special circumstances that clearly outweigh any harm by reason of inappropriateness and any other harm if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources".

The Companion Guide to PPS22 - Active Solar (photovoltaic) says that in general 'solar panels' are to be encouraged. The guide predominantly relates to householder schemes but has little to say on stand-alone PV arrays connecting to the local electric transmission network.

# East of England Plan, May 2008 and Milton Keynes & South Midlands Sub-Regional Strategy, March 2005

Policy ENG2: Renewable Energy Targets states:

'The development of new facilities for renewable power generation should be supported with the aim that by 2010 10% of the region's energy and by 2020 17% of the region's energy should come from renewable sources. These targets exclude energy from offshore wind'.

The East of England region failed to reach the 2010 figure and is a considerable way from achieving the 17% by 2020. In view of this the policy should be given considerable weight.

## Planning Policy Statement 7: Sustainable Development in Rural Areas

PPS7 encourages farmers to diversify into new agricultural opportunities such as renewable energy crops. Paragraph 31 states that LPAs should give favourable consideration to proposals for diversification in Green Belts where the development preserves the openness of the Green Belt and does not conflict with the purposes of including land within it. The guidance further states that "Where farm diversification proposals in the Green Belt would result in inappropriate development in terms of PPG2, any wider benefits of the diversification may contribute to the "very special circumstances" required by PPG2 for a development to be granted planning permission".

Planning Policy Statement 7 (PPS7) also states that, 'the presence of best most versatile land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) should be taken into account alongside other sustainability considerations....when determining planning applications".

#### **Green Belt**

The proposal site is within the South Bedfordshire Green Belt. PPG 2: Green Belts states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The most important attribute of the Green Belts is their openness. Five purposes are listed for including land within a Green Belt. The most relevant to this application site is the safeguarding of the countryside from encroachment.

In accordance with advice in PPS22 advice the proposed the photovoltaic array and associated plant constitute inappropriate development.

Inappropriate development is, by definition, harmful to the Green Belt. It is therefore necessary to demonstrate why permission should be granted. Very special circumstances to justify inappropriate development will not exist unless the harm, by reason of inappropriateness and any other harm is clearly outweighed by other considerations.

## Very Special Considerations (VSCs) in the Green Belt

The VSCs provided by the applicant are as follows:

- Sustainability credentials and the strong legislative support for renewable energy;
- The temporary nature of the panels supported by screw piling with no foundations for a period limited to 25 years;
- Community Fund for energy efficiency measures and renewable technologies in Caddington and Slip End;
- Educational facilities including an amphitheatre and seating areas within the site to be used by local schools;
- Footpath improvements; new circular walk to be created;
- The proposal would assist with farm diversification in the area.

It is considered that the VCSs forwarded by the applicant provide material considerations which taken together are sufficient to provide Very Special Circumstances for by definition 'inappropriate development in the Green Belt'.

# 2. Impact of the proposal on Landscape Character, Openness of the Green Belt and Visual Amenities of the Green Belt

The applicant has submitted a Landscape and Visual Impact Assessment (LVIA) which includes a selection of view points considered to be representative of the range of views and receptors around the site.

The assessment evaluates the scheme against national character areas and the South Bedfordshire Character Areas (2009). The appraisal also assesses the scheme in relation to its impact on the Green Belt. Both PPG2 and PPS22 require that the visual impact of development, including those for renewable development, be carefully considered so that they do not adversely affect the openness and visual amenities of the locality.

The LVIA identifies that the development could be successfully accommodated and assimilated into the surrounding landscape without causing significant harm to landscape character, visual amenity or landscape setting of the area.

The (former) South Bedfordshire District Landscape Character Assessment (2009), and in particular type 11 chalk dipslope (11B: Caddington – Slip End Chalk Dipslope) and type 12 Chalk Valleys (12B Ver Chalk Valley) and type 11A: Whipsnade Chalk Dipslope and the Chilterns Landscape Character Area 110 as wider context. Type 11B: Caddington – Slip End Chalk Dipslope, is characterised by a large scale open landscape with a broad plateau landform

undulating to form subtle valleys. It has denuded hedgerow cover with large scale open arable fields and occasional mature oaks marking former boundary lines (note that the proposal will remove rather than restore this feature of the site). Limited views to the urban edge of Dunstable (courtesy of the chalk scarp slope) provide a natural container to growth, although the area does have a strong urban fringe character. The pylon line running across the plateau forms a prominent vertical feature in open views.

