

7000Acres Written Representation

Deadline 1, October 2023

Response to the Cottam Solar Project Ltd, Environmental Statement: Chapter 8

Landscape and Visual Impact Assessment

Executive Summary

The Cottam Solar Project has negative impacts on the landscape character and visual amenity of the proposed sites and surrounding landscape.

The 7000 Acres Group is concerned that the Applicant has not fully assessed the harms associated with the proposed development.

The following areas for discussion cover certain issues where questions are left unanswered and evidence is questioned.

Planning Issues. The importance and precedence of Local Impact Reports is raised in relation to section 105 of the Planning Act 2008.

Landscape and Visual Impact Methodology. Inaccuracies and anomalies are considered.

Landscape and Visual Effects. Impacts of the Cottam Solar Project on Landscape Character and Visual Amenity are highlighted. Negative impacts are caused due to failings in the Applicants Landscape Character Baseline. The submitted Landscape and Visual Impact Assessment shows significant harm for both Landscape and Visual Effects.

Mitigation. This is based on the successful implementation of vegetation. The flaws in this approach are discussed and negative impacts on landscape character highlighted. Extensive removal of existing vegetation and the impact of localised browsing compound the negative effects.

Biodiversity and Biodiversity Net Gain. The impact of landscape change is discussed in relation to biodiversity and the feasibility of the Applicants claims assessed.

Soils. The ALC findings supplied by the Applicant are questioned. Damage to soils during construction is highlighted.

Mental Health and Wellbeing. The positive impact of landscape and green space on mental health and wellbeing is explored. Loss of these benefits has a harmful effect. The Cottam Solar Project (CSP) proposes to infringe the use of Public Rights of Ways (PRoW's).

Tranquillity. Peace and quiet is experienced by residents at the site. The CSP will disturb this peace.

Contents

1. Introduction	4
2. Scope.....	4
3. Size, Locations and Duration of the Cottam Solar Project	5
4. Planning Issues.....	7
5. Barriers to Understanding the Landscape and Visual Impact Assessment	8
6. Inconsistencies in the Findings of the LVIA	9
7. LVIA Methodology.....	10
8. Landscape and Visual Effects	12
9. Mitigation.....	20
10. Biodiversity and Biodiversity Net Gain.....	22
11. Soils	24
10. Mental Health and Wellbeing	25
11. Tranquility.....	27
12. Conclusion.....	27
Bibliography	28

1. Introduction

- 1.1 The 7000 Acres Group is a collection of local residents and community groups against the vast solar industrialisation of the countryside in the District of West Lindsey, Lincolnshire. Many of our members are already being and will be directly and adversely affected by the industrial proposals.
- 1.2 The collective opposition to the proposals from members has provided the 7000 Acres Group with a mandate to represent their views.

2. Scope

- 2.1 The purpose of this written representation is to provide the Examining Authority with the perspective of residents and users of the countryside in and around the proposed development of the Cottam Solar Project, to express the concerns our members have in relation to the significant loss of landscape character, visual amenity and beauty of the landscape in the area they live.

No arbitrary line has been drawn here to determine any field of influence as residents and users perceive the landscape beyond these lines and in an experiential manner. Therefore, any negative impact is also perceived in this way.

The approach of this written representation is to provide the viewpoint of the people affected by the Cottam Solar Project (CSP) for the Examining Authority. The contents of this document highlight certain issues, by drawing together the appraisal of the LVIA by Lincolnshire County Councils (LCC) Landscape Consultants, AHH and the Local Impact Reports by LCC and West Lindsey District Council (WLDC) and merging their review submissions with the ground observations of residents and Interested Parties. Further elements may be added in subsequent written representations as more information comes to light through the Examination process.

- 2.2 The issues raised in this written representation will cover aspects regarding:

Barriers to Understanding the LVIA

Inconsistencies in Findings of the LVIA

LVIA Methodology

Landscape and Visual Effects

Mitigation

Biodiversity and Biodiversity Net Gain

Soils

Mental Health & Wellbeing

Tranquillity

3. Size, Locations and Duration of the Cottam Solar Project

- 3.1 This scheme is divided into four separate sites (Cottam 1, 2, 3a and 3B) comprising a number of land parcels and proposes to cover collectively an area of approximately 2800 acres (1,150 ha) of farmland and countryside with solar PV, battery storage energy plant and associated infrastructure. The Order Limits include and amount to a 600MW Solar Project. The high voltage cable connection between the sites and grid connection travels approximately 27.5km. The life-span of the scheme is open-ended but the Applicant has put forward a time period of 40 years.
- 3.2 Cottam 1 (812.2ha) encircles the hamlet of Coates and falls within the parishes of Cammeringham, Fillingham, Stow, Sturton-by-Stow, Thorpe in the Fallows and Willingham. Cottam 2 (132.66ha) is a single site, northeast of Corringham village. Cottam 3a (169.49ha) is east of Blyton and falls between Blyton and Laughton. Cottam 3b (74.27ha) is located east of Pilham and falls between Blyton and Pilham.

