

PARISH Elmton With Creswell

APPLICATION Development of a solar farm using solar PV panels, frames, inverter pods and substation along with ancillary fences, access tracks, security cameras and landscaping

LOCATION Land To The North And South Of Sewage Treatment Plant Frithwood Lane Elmton

APPLICANT Mr Charles Houston

APPLICATION NO. 14/00349/FUL **FILE NO.** PP-03546396

CASE OFFICER Mr Peter Sawdon

DATE RECEIVED 24th July 2014

Delegated application referred to Committee by Head of Planning
Reason: Consideration of visual impacts

SITE The gross application area is 11.8 hectares in size and is located on reclaimed colliery tips land generally to the south of Creswell (approx. 225m south of the Craggs Business Park). It is positioned on two areas to the north and south of the Creswell Sewage Works.

It is stated that the site is owned by the Welbeck Estate and would be rented by the applicant.

The site comprises 11.8 hectares of reclaimed land, the site having previously been a colliery spoil heap. The site has been used for grazing sheep. It is stated that whilst the 'DEFRA' Magic Maps show the land zoned Grade 3, it is clearly worse that this (Grades 4 – 5) with only approx 6-8" of topsoil above stone, with this anomaly being due to the historic nature of the land grading which pre-dates the spoil heap.

The site is split into two areas to either side of the Frithwood Lane Bridleway: -

- The southern site comprises a former spoil heap of approx 30 acres which rises approximately 12m from the level of Frithwood Lane and then slopes down southwards and westwards towards the railway (which forms the western boundary) before rising again at the southern end.
- The northern site comprises approx 7 acres of the south-facing slope of an adjoining spoil heap on the northern side of Frithwood Lane. Like the south site, the north site borders the railway to the West. Some of the north site has been planted with young trees, partly to screen the Severn Trent Sewerage plant which lies between the two sites.

Both sites will be accessed from Frithwood Lane which is a rough private track leading from the A616 that provides access to the sewage farm; that track is also used as a bridleway.

PROPOSAL The applicant proposes to install an array of photovoltaic solar panels on the site, as shown in the accompanying indicative Layout Plan, to convert daylight into electricity. It is stated that this solar development will have an export capacity of approximately 5 megawatts (MW), which is enough to power 1480 typical homes, and save 2,783,000 kg in CO² emissions per annum. All the power from the array will be exported into the local 11KV grid for use locally.

It is stated that the solar development involves the change of use of approximately one third by area of fields comprising poor agricultural land to a new use of solar energy generation, by the erection of solar PV panels, invertors, access tracks and a substation. Thus the majority (2/3) of the site will not be affected by the development and will remain 100% in agricultural use. Approx. 25,000 panels would be installed.

The planning application is supported by the following reports: -

- Design and Access Statement
- Landscape and Visual Impact Assessment (LVIA)
- Heritage Impact Assessment
- Ecological Report
- Construction Management Plan
- Glint and Glare Report
- Landscape Statement
- Statement of Community Involvement
- Transport Statement

The applicant is requesting a temporary permission of 25 years; that is also the timescale that the applicants intend to have an interest in the land. It is stated therefore that the array will be dismantled 25 years after its first commission, probably in the year 2040. It is indicated that PV modules have an operational life of between 25 – 35 years.

The PV panels themselves would be erected on aluminium and galvanised steel framework that would be piled into the ground. The highest point of the 25° angled PV panels would be up to 2.7m above ground and these would be installed in rows between 4.5m and 6.0m apart.

The proposed sub-station would measure 4.995m x 6.5m x 3.945m maximum height (eaves height 3.055m).

The proposed inverter pod would measure 11.6m x 2.7m x 3.22m high.

Motion Sensor security cameras are proposed on 2.75m high poles to monitor the site and detect any unwanted activity.

It is stated that no lighting is required or proposed as part of this application.

AMENDMENTS

CCTV details were submitted on 15th September 2014;

Addendum to the Landscape and Visual Assessment was submitted on 23rd September 2014; and

Updated Heritage Impact Assessments were submitted on 24th September 2014 and 14th

October 2014.

Amended Site Plan [ref.1100-112/F] submitted on 20th October 2014

E-mail clarifying dimensions of various aspects of the proposal received 21st October 2014.