As noted by Natural England and the Council's Landscape Officer, the open, exposed landscape means that any development has the potential to be highly visible. Both agree, however, that the existing boundary planting supported by additional hedgerow planting will screen or filter most views to the solar arrays.

The proposed solar farm comprises low lying (approximately 2m high) photovoltaic panels sited away from the ridgetop, not breaking the skyline, predominantly surrounded and enclosed by trees and hedges. This means that immediately local views are in the main screened, and those not already screened can readily be enhanced hedgerow screening. The lack of vertical prominence would also help to blend with the smooth and open slopes of the Yer valley. Given the extent of the existing screening to the west of the site the proposal would not be seen from the Chilterns AONB.

The Landscape Officer has raised concern regarding the management of existing and proposed hedgerows/trees which should maintain their natural variation in form and height, enabling trees to mature and continue the character of local planting structures. The applicant has confirmed that some variation can be introduced to the form and height of hedgerows/trees. However, this will not be possible in all areas. In order for the site to operate effectively care will need to be taken to ensure that surrounding vegetation does not overshadow the solar panels.

Whilst some coppicing of woodland will be needed towards the southern corner and west of the site, these are points of deeper woodland, meaning that the reduction in height of trees closest to the panels will not necessarily be apparent from distant views due to other trees retained at their existing height continuing to shield the main site. Whilst some coppicing will be necessary, full height trees will remain to help screen the development. In addition, due to the higher levels of the application site, it is apparent that a screen of 5m in height (and probably lower) will be sufficient to screen any views of the panels within the site.

The Landscape Officer has also queried a number of locations where there may need to be additional planting to screen the solar panels. This issue can be agreed as part of the Environmental Management Plan which will form part of the S106 Legal Agreement.

A number of consultation responses have raised concern regarding the impact of security lighting on the Green belt and AONB. There would however be no security lights proposed as part of the application. The scheme would use infrared security cameras which do not require lighting. A condition restricting lighting has been recommended as part of this report.

Concerns have also been raised regarding the security fences which would be located within the fields. The proposed fences would be 7ft high green weld

mesh. They would be set back between 12&28m within the fields and in the majority of locations would be adjacent to or set behind existing areas of trees, hedges or scrub. The fence would be integrated into the site with additional tree and hedgerow planting creating a landscape buffer area so that in the medium term they would not be visible from the public footpaths. Climbing plants would also help the fence to blend well with its surroundings.

The proposed inverter/transformer buildings would be located in areas within the fields, between banks of the solar panels, away from Public Rights of way to reduce their impact. Likewise, to reduce its impact, the substation building has been located to the north of the poplar plantation adjacent to the Business Park. Both the inverter/transformer buildings and the substation or relatively modest in size and would be coloured green to reduce their impact.

Although there would be an impact on the Visual Amenities of the Green Belt this would be limited. Considering the modest height of the panels and buildings, and the mitigation measures to be implemented in the Environmental Management Plan, it is considered that the Visual Amenities of the Green Belt or locality would not be detrimentally harmed. Because the solar array would be predominantly 2m high with no foundation, and time limited to 25 years, it is considered that the scheme would not have an adverse harm the openness of the Green Belt.

## 3. Ecology

The ecological assessment submitted with the planning application reports limited biodiversity on the application site. Features of note include commuting paths for badger, trees with potential for bat roosts, habitat for nesting birds, and peripheral areas of suitably habitat for native reptiles.

Natural England supports the measures proposed by way of mitigation, particularly access through (or under) the security fence to maintain access for badgers to forage on the site, and the felling of trees with bat roost potential using 'soft' fell techniques (this should target the September – October period preferably). Natural England also support the recommendation to clear breeding bird habitat outside the breeding season (March – August), or otherwise preceded by a survey for active nests by a suitably qualified ecologist, and also support the use of habitat manipulation techniques (outside of the hibernation period) to avoid killing or injuring reptiles, for the restricted area of works to facilitate access between fields.