- 3.3 The cable routes will travel approximately 27.5km from the sites to the grid connection and the cable runs between the separate sites will be approximately 49.4km in length with a 50m wide works area for implementation. Parts of the Gate Burton Energy Park and the West Burton Solar Project cable routes may be located in the Cottam Solar shared cable route corridor. Provision for the Tillbridge Solar Project on any other subsequent and foreseeable Solar NSIP in this regard, is not specified.
- 3.4 The area covered by the sites is predominantly arable agricultural land and so rural in setting and nature. Most of the farmland is classified as 3b, within the ALC grading system but the quality and yield of arable crops from this farmland is high. The value to the nation in terms of exports for Lincolnshire cereals alone this year was in excess of 300 Million Pounds sterling.
- 3.5 Land drainage and flood management in these low-lying areas is a key factor to sustaining agriculture practices and protection of populated areas. Cottam 1 falls within Flood Zone 3 and Flood Zone 2. Cottam 2 falls within Flood Zone 3 in the north and east of the site with the majority in Flood Zone 1 and Cottam 3a and 3b are located in Flood Zone 1.
- 3.6 Due to the nature of the solar scheme being spread over separate sites across a wide area in the West Lindsey District, there are several Public Right of Ways (PRoW's) affected and or temporarily stopped by the proposals. Cottam 1 in particular has a number of PRoW's and local roads which will be impacted. Cottam 3b has one PRoW across the site and is proposed to be temporarily stopped. The proposed 3b site is adjacent to the Brigg Branch Line of the Sheffield to Lincoln railway line. Along with these designated PRoW's, local roads are utilised for recreational use by walkers, horse-riders, cyclists and indeed facilitate local rallies and events, therefore, impact to communities and visitors enjoyment of the surroundings is a significant factor. Consequently, mental health issues are a major concern.
- 3.7 The design principles of the Cottam Solar Project and subsequent methodology utilised to develop the scheme has not been clear. Therefore, the site selection process has been established on land availability rather than design and assimilation into the landscape. This has meant that assessment of site alternatives has not sufficiently been carried out. The areas covered by the Cottam Solar Projects multiple sites means that an extensive area of

farmland and countryside is affected by the proposed scheme. A large geographic area will be affected along with many communities and villages.

4. Planning Issues

- 4.1 It is considered that no National Policy Statement (NPS) has effect in relation to section 104 of the Planning Act 2008. This is recognised by the Applicant. Therefore section 105 of the Act is paramount.

The Local Impact Reports submitted by Lincolnshire County Council (LCC) and West Lindsey District Council (WLDC) take precedence within section 105 above “(b) any matters prescribed in relation to development of the description to which the application relates, and (c) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State’s decision.”

The above statements set out the hierarchy for assessment and judgement and as such show that Local Impact takes precedence above other matters, therefore, it can be argued that the local impact as described in this written representation forms part of that submission.

- 4.2 National Planning Policy Framework (NPPF)

The NPPF published in 2012 and updated in 2018, 2019, 2021 and 2023 states that it does not contain specific policies for Nationally Significant Infrastructure Projects.

However, West Lindsey District Council consider that the NPPF ‘provides guidance on the requirement for good design, promoting healthier communities, conserving the historic environment, conserving the natural environment, sustainable transport and meeting the challenges of climate change. With due regard to the scope of the policy at a national level, WLDC consider the NPPF to be an important and relevant matter for the determination of the application under section 105 of the PA2008’ (WLDC LIR, p21).

- 4.3 The Central Lincolnshire Local Plan 2023 – 2043 was adopted April 2023 and replaced the Central Lincolnshire Local Plan (adopted 24 April 2017).