HISTORY None relevant

CONSULTATIONS

Archaeologist – No potential for below-ground archaeological remains. Concerned that the visual impact assessment doesn't sufficiently assess the significance of the proposed site within the setting of Creswell Crags (Scheduled Monument) and does not satisfy the relevant criteria of the NPPF 13/8

Coal Authority – Site is within a low risk area and recommends inclusion of standing advice (*this is included on this Authority's standard notes issued with all decisions*) 19/8

Crime Prevention Design Advisor – Recommends alternative security fence increased in height to 2.4m, along with additional information about lighting and CCTV proposals 20/8. Following revisions is satisfied that measures have been taken to reduce the opportunities of crime. Request that type and height of the security fencing are conditioned 23/10

English Heritage – Concerns with the initially submitted Heritage Assessment, disagreeing with some of the descriptions and assessments of significance and setting and considered further viewpoint analysis needed to be undertaken 1/9. Following the submission of additional Landscape and Heritage Assessment documents EH has confirmed that in its view the applicant has successfully substantiated their case, and has therefore addressed the initial concerns that it raised in its initial letter 20/10

Natural England – No objection and no conditions requested 28/8

DCC (Highways) – Seeking submission of details to demonstrate whether a suitable traffic management scheme can be provided at the access, implemented and maintained throughout the construction phase 3/9; Confirm adequate temporary traffic management can be provided for the duration of the works, so raise no objections – condition and advisory note recommended 29/9

Environment Agency – No objections in principle but recommends condition requiring development to be implemented in accordance with the submitted Flood Risk Assessment 5/9

Environmental Health Officer (Contamination) – No comments 15/10

Environmental Health Officer (Noise and Glare) - no objections in principle to the proposal in relation to noise issues, nor is there considered to be any other glare factor that would create a problem in addition to those covered by the applicants in respect of the railway line. 23/9

Network Rail – No objections subject to condition 12/9

Severn Trent Water – No comments 13/10

Derbyshire Wildlife Trust – Generally happy with the quality of the submitted Surveys and Reports, but raise concerns about sufficiency of proposed impact on and mitigation proposed for, ground nesting birds. Other mitigation measures can be included as conditions. 15/10

PUBLICITY By site notice, press advert and 15 neighbour letters.

One letter of representation has been received. The writer is a keen birdwatcher. He broadly agrees with the content of the submitted Phase 1 Habitat Survey and Protected Species Survey but makes additional comments, with reference to the Lowland Derbyshire Biodiversity Action Plan and has made detailed comments regarding species listed in that document. In summary the writer states that he is not against this development in principle and the additional protection offered to the site, plus the additional hedging proposed, could

improve the site for some species. However, he is concerned about the effect on the ground nesting species and hope that a solution can be found which leaves sufficient suitable habitat for them to continue breeding on site.

POLICY

Bolsover District Local Plan (BDLP): GEN1 (Minimum Requirements for Development); GEN2 (Impact of Development on the Environment); GEN5 (Land Drainage); GEN8 (Settlement Frameworks); ENV2 (Protection of the Best and Most Versatile Agricultural Land and the Viability of Farm Holdings); ENV3 (Development in the Countryside); and ENV5 (Nature Conservation Interests throughout the District).

National Planning Policy Framework

Paragraph 14 comments on the importance of:

“approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out of date, granting permission unless: any adverse impacts of doing so would significantly and demonstrably outweigh the benefits”.

Paragraph 17 lays down twelve core planning principles that must be taken into account when plan-making and decision-taking. This paragraph states that planning must:

“support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy)”.

Renewable energy generation is discussed at length in Part 10 and paragraph 97 comments that we need to “recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources”. It also states that Local Planning Authorities should have: “a positive strategy to promote energy from renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily”.

Paragraph 98 states that Local Planning Authorities should “not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse emissions; and approve the application if the impacts are (or can be made) acceptable”.

Paragraph 28 comments that local plans should “promote the development and diversification of agricultural businesses”, thereby supporting rural communities.

Other (specify)

National Planning Practice Guidance (NPPG) indicates that:

“Increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an

important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.”

The NPPG goes on to state that “The deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively”, indicating that particular factors a Local Planning Authority will need to consider including: -

- encouraging the effective use of land by focussing large scale solar farms on previously developed and non agricultural land, provided that it is not of high environmental value;
- where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.
- that solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;
- the proposal’s visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;
- the extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;
- the need for, and impact of, security measures such as lights and fencing;
- great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets. Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset;
- the potential to mitigate landscape and visual impacts through, for example, screening with native hedges;
- the energy generating potential, which can vary for a number of reasons including, latitude and aspect.