The Council's Ecologist has stated that

'Loss of the mature oak trees is a great shame, from the photographs in the EMP they appear to be fine healthy specimens which no doubt provide a rich ecological resource. However, I am pleased to see in 6.9 retention of standing deadwood, this will benefit bats but also other species such as woodpeckers. I approve of the recommendations mentioned in the Ecological Assessment in relation to birds, bats and reptiles and these should be followed'.

Although the proposal is for a solar farm, the agricultural use of the land would not completely cease with a hay crop being taken between the solar panel strings. The ecologist welcomes the proposal to create a species rich grassland through extensive mowing regimes between the solar panel strings, but queries how this will be undertaken within such tightly spaced panel rows. The space between rows is actually 4m wide which is more than sufficient width for a tractor.

Although the removal of three mature and healthy oak trees in the northern field is to be regretted, the Tree & Landcape Officer has no objections to the application and has confirmed that, 'the scrub management has been clarified and that the treescape character and associated screening value will be retained. I also understand that the three Oaks will be replanted in the area beyond the Poplar plantation to the north of the site'.

## 4. Agricultural Land

The application site comprises land which has been 'set aside' for approximately 17 years. The applicant has stated that the land is a mixture of land classified as 3a and 3b.

Planning Policy Statement 7 (PPS7) states that, 'the presence of best most versatile land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) should be taken into account alongside other sustainability considerations.....when determining planning applications".

Although part of the land is classified 3a, the development is not considered to be irreversible because the permission would be conditioned so that in 25 years the solar panels and associated building would be removed and the land would be returned to agricultural use. In addition, as stated above, the site would still be used for an agricultural use because a hay crop would be taken from between the solar panel strings.

## 5. Countryside Access - Rights of Way

The Rights of Way passing through the site will be maintained both during construction and when in operation, and it is proposed as part of the Environmental Management Plan to improve and upgrade footpaths (including educational facilities and 'furniture') to create a link between Footpath no. 16&18 and to create a permissive circular walk.

The Rights of Way Officer broadly supports the proposal but has concerns regarding the drainage of some paths:

'A contributory factor to the poor surface drainage of the paths may be related in part to the fact they are rather enclosed between the existing hedge and scrub belt and are restricted in terms of light and air reaching the surfaces to dry them out. The paths should be 2 metres wide useable mown grass paths with 2 metre verge buffers on either side before planting so that they remain open, useable and are not encroached upon by vegetation. In this regard, we are not overly keen on the proposal for 3 metre high scrub planting alongside the public footpaths in such close proximity. Although I accept that the proposed function of the scrub planting is to screen views, the 'Typical Sections' submitted, do raise my concerns that the paths will become and feel even more enclosed'.

The Environmental Management Plan identifies the need to upgrade some areas of footpath because of drainage issue. While the applicant has agreed to

further discuss those areas identified by the Rights of Way Officer, there is a balance to be had between the need to increase screening in certain areas and improve the rights of way. Overall it is considered that although there may be some enclosure of footpaths, the existing Rights of Way network would benefit from the proposed measures.

The Environmental Management Plan will form part of the s106 Agreement to be agreed (should permission be granted) by October 2011. This will enable further discussions between the Council and the Applicant.

## 6. Highway Issues

A Transport assessment has been submitted with the application which identifies that construction traffic would access the site via Dunstable Road and the Cotswold Business Park, which would be for a period of approximately 2-3 months.

Although Millfield Lane is a single-track road, it is already subject to use by users of the Business Park and local farms and there are a number of pull-in spaces from the Dunstable Road to the Business Park.

It is envisaged that delivery of the solar panels would take up to 90 HGV vehicle loads, delivered at a rate of one-two vehicles per day. In the first phase of construction there is expected to be an additional 1-2 construction vehicles. It is expected that construction workers will use cars or light vans and it is anticipated that there would be up to 50 people employed although not all on site at any one time. Car parking for the workers will be in a field adjacent to the site. The HGV deliveries would be managed by traffic control by radio or phone.

During the operation of the solar farm it is expected that there would be1-2 engineers employed who would visit the site as and when required for maintenance purposes. There would be a permanent security guard on the site.