- 4.4 It is considered by both Lincolnshire County Council and West Lindsey District Council that the current Central Lincolnshire Local Plan 2023 – 2043 is deemed ‘important and relevant’ for the purposes of section 105 and should be afforded significant weight in the decision making process. The 7000 Acres group agree with this assessment.
- 4.5 The 7000 Acres Group also agrees that the DCO submission be examined in light of the relevant Local Plan Policies and Neighbourhood Plans as cited by the respective Councils.

5. Barriers to Understanding the Landscape and Visual Impact Assessment

- 5.1 The Applicants Draft Development Consent Order specifically cites the provision to remove **all** trees and hedgerows within the Order Limits and beyond to facilitate the proposed development. The Landscape and Visual Impact Assessment claims retention and enhancement of trees and hedgerows within the same areas. The subsequent findings of the LVIA are based on this premise. The contradiction of these two fundamental documents means that neither is valid at present. Subsequently, if changes are made to either document in the Examination process, clear and coherent measures and findings need to be submitted by the Applicant to offer all parties any scrutiny of results.
- 5.2 There are several barriers to understanding the information provided in terms of presentation, not using plain language and moreover not following issues identified at the baseline through stages of the methodology process to the findings and results.
- 5.3 AHH Planning Consultants appointed by Lincolnshire County Council, to review the LVIA, state that, ‘the LVIA and associated appendices, which while very detailed and extensive, makes the identification and clear understanding of key landscape and visual findings, as well as providing succinct review comments, difficult’ and that the document is ‘inaccessible to most readers and difficult to follow’. This illustrates the barriers to understanding that residents are experiencing. This failing of the Application material is prejudicial to our members and members of the public in the region. In effect, they become excluded from understanding the information provided. This ultimately means that they cannot engage fully in the Examination process and so representations to the Examining Authority and

subsequently the Secretary of State are less informed. Many of our members have expressed great frustration at not being able to interpret and understand the information submitted by the Applicant. It seems clear that if the professional teams of consultants employed by the representative Councils find it 'difficult' to navigate and understand the information, members of the public and effected residents do not have much chance in doing so. This aspect is a major failing in the Application submission.

6. Inconsistencies in the Findings of the LVIA

6.1 The extensive volume of information in the LVIA report and appendices creates a problem in itself to convey the meaning and reasoning of the report. The veins of reasoning are lost in the body of material. Also, the parameters of the development proposals have not been clearly expressed by the LVIA and so the basis for the LVIA is lost. This is highlighted in 5.1 of this document. The intention described in the LVIA is to retain and enhance trees and hedgerows in relation to the Scheme. The Draft DCO is applying for the removal of all trees and hedgerows as mentioned. Therefore, the basis of the LVIA is undermined as all landscape findings and recommendations refer back to the retention of trees and hedgerows and vegetation enhancement. No landscape plans show the removal of all trees and hedgerows. The mitigation programme is based solely on vegetation measures and so this programme through all phases of the proposed Scheme, will be baseless if this element of the Draft DCO stands.

The 7000 Acres Group strongly objects to the possibility of all trees and hedgerows within the Order Limits and beyond to be removed. The Applicants statement in this regard holds no credibility or validity. Members have expressed shock and disbelief at this possibility.

6.2 In addition to the previous concerns discussed, all visualisations in the LVIA show the retention of the majority of trees and hedgerows during all phases of the Scheme. If the 'worst-case' option to remove all trees and hedgerows is employed then these visualisations completely misrepresent the Applicant's proposals and intentions to all parties involved.

- 6.3 The Applicant claims that at various phases of the Cottam Solar Project there will be an improvement to local and regional landscape character. This claim is entirely illogical and is discussed later in this report.
- 6.4 The Applicant has stated that the proposed development will have a negligible or beneficial cumulative impact on the landscape. However, within the Applicant's own documentation they argue the opposite. Paragraph 18.7.112 of the Socio-economic chapters (Doc. Ref. EN010133/APP/C6.2.18) states that the Scheme will 'have a long-term impact on the landscape character of some tourism and recreation receptors that are reliant on the landscape context for their value, such as viewpoints, landmarks, and cultural heritage assets'. This statement from the Applicant undermines their LVIA findings and conversely the LVIA findings undermine the Socio-economic statements as cited.