ASSESSMENT The main planning considerations in relation to this proposal are the principle of a ‘Solar Farm’ in the open countryside, its impacts on the character and appearance of that countryside, impacts on Heritage Assets, in particular, Creswell Crags that is a scheduled ancient monument, and impacts on ecology and biodiversity interests. Other issues for consideration include flood risk/drainage issues, highway and railway safety and residential amenity.

The desire to deliver renewable energies as a means of seeking to address climate change

issues is well documented and national planning policy is supportive of the principle of the provision of renewable energy projects, subject to ensuring acceptable levels of environmental impacts. Similarly adopted Local Plan policy ENV3 (Development in the Countryside) states that planning permission will be granted for development which is required for the exploitation of sources of renewable energy subject to environmental criteria, the relevant ones of which include the sustainability of its location, and not being materially harmful to the landscape.

This development is proposed on land that is re-claimed colliery tips and the land is not high grade agricultural land, being grades 4-5. As such their proposed use will not result in the loss 'best and most versatile agricultural land'. Some agricultural activity, such as grazing, can still be undertaken around the installations. In addition, given the temporary (25 years) and reversible nature of the development the impacts on agricultural land are minimal and are not considered to be harmful. This is considered to accord with the requirements of policy ENV2 (Protection of the Best and Most Versatile Agricultural Land and the Viability of Farm Holdings), the NPPF and NPPG.

Given such potential impacts on landscape, but also in this instance impacts upon a landscape important to the setting of heritage assets, in particular Creswell Crags, a Scheduled Ancient Monument, the application is supported by both landscape and Heritage Impact Assessments. These generally establish that, with the exception of the areas immediately alongside the arrays, the development is well screened from many views by both landform and other landscape features, including areas of tree planting on and around these former, now reclaimed, pit tips. Planting is proposed alongside the visible edges to mitigate the landscape impacts.

The following is an extract from the summary and conclusions of the Landscape and Visual Impact Assessment:

"Overall the proposed site is a well contained and enclosed site with limited views towards to proposed solar PV development. The majority of receptors are not likely to receive views of the development. A limited number of receptors have been assessed as having a notable effect; however, these receptors are within close proximity to the site and are listed below.

For all notable landscape and visual effects, the impact is considered to be moderate-substantial. A notable visual effect is expected for Viewpoint 5 Badgers Copse residential receptor. The effect arises through proximity to the solar development with views across the northern section of the site.

A notable visual effect is expected for Viewpoint 7 and Viewpoint 8 for receptors using the local cycle route through the site. Receptors would be travelling through the site with open views across the solar development.

A localised notable landscape effect is expected for the local landscape character type: Limestone Farmlands, the notable effect is assessed to only be within the site itself. The solar PV and associated infrastructure, located in a pastoral landscape, will be a new and prominent feature within the immediate locality. However, in the wider area this is much reduced, and overall the effect would be slight adverse.

No notable cumulative effects are expected on landscape character or visual amenity. While the massing of the solar panels across the site will be considerable, the visual envelope for the solar development site is well contained and limited largely to within the site with the exception of partial views to the east, approximately 1km from the site. The localised topography and vegetation cover surrounding the site limits views into and out of the site; this combined with the overall low-lying form and scale of the development, which will be no greater than 3m in height, will result in the development not appearing as a prominent feature within the wider landscape.

Visual effects are limited by the fact that there are few sensitive receptors close to the site and there are high levels of screening. Many roads are bordered by hedgerows and views, where possible are often likely to be merely glimpsed. Views from residential properties— even from properties in Creswell to the north of the site, and the majority of isolated properties to the east, south and west—are screened by boundary vegetation and topography.

The assessment and conclusions above have been made prior to any mitigation measures being put into place. Once mitigation planting has been established, over time, it will provide screening into the site which is likely to reduce the overall visual impact of the solar panels and associated infrastructure. Existing vegetation surrounding the site will also mature providing additional screening into the site.”

The Landscape and Visual Assessment to provide an accurate assessment of the likely views and impacts of the proposal and shows that the site is very well screened from the majority of views, with only a few impacts that are generally very localised in nature in closer proximity to the site.

The consideration of these landscape impacts has also informed the separate Heritage Impact Assessment and the following is an extract from the summaries contained in that document: -

“The assessment has concluded that no designated heritage assets would be substantially harmed by the proposed solar park.”

“A negligible-slight impact has been assessed for the Creswell Crags...; any visual impact would be minimal and would not affect the key attributes of the significance of the site or its setting.