The highway Officer considers that the levels of the 2-3 month construction traffic, and subsequent operation of the Solar Farm, would not be material and would not therefore have a detrimental impact on the operation or safety of the local highway network. The Highway Officer has requested improvements to the road junction of Millfield Lane and Dunstable Road and the junction of Millfield Lane with Cotswold Business Park, which will form part of the s106 Legal Agreement.

## 7. Impact on residential amenity

The nearest residential properties are located to the west of the site on Millfield Lane and share a common boundary. Given the existing screening between the proposal site and the residential properties and the modest size of the proposed panels and ancillary buildings, there would not be a detrimental impact in terms of visual impact. Although there would be CCTV cameras they would be directed into the site away from the adjacent residential properties.

Adjoining neighbours have raised concern regarding potential noise produced by the panels, transformer and substation buildings, from glare produced by the solar panels and from strong winds around the panels and buildings.

The nature of photovoltaic panels is to absorb rather than reflect sunlight,

therefore glare from the solar panels will not harm amenity. Neither do the solar panels make a noise. The transformers and substation would by themselves produce noise but would these would be housed in buildings with sound proofing and would be located between 90 and 280m from the nearest residential property.

In strong wind there is a possibility that the solar panels and associated buildings could produce a noise. This question has been posed to the applicant and an update will be provided in the Late Sheet.

It should be noted that the Environmental Health Officer has no objection to the proposal.

## 8. Electromagnetic Fields Review

An Electromagnetic Fields Review was submitted with the application. It concludes that, 'the proposal is expected to comply with the UK government guidelines and EU advice on electric fields and electromagnetic fields. Using the typical data available the expected strength of the fields from the site and its electrical distribution to the point of connection with the existing electricity network is many times lower than the guidelines....

It is therefore the considered view that due to the addition of the PV generating site and associated power connections the general public and the residents of Caddington will not be exposed to electric fields or electro-magnetic fields in excess of either the UK government guideline limit or National Radiological Protection Board recessionary limit due to this installation.

From current research there are no firm conclusions that a relationship exists between low level Extremely Low Frequency Electro-magnetic Fields and adverse health effects. The government has instigated a working group to consider the impact of limits. This work is presently ongoing'.

There is no evidence to that (as suggested by the Parish Council) that the Solar farm would attract electrical storms to Caddington.

## 9. Section 106 Agreement

The Section 106 has been developed with the applicant so that it meets the tests for Planning Obligations set out in Circular 05/05.

The proposed Community Fund would be an Annual Payment (for 25 years) of £3,500 per megawatt of installed capacity, calculated during the 12 months preceding the payment, that would be paid by the developer to a Community Fund Account. This would be administered by Central Bedfordshire Council in conjunction with a Community Fund Panel which would be set up by Central Bedfordshire Council and Caddington and Slip End Parish Council. This is expected to involve members of relevant community groups including the local schools.

The Community Benefit Contribution and Annual Payment would be used to promote, develop, support and deliver initiatives and projects determined by the Community Fund Panel as being of benefit to the local community and focused

on the provision of renewable energy, and improvements to energy efficient buildings. The proposed linking of the Community Fund to energy efficient/renewable measure ensures that it meets the test for a planning obligation in that it is relevant to planning and relevant to the Planning Application.

Caddington and Slip End Parish Council have raised concern regarding the proposed Community Fund and in particular its use specifically for renewable energy/energy efficiency measures. It feels that this fund would not benefit all members of the community and that a reduction in all householders Parish Precepts could be preferable option.

The Parish Council's proposal does not meet the tests for a Planning Obligation because it does not relate to Planning, does not relate to Planning Application and is not reasonable.

Due to the tight timeframes of the scheme, and due to its scope, the Environmental Management Plan will form a schedule in the s106. This will allow further discussion between the Council and the applicant to be agreed before the first planting season. An associated Landscaping condition has been recommended in this report.

## 10. Flood Risk

The Environment Agency's initial response (received 8 weeks in to application) is an objection stating that the Flood Risk Assessment submitted with this application does not comply with the requirements set out in Annex E, paragraph E3 of Planning Policy Statement 25 (PPS 25).