7. LVIA Methodology

- 7.1 This is presented in Section 8.4 of the Landscape and Visual Impact Assessment. At 8.4.10, the 2km Study Area for each of the multiple sites including infrastructure, substations and energy storage areas are considered 'appropriate' as it is 'not expected' that effects on local landscape character and key visual receptors will experience significant effects. The 7000 Acres Group argues that this expectation in the first instance, limits the scope of study area and potential significant effects on multiple receptors.
- 7.2 The 5km Study Area is based on the visibility of the Scheme. Due to the existence of multiple sites across a large geographical area in the West Lindsey District, the visibility of the Scheme as whole covers an expanse of land that means multiples of 5km Study Areas are conjoined. The justification for the 5km limit is given in relation to the existence and retention of a 'strong framework of hedgerows and tree cover' (8.4.11) amongst other things. If the Rochdale Envelop is adopted and the Draft DCO approved, then the 'worst-case' scenario of the removal of all trees and hedgerows (including TPO'd trees) in the vicinity of and extending beyond the Order Limits, will mean that the parameter of the 5km Study Area radius is fundamentally flawed and that visibility will extend beyond this distance and in turn significantly affect many sensitive receptors across the District. These sensitive receptors

include Landscape Character Areas, such as the Ridge Area of Greater Landscape Value (AGLV) and Gainsborough AGLV and the historic and internationally important Lincoln Cathedral and Castle, (see image).



The image was taken on the 30th September 2023 and illustrates the presence and dominance of the Cathedral and Castle over the Lincolnshire landscape. The Cathedral is visible for many miles, its purpose being to draw pilgrims and visitors from far and wide.

- 7.3 It is noted that the Cottam Solar Project will spread over 16km in length therefore its reach in terms of visibility is extensive across the wider landscape.
- 7.4 The Zone of Theoretical Visibility (ZTV) Methodology states that existing woodland and large areas of vegetation have been utilised into the Digital Terrain Model (DTM). Given that removal of all trees and hedgerows has been written into the Draft DCO, then this modelling

is potentially baseless. This process of modelling has also been questioned by WLDC in preference for Digital Surface Modelling (DSM).

8. Landscape and Visual Effects

8.1 The West Lindsey area is a rural district with a largely agricultural landscape. The region grows significant quantities of high quality arable crops for the nation. The area is described as being ‘a relatively expansive landscape, characterised by long views and dramatic skies’, (West Lindsey Landscape Character Assessment (1999). This appraisal, although written some twenty four years ago, largely still stands the test of time and illustrates the unique landscape qualities of this area, which in themselves are timeless. The immediate and wider rural landscape is highly valued by residents, users and visitors. The locality is distinctive and has a sense of place.

8.2 The Landscape Character Baseline is submitted by the Applicant in Chapter 8, 8.5.11 to 8.5.52, (EN010133-000250-C6.2.8). It is a desk top study examining the National, Regional and Local Character Areas. From these, 5 Regional Character Areas (from the East Midlands Regional Landscape Character Assessment), 4 Local Character Areas (from the West Lindsey Landscape Character Assessment), 3 Trent Vale Landscape Character Areas (from the Trent Vale Landscape Character Assessment) and 1 Historic Landscape Character Zone (from the Historic Landscape Characterisation Project: The Historic Character of The County of Lincolnshire). These assessments are at a large scale and so a more detailed landscape characterisation was carried out. From this, 9 further landscape receptors or individual contributors to landscape character were identified.

Due to the multiple sites which make up the Cottam Solar Project, the large amount of information prevents an understanding of the overall landscape character of the study area. Again, barriers to information occur as the process of cross-referring the many tables and pages means a clear picture isn’t presented.

8.3 The landscape baseline identified no character areas or contributors that were of high sensitivity or susceptibility to effects. This is an unexpected finding and warrants further scrutiny.

- 8.4 There are two designated Areas of Great Landscape Value in the District. These are the Lincoln Cliff and the land to the north, east and south of Gainsborough. These designations indicate that the landscape in these areas, are high sensitivity receptors. Due to the reach of the Cottam Solar Project it is reasonable to argue that these areas of high sensitivity will be negatively affected (see image).



This image was taken in May 2023, from the B1398 (Middle Street) in between the villages of Fillingham and Glentworth in a South Westerly direction. The West Burton Power Station is visible on the distant horizon at the extreme right of the picture with the Cottam Power Station in the middle of the distant horizon line. The open and panoramic views across the landscape show how the Lincoln Cliff AGLV in the foreground and the AGLV (in part) south of the West Burton Power Station (to the left of the West Burton Power Station in the image), are visible in the panoramic scene and as such should be deemed as sensitive receptors.