Negligible-slight impact has been assessed for The Oaks, one of a number of farmsteads that comprise the Elmton with Creswell Farmsteads Conservation Area, although views are likely to be screened by trees.”

“Policy 134 of NPPF states that:

Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

The harm to the heritage assets ... is assessed as negligible-slight, and the assessment concludes that the proposed solar park meets the requirements of NPPF."

Clearly the importance of the Creswell Crags makes the impacts on this significant local asset a key consideration in respect of this proposal. Advice on the application in respect of those heritage impacts has been taken from English Heritage, the County Archaeologist and the Council's Conservation Officer and the applicant has responded positively to the requests for further information to enable the potential impacts to be properly considered.

None of these consultees disagree with the findings of the assessments summarised above. English Heritage raised initial concerns that not all viewpoints had been adequately assessed and additional submissions were made as a result, such that English Heritage has confirmed that "in our view the applicant has successfully substantiated their case, and has therefore addressed the initial concerns that we raised in our previous letter".

The County Archaeologist similarly sought additional information based on that originally submitted, but again is satisfied that the documents accurately assesses the impacts. Ideally he would have preferred to have seen a condition to secure the management of new woodland adjacent to the site, but this was not possible as this was not contained in the planning application site boundary. As such he has indicated that the Council may wish to confirm that the woodland is intended as a permanent landscape feature, as it provides crucial screening with regard to approaches to the Crags; in response to this, the applicant's have provided a letter from the landowner (Welbeck Estates) confirming its commitment to the retention of the woodland.

Conditions are recommended for inclusion to secure that any landscaping proposed is carried out to an appropriate standard and maintained to ensure that the impacts of the development on the landscape and Heritage Assets are adequately mitigated. Final external details of other installations, including housings, fencing and CCTV cameras are also recommended to ensure that their impacts can be mitigated as far as practicable.

In terms of the overall design, additional details and amendments have been received as a result of comments received from the Crime Prevention Design Advisor in respect of the height and design of the security fence, the CCTV cameras and other potential security measures, given the remote location of the proposal. Whilst this has resulted in the fence increasing in height from 2.4m to 2.4m, this does not impact markedly on the overall character and appearance of the development, given the panels would be marginally higher, such that the fencing would still be seen against a combination of the taller panel arrays and/or associated landscaping and is considered to be acceptable, subject to conditional control over final detailing as discussed earlier.

A Glint and Glare assessment has been submitted, principally to address the possible impacts on the adjacent railway line. This confirms that ground based reflections can only occur at limited times of the day from the end of March to mid-September in an identified zone to the west of the application site, although such reflections will be reduced by existing planting and topography. Whilst some reflection to the railway line is expected, the assessment does not identify any risk to railway safety. Network Rail has responded stating that although the assessment indicates that there are unlikely to be any issues of interference

with signal sighting, it notes that there are still a number of possible uncertainties (e.g. paragraph 4.1) to which only monitoring following the implementation of the development can the position of Network Rail (public safety) be protected. Network Rail has suggested a condition requiring monitoring of the effects of the development for 12 months following its implementation and mitigation to address any impacts if identified. The inclusion of such a condition is considered an appropriate way of ensuring public safety is maintained on the adjacent railway and is recommended for inclusion.

The landscape impacts assessment and Glint and Glare assessments demonstrate that there will be no harmful impacts on the amenities of occupants of any nearby dwellings. Whilst parts of the arrays would be visible from some dwellings, the amount that these are visible and the distances involved are such that any impacts are not considered to be harmful. Topography and landscaping will screen any Glint and Glare impacts.

The Highway Authority has been consulted. It notes the substandard nature of the junction of Frithwood Lane and off Mansfield Road, but given very little traffic associated with the operation of the facility is only concerned with the increase in the use of the junction in the construction phase. That Authority has agreed with the applicants that the temporary nature of the impacts can be controlled through the use of temporary traffic management measures and has recommended a condition to require this. Such a condition is recommended for inclusion should planning permission be granted in the interests of highway safety.

The Environment Agency has considered the submitted Flood Risk Assessment (FRA) and has stated that it has no objections subject to the imposition of a condition requiring implementation of the measures detailed in the FRA as follows:

1. Incorporate swales and scrapes as per drawings J-4945-CFM 3001 and 3002.
2. A 25mm rainwater gap should surround around each individual module
3. Any related access tracks must be constructed of a permeable substance.