Given that the proposal is on a hill, not within a flood plain and does not propose any hard standing, this matter is considered to be one that can be clarified by further information. The Environment Agency have informally agreed with this view. This information has been submitted by the applicant but at the time of writing the Environment Agency had not responded. An update will be provided on the Late sheet.

#### 11. Other Issues

The Parish Council is concerned that in 25 years' time the proposal site, following its use as a solar farm, could loose its designation as Green Belt and/or become Brownfield land.

Provided that the proposal site is still designated Green Belt in 25 years' time, the land would not cease to be Green Belt because of the use of the land as a solar farm. Neither would the land become Brownfield land. A condition time limiting the scheme to 25 years has been recommended as part of this report, including removal of all structures, fences and plant and the returning of the land to agricultural use.

#### 12. Conclusion

The proposed Solar Farm has provided Very Special Circumstances for inappropriate development in the Green Belt, which would preserve the

openness of the Green Belt, would contribute towards the renewable energy and carbon reduction targets for the East of England and Central Bedfordshire and is acceptable in all other ways.

The proposal does not need to be referred to the Government Office for the East of England under the Town and Country Planning (Green Belt) Direction 2005 (Circular 11/2005) because the floorspace proposed is significantly below the 1,000 sq.m threshold (the solar panels do not create a floorspace) and the development by reason of its scale, nature and location would not have a significant impact on the openness of the Green Belt.

## Recommendation

That Planning Permission be Approved subject to the signing of a Section 106 Agreement and the removal of the Environment Agency's flood risk objection.

1 The development shall begin not later than three years from the date of this permission.

Reason: To comply with Section 91 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

Within 6 months of the planning permission hereby granted approval, a landscaping scheme to include any hard surfaces and earth mounding shall be submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be implemented by the end of the full planting season immediately following the completion and/or first use of any separate part of the development (a full planting season means the period from October to March). The trees, shrubs and grass shall subsequently be maintained for a period of five years from the date of planting and any which die or are destroyed during this period shall be replaced during the next planting season and maintained until satisfactorily established.

Reason: To ensure a satisfactory standard of landscaping. (Policy BE8, S.B.L.P.R).

No external lighting shall be installed without the prior written approval of the Local Planning Authority.

Reason: To protect the amenity of neighbouring properties and impact on the Green Belt and Chilterns AONB. (Policy BE8, S.B.L.P.R).

Within 6 months of the planning permission hereby granted approval, details and locations of the security cameras shall be submitted to and agreed in writing with the Local Planning Authority.

Reason: To protect the amenity of neighbouring properties and impact on the character of the locality. (Policy BE8, S.B.L.P.R).

Should the solar panels not be used for the production of energy for a period of six months, the panels, support structures and associated buildings shall be removed in their entirety and the land shall be restored to its former condition in accordance with a scheme of work submitted to and approved in writing by the Local Planning Authority.

Reason: To prevent the retention of development in the countryside that is not being used for its intended purpose.

The permission hereby granted shall endure for a period of 25 years from the date when electricity is first generated by the Solar Farm (the 'First Export Date'). Written confirmation of the First Export Date shall be provided to the local planning authority no later than 1 calendar month after the event. Within 6 months, following the completion of the 25 year period, the solar panels, support structures and associated buildings shall be removed in their entirety and the land shall be restored to its former condition.

Reason: To ensure that the development is decommissioned and to protect the character and appearance of the locality (Policy BE8, S.B.L.P.R).

The development hereby permitted shall not be carried out except in complete accordance with the details shown on the submitted plans, numbers BNL.0259\_02-1, E.0147\_12-2, TS10-207A\1 revision 0, E.0147\_10-1, E.0147\_02-3, E404-23-01-0, E404-32-01, CBC/01, CBC/02, CBC/03, CBC/04 and CBC/05.

Reason: For the avoidance of doubt.