West Lindsey District Council's Written Representation (5.54) states that, 'The Cottam Solar Project scheme will cause significant harm to the landscape character of the area, altering it from its agricultural use and character potentially irrevocably. The visual effects on communities and visitors will be significant'.

- 8.5 A further barrier to understanding the findings of the LVIA is 'some inconsistencies between the appendices and summary tables' (4.9, AHH Planning Consultants, Landscape & Visual Review Lincolnshire County Council, Cottam Solar Project). These inconsistencies are listed in this review and are important as they relate to the significant effects of the Scheme and therefore any further proposed outcomes. Of particular note are findings of Moderately Beneficial for year 15 for Cottam 1, 2, 3a and 3B. At paragraph 4.10 of this same review, AHH state, 'we are not in agreement with the findings of the landscape assessment, and do not see any appropriate justification for assessing significant beneficial landscape effects on both landscape character areas, or individual contributors to landscape character by the construction and operation of a large solar development.'

The 7000 Acres Group agrees with this statement. To cover thousands of acres of landscape with industrial units cannot have a beneficial effect on landscape character. Also, as stated in the Draft DCO element of the removal of all trees and hedgerows is to be implemented, these findings by the Applicant illustrate skewed and biased results.

West Lindsey District Council considers these results as 'erroneous, failing to reflect the conclusions reached in other ESs for similar projects.' (Written Representation para 5.56).

- 8.6 Furthermore, the industrial development of the landscape will (paragraph 4.11, AHH) "bring about an extensive change on land use...and subsequently the openness and perception of solar development: creating what may be perceived as an 'energy landscape' as opposed to rural or agricultural one at present, which is a complete change of character."
- 8.7 Lincolnshire County Council from September 2023 is embarking on an ambitious woodland creation programme and will be planting 750,000 trees over coming years across the County. This strategy will be carried out in conjunction with many partners and stakeholders across

the County to implement sensitive woodland and habitat creation schemes which assimilate into the landscape and promote accessibility and healthy living.

The proposed Cottam Solar Project will directly and indirectly impinge on this programme of tree planting in the County. Moreover, the Cottam Solar Project is advocating removing all trees and hedgerows in its wake as we know. Therefore, diverse habitat creation which will add to the current ecological and environmental make-up of the locality from this woodland creation programme will in effect be detrimentally effected due to the proposed expanse of the solar industry across the landscape instead. Therefore, this shows that other positive land use changes in the County will not be feasible or as effective due to the solar industrialisation from the proposed Cottam Solar Project and further proposed Solar NSIP in the District.

- 8.8 The beneficial landscape effects promoted by the Applicant are mainly based on the mitigation planting. This analysis is deemed as providing 'an unbalanced judgement as to the benefits of the scheme' (para. 4.12, AHH).
- 8.9 The failings of the LVIA continue, highlighted in the AHH Review, in Operation (Year 1), with beneficial effects being assessed in relation to landscape receptors again based on mitigation planting.

Our members are aware of the difficulty of establishing landscaping in the area due to grazing and browsing. To suggest that at Year 1 that there are beneficial effects in terms of landscape receptors due to mitigation planting is not credible. The Planning Consultants, AHH, (4.13) state they, 'disagree that any beneficial landscape effects will be achievable at the stage' and that (4.15) 'we judge that the scheme would lead to significant adverse effects on landscape character at all phases. The Development has the potential to transform the local landscape by altering the character on a large scale. This landscape change also has the potential to affect wider landscape character, at a regional scale, by replacing large areas of agricultural or rural land with solar development, affecting the current openness and agricultural character that are identified as key defining characteristics of the area'.

- 8.10 It is considered by the 7000 Acres Group that the capacity for landscape character change in the area is minimal due to the agricultural and open nature of the wider landscape. As such any material change in the landscape constitutes a notable change in the character. The mass and scale of the proposed development would in our opinion have a significant adverse effect on landscape character.

Lincolnshire County Council agrees in their Local Impact Report (16.4) that there will be a 'permanent and negative impact upon the landscape character and the appearance of the area as a consequence of changes to the current arable agricultural land use'.

- 8.11 Due to the many anomalies and dubious findings of the LVIA, the Planning Consultants at AHH recommend that the 'examination provides the opportunity to further interrogate the findings of the landscape assessment'.

The 7000 Acres Group argues that this statement illustrates that the Landscape and Visual Impact Assessment is not fit for purpose.