It is recommended that this condition be included to ensure that the site is appropriately drained.

In terms of biodiversity Natural England (NE) has raised no objections to the proposal and has not requested any conditions, drawing attention to its standing advice. The proposed development is unlikely to lead to significant and irreversible long term loss of agricultural land as the solar panels would be secured to the ground by steel piles with limited soil disturbance and could be removed in the future with no permanent loss of agricultural land quality likely to occur, provided the development is undertaken to high standards. Reference is made to DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and the applicant can be informed of this using an advisory note if planning permission were to be granted. NE also ask that the council consider applying conditions to secure appropriate agricultural land management and/or biodiversity enhancement during the lifetime of the development, and to require the site to be decommissioned and restored to its former condition when planning permission expires, indicating that opportunities may occur to improve biodiversity on the site.

The Derbyshire Wildlife Trust has also considered the submitted ecology assessments and has advised that there would be a resultant net loss of biodiversity as a result of the development, contrary to principles established in the National Planning Policy Framework.

Whilst conditions could be used to secure adequate mitigation for some of these impacts, including grass snake mitigation, this would not be effective for ground nesting birds. There is an impact on ground nesting bird species identified on the site that has not been adequately mitigated. At the time of writing this report, this issue had not been fully resolved, the applicant has offered to amend the planning application by removal of sections of panels and re-configuration of the location of some of the panels to increase available areas within the site to create compensatory habitat, along with management and mitigation for this and other species, with a view to securing at least no overall interest harm, but potentially net gain, as well as an opportunity for further research into the impacts of such developments. The Derbyshire Wildlife Trust has indicated in principle that there is a good prospect of the changes securing adequate mitigation to render the submission in compliance with the NPPF. Although at the present time it would appear that the impacts are likely to be capable of adequate mitigation, an update report on this issue will be provided to the meeting of the planning committee. Conditions to secure that mitigation and management will be required.

The reduction in panel numbers suggested, along with the associated changes is very unlikely to impact significantly on any other considerations, such as landscape and historic asset impacts. Indeed the removal of areas of panels is likely to reduce any impacts, particularly at the localised level immediately alongside the site, where the visual impacts would be greatest.

In conclusion, this proposal represents for the most part an appropriate location for a solar farm, the impacts of which are very well mitigated due to topography and existing landscape features. Where views are available, particularly from heritage assets, additional mitigation is proposed that can be secured by condition to make those impacts acceptable in terms of both impacts on the character and appearance of the countryside, but also on heritage assets. There is an unresolved impact is on biodiversity interests, although there is a good indication that it will be possible to satisfactorily mitigate those issues; this should be confirmed by the time of the Planning Committee and an update will be provided. There are no other harmful issues identified in the assessment. As such, the proposal is considered to meet the objectives of both national and local policy for the delivery of renewable energy developments and, subject to being able to demonstrate and secure (by condition) biodiversity mitigation, the proposal is recommended for permission.

Other Matters

Listed Building: N/A

Conservation Area: See assessment

Crime and Disorder: See assessment

Equalities: No known issues

Access for Disabled: No known issues

Trees (Preservation and Planting): See assessment

SSSI Impacts: N/A

Biodiversity: See assessment

Human Rights: No known issues

RECOMMENDATION: Subject to satisfactory confirmation of the ability to deliver adequate biodiversity mitigation, it is recommended that planning permission be granted, subject to conditions to cover the following issues, which are provided in précis form:

- 1 Commencement within 3 years
- 2 Temporary permission for 25 years following the commencement of the generation of electricity.
- 3 Operator to notify the local planning authority in writing of that date electricity generation commences.
- 4 Submission of a Decommissioning and Site Restoration Scheme not later than 3 years prior to the date expiry of the temporary permission.
- 5 Submission, approval and implementation of full details of both hard and soft landscape works including a programme for implementation.
- 6 Submission, approval and implementation of a landscape management plan for the life of the development.
- 7 Submission, approval and implementation of fencing details to accord with Crime Prevention Design Advisor advice.
- 8 Submission, approval and implementation of CCTV details – numbers, location and finish of all elements, including poles.
- 9 Submission, approval and implementation of finishes to buildings
- 10 Requirement for mitigation if required following 1 year monitoring period on Railway safety.
- 11 The development to be carried out in accordance with the approved Flood Risk Assessment (FRA).
- 12 Implementation of temporary traffic management measures during the construction phase.
- 13 Submission, approval and implementation of biodiversity mitigation measures.