## **Reasons for Granting**

The proposed Solar Farm has provided Very Special Circumstances for inappropriate development in the Green Belt, which would preserve the openness of the Green Belt, would contribute towards the renewable energy and carbon reduction targets for the East of England and Central Bedfordshire, and is acceptable in all other ways. Accordingly the proposed development is in accordance with Local Plan Policies BE8 and NE10, East of England Plan Policies SS1, ENV2, ENV3, ENV7, ENG1 and ENG2 and Planning Policy Statements 1, 4, 5, 7, 9, 22 and Planning Policy Guidance 2 and 13.

The proposal does not need to be referred to the Government Office for the East of England under the Town and Country Planning (Green Belt) Direction 2005 (Circular 11/2005) because the floorspace proposed is significantly below the 1,000 sq.m threshold (the solar panels do not create a floorspace) and the development by reason of its scale, nature and location would not have a significant impact on the openness of the Green Belt.

# **Notes to Applicant**

1. In accordance with Article 31 of the Town and Country Planning (Development Management Procedure) (England) Order 2010, the Council

hereby certify that the proposal as hereby approved conforms with the relevant policies of the Development Plan comprising of the Regional Spatial Strategy for the East of England (the East of England Plan and the Milton Keynes and South Midlands Sub-Regional Strategy), Bedfordshire Structure Plan 2011 and the South Bedfordshire Local Plan Review and material considerations do not indicate otherwise. The policies which refer are as follows:

# Regional Spatial Strategy East of England Plan (May 2008)

SS1 - Achieving Sustainable Development

**ENV2 - Landscape Conservation** 

ENV3 - Biodiversity and Earth Heritage

ENV7 - Quality in the Built Environment

ENG1 - Carbon Dioxide and Energy Performance

**ENG2** - Renewable Energy Targets

#### **Bedfordshire Structure Plan 2011**

None

#### South Bedfordshire Local Plan Review Policies

BE8 - Design and Environmental consideration

- 2. In accordance with Article 31 of the Town and Country Planning (Development Management Procedure) (England) Order 2010, the reason for any condition above relates to the Policies as referred to in the Regional Spatial Strategy (RSS), Bedfordshire Structure Plan 2011 (BSP) and the South Bedfordshire Local Plan Review (SBLPR).
- 3. This permission relates only to that required under the Town & Country Planning Acts and does not include any consent or approval under any other enactment or under the Building Regulations. Any other consent or approval which is necessary must be obtained from the appropriate authority.
- 4. The site is located on a Principal aquifer - the Woburn Sands Formation Principal aquifers are geological strata that exhibit high permeability and usually provide a high level of water storage. The site is also located within a Source Protection Zone 3 (SPZ3). We use SPZs as a means to protect groundwater that is abstracted for human consumption. An SPZ3 is a zone designed to cover the complete catchment area of a abstraction point. All groundwater aroundwater and groundwater contaminants within this zone will eventually reach the abstraction point. The Western side of the sites area is situated within SPZ 2, of our Groundwater Protection Policy. Any pollutants entering the aguifer below this site could potentially contaminate the potable water supply within 400 days.

In accordance with our Groundwater Protection, Policy and Policy (GP3) document, we offer the following information on the design and location of sustainable drainage systems:

Direct discharges into groundwater of surface water run-off are not acceptable. All infiltration structures (permeable pavements, infiltration trenches, soakaways, etc.) should be constructed to as shallow a depth as

possible to simulate natural infiltration.

contamination should be passed through an oil separator designed and constructed to have a capacity and details compatible with the site being drained. Roof water should not pass through the interceptor.

Only clean, uncontaminated water should be discharged to any soakaway/infiltration structure.

Deep bore and other deep soakaway systems are not considered by the Environment Agency to be appropriate in areas where groundwater constitutes a significant resource (i.e. where aquifer yield may support or already supports abstraction).

Drainage systems should be constructed in line with guidance provided in CIRIA C697 as well as referring to the details given in C609 referred to above. C522 replacement (prior to publication, 2006, refer to CIRIA Report 609).

- 5. The development of the site is subject to a Planning Obligation under Section 106 of the Town and Country Planning Act 1990 (as amended).
- 6. Please note that the unnumbered drawings submitted in connection with this application have been given unique numbers by the Local Planning Authority. The numbers can be sourced by examining the plans on the View a Planning Application pages of the Council's website www.centralbedfordshire.gov.uk.

DECISION	l			