Our opinion is shared with West Lindsey District Council in their Written Representation (Paragraph 5.58) where they state they 'have significant concerns about the adequacy of the LVIA assessment and the conclusions it reaches.'

- 8.12 The implementation of landscape vegetation is the main focus of mitigation for the Scheme. An overriding landscape characteristic of the area is the wide and open land form. To purely rely on landscape planting to obscure views of solar structures and industry means that the landscape and views become enclosed and narrow and planting becomes a defining detrimental characteristic. Conversely, if any of this planting is unsuccessful any *claimed benefits* will not be achieved. It is therefore apparent that such a proposed development cannot be readily assimilated into the landscape as demonstrated by the Applicants own convoluted reasoning and mitigation approach. To add further to this view, the Draft DCO claims all tree and hedgerows will be removed. The 7000 Acres Group is at a loss to comprehend the Applicants landscape approach. The statement in the Draft DCO is not reflected in the findings of the LVIA. Also, AHH, have found that the (4.21) 'construction landscape effects may be underestimated within the LVIA through the impact of, or loss of,

vegetation'. They go on to argue that adverse effects of potential vegetation loss, urbanisation or visual amenity are probable.

The 7000 Acres Group finds that to advocate that the landscape character will improve with the development of large scale solar industrialisation in the area is irrational. The Applicant's LVIA is unreliable.



This image was taken in May 2023 in a North Westerly direction and shows the 'Lincoln Cliff' AGLV in the foreground and the village of North Carlton in the middle ground. The Cottam Power Station is to the left along the horizon and the West Burton Power Station to the right. This photograph shows that the power stations are singular and distant landmarks on the horizon from the escarpment. In contrast, the Cottam Solar Project, along with the Gate Burton Energy Park and West Burton Solar Project will cover the land in solar industrial units.

- 8.17 The Lincoln Cliff Edge is a well-known, distinctive and much admired landscape feature in the region. Views from the Cliff extend down to the Trent Plain and into Nottinghamshire. Fields of view are open and far reaching from the Cliff and from the plain back up towards the escarpment as visible within the previous photographs.
- 8.18 Views are a primary consideration for our members. We have been advised that some members of our group who are Affected Parties have consulted the Applicant and advised us that extended buffer zones between their properties and the boundary to the development were agreed to mitigate the negative impact on views from properties. These mitigation measures were then subsequently withdrawn by the Applicant and the buffer zones significantly reduced.
- 8.19 It is noted that the Applicant has found that 15 of the 30 close range views, at Year 15 of the Scheme, were considered as having significant beneficial effects. At Paragraph 5.10, AHH state that they 'disagree with the findings of the LVIA that any of the views would be improved over the baseline by the implementation of a large scale solar development across an open agricultural landscape.' Furthermore they add that the 'justification for the benefits is predominantly reliant upon landscape benefits, not visual – the scheme does not improve or enhance the view, and generally does not screen or integrate existing visual detractors.'
- 8.20 The 7000 Acres group argue that the negative impact on visual receptors amounts to being highly significant. Residents and other users enjoyment of the landscape will be severely affected.

Cumulative Landscape and Visual Effects

- 8.21 The West Burton Solar Project, Gate Burton Energy Park and Tillbridge Solar Farm are proposed in close proximity to the Cottam Solar Project. A further NSIP Solar Project has been recently launched. The One Earth Project will fall within the West Lindsey District near Newton on Trent and will spread into Bassetlaw and Newark and Sherwood Districts in Nottinghamshire. There are now 11 proposed Solar NSIP's in Lincolnshire as a whole listed on the National Infrastructure planning website at various stages within the regime. The proposed landscape change to the region and locality is overwhelming. It is evident that each

Scheme will have compounding effects on the others and yet the Applicant had stated that there will be beneficial effects in Landscape Character at National and Local levels but does not offer valid justification of their findings. West Lindsey District Council (Written Representation, 5.112) state 'that such impacts cannot be deemed 'beneficial' due to their obvious harm as alien features in the countryside have a significant adverse impact upon both visual amenity and landscape character.'

- 8.22 In contrast to the findings for the Cottam Solar Project LVIA Cumulative Landscape and Visual Effects and Residential Effects Amenity Assessment, the Gate Burton Scheme has assessed there to be a moderate adverse impact based on cumulative impact of the West Burton, Tillbridge Solar and Cottam Solar schemes. West Lindsey District Council finds the assessments of both cumulative assessments by Gate Burton and Cottam are in conflict.
- 8.23 Lincolnshire County Councils consultants, AHH, found (paragraph 6.5) 'that the cumulative change to the landscape will be considerable and significant, and the combination of two or more sites has the potential to change the local landscape character at a scale that would be of more than local significance. The cumulative impact of the four adjacent NSIP scale solar schemes has the potential to affect the landscape at a regional scale through predominantly a change in land use: from arable to solar, creating what may be perceived as an 'energy landscape' as opposed to rural or agricultural one at present.'
- 8.24 It has been understood by our members since they became aware of these proposals that the landscape in the region could drastically change from a rural, agricultural landscape to a solar landscape. This degree of change is not tenable. The subsequent degree of long term harm is not measurable.
- 8.25 These harms or effects will be compounded when travelling through the locality and region. AHH state (paragraph 6.7) that there will be a 'perception of being surrounded by solar development. Views do not have to be extensive and open to create the perception, and regular sequential glimpsed views would create a change to the experience of visual receptors as well as change the perception of character of an entire area.'

9. Mitigation

- 9.1 The Mitigation of the Cottam Solar Project in the LVIA is dependent on findings in the current LVIA. If changes are made to the Scheme then the LVIA and subsequent measures such as mitigation will be affected. Therefore, mitigation measures will need to be re-assessed and re-examined. If all trees and hedgerows are to be removed as stated in the Draft DCO then mitigation measures are obsolete.
- 9.2 It is noted that the landscape screening for the Cottam Solar Project is the only mitigation utilised. The screening of the Scheme is subsequently solely dependent on the retaining and establishing vegetation. AHH state (Paragraph 7.7) that there is an 'over reliance within the LVIA upon planting to mitigate the visual effect of the development.'
- 9.3 This aspect of the design proposals not only undermines opportunity to enhance landscape character but it also has a compounding negative effect on areas inappropriately landscaped. For instance, the open intersected landscape character of this area will be significantly changed to a landscape populated by industrial infrastructure and proposed planting which will, if effective, enclose landscape and narrow views. Therefore, the mitigation measures alone will, if approved, harm the landscape character. AHH (paragraph 7.1) states that the LVIA must 'ensure the design of mitigation enhances the physical landscape, or views from receptors, other than just screening the development'.
- 9.4 The establishment of planting will be severally impacted by grazing deer, brown hare and rabbit populations. With the displacement of birds of prey and foxes due to the proposed development, the population numbers of rabbits will increase exponentially in the immediate locality, therefore, the loss of newly planted vegetation will be significant. This in turn will have a detrimental impact on any landscape mitigation measures which in itself compounds the loss of existing vegetation, due to removal for development and loss of the landscape area within the site boundary.
- 9.5 Extensive and persistent browsing of hedgerow and hedgerow trees is common knowledge in local communities. Establishment of planting in the landscape is haphazard.

- 9.6 The proposed tracking solar panels will be 4.5m in height. In some Flood Zone areas the panels will be raised a further meter. There will be extensive security fencing, lighting, CCTV, BESS, substations, warehousing and storage buildings varying in heights above 5m across the landscape. The Applicant has stated that they will maintain hedgerow at 5m height. With no leaf cover for approx. 6 months of the year and reflecting that plant establishment will be difficult to achieve, it is evident that the proposed screening will not be effective.
- 9.7 The extent of the removal of the existing trees and hedgerow cannot be assessed as the Applicant has provided conflicting statements. The plans indicating retention do not provide a sound basis for judgement of the proposed development when considered with other documentation such as the Draft DCO.
- 9.8 It is noted that the Management Plan and success thereof (AHH, Paragraph 7.5) 'is highly dependent upon the successful management and maintenance of the new planting, as well as protection of exiting trees and hedgerows.' Also, the Management Plan covers a period of 5 years only. If the schemes life span as we are advised is for approximately 40 years, it seems incongruous that no further Management Plan beyond a 5 year period exists. This is particularly pertinent in that 'the landscape and visual effects are being assessed at 15 years' with findings of the LVIA being projected from successful implementation of the aforementioned Landscape Management Plan.
- 9.9 The Public Rights of Way (PRoW) in and around the multiple sites which constitute the Cottam Solar Project have open aspects with short and long distance views. If the proposed 5 meter high hedging and mitigation measures are implemented, it is arguable that loss of landscape character and enjoyment of the landscape will occur.
- 9.10 The 7000 Acres Group argues that planting mitigation measures will not be effective as suggested in the LVIA and will harm the character of the landscape. If all trees and hedgerows are removed in relation to the Cottam Solar Project as stated in the Draft DCO, the negative effects on the environment, regional and local landscape character will be immeasurable.

10. Biodiversity and Biodiversity Net Gain

- 10.1 The Cottam Solar Project will cover an expansive area of the landscape with solar panels and associated equipment as already described. The loss of multiple and significant areas of land, vegetation and habitats is a matter of grave concern to our members.
- 8.2 The CSP represents a monoculture of solar over land. The loss of land mass has a negative impact on biodiversity.
- 10.2 Biodiversity is under pressure from competing land use factors.
- 10.3 The proposals in the Cottam Solar Project to remove existing and mature trees and hedgerows equate to immediate and extensive habitat loss and indeed to potentially eradicate all trees and hedgerows in the vicinity of the multiple sites of the CSP is catastrophic in terms of Biodiversity. Removal of established vegetation means species loss and consequentially biodiversity loss as established trees and hedgerow already have a biodiversity value.
- 10.4 The subsequent planting of new and immature vegetation does not equate in biodiversity terms to the removed existing and mature vegetation. There is an immediate and lasting impact on biodiversity as the new vegetation takes several years to establish. These interventions equate to a biodiversity net loss.
- 10.5 Also, as previously discussed, the localised browsing of newly planted vegetation means landscape mitigation measures will be adversely affected. As such, claims by the Applicant that biodiversity will increase and net gains in biodiversity achieved are questionable.
- 10.6 The construction of the CSP will cause fragmentation and destruction of existing habitats above and below ground. The Applicant's Landscape and Ecological Management Plan (C7.3) lacks detail.
- 10.7 The extensive groundworks for the cable route will also have a negative impact on biodiversity. West Lindsey District Council state in their Local Impact Report (Paragraph

8.1.1) that the 'Applicant has based the Shared Cable Route Corridor on a construction programme taking 18 months in the Ecology and Biodiversity chapter. This differs from the Gate Burton scheme which accounts for a 24-36 month construction period. This would also circumvent the BNG guidelines which stipulate that 'temporary loss' of habitat is only when this cannot be restored (in full) to baseline condition within 2 years. If the cable route were to take longer than this then it is expected that the BNG calculations should be revisited.'

The 7000 Acres Group is very concerned regarding the difference in time frame for construction of the cable route between the two solar projects. Clarification of the issue needs to be addressed.

- 10.8 The landscape has opportunities without the CSP to improve biodiversity. Current and evolving Government Policies and Programmes mean that funding for biodiversity improvement schemes are available. This measure has not been factored into the equations measured by the Applicant. Therefore, the baseline results and subsequent outcomes do not reflect comparable biodiversity factors.
- 10.9 The Department for Rural Affairs is currently reviewing the Biodiversity Metric. Consultation findings were published in March 2023. The new Biodiversity Metric 4.0 is expected to be mandatory in November 2023. The Cottam Solar Project will be required to adhere to this new legislation and amend any subsequent biodiversity measures.
- 10.10 Amongst ecologists the Biodiversity Metric is regarded as not fit for purpose. Dr C J Betts states that the 'metric is not a substitute for expert ecological advice' and that the 'biodiversity metric unit calculations/scores are not scientifically precise or absolute values'. Also, that the 'metric is not in or of itself a solution to biodiversity decisions'.
- 10.11 Professor M. Adler in his paper, Biodiversity and Solar Farms, concludes that a 'lack of evidence relating to the ecological impact of solar farms is concerning' and that until future 'research is complete it would be premature to give approval for large scale solar schemes'.

11. Soils

- 11.1 National soil maps show there are predominantly three main soil types in relation to the Cottam Solar Project. The three soil types are described as ‘slowly permeable seasonally waterlogged fine loam over clayey soils, or fine silty over clayey soils.’ (Lincolnshire County Council, Review of Soils and Agricultural Land Classification Cottam Solar Project, September 2023 by Landscape, Land & Property Management).
- 11.2 The ALC findings supplied by the Applicant are in general in line with MAFF 1988 Guidelines and Natural England Technical Information Note TIN049. The findings of the ALC report essentially identify over 90% of the site as Grade 3b. The majority of any BMV land is shown to be Grade 3a, with only around 30 ha of Grade 2.
- 11.3 The land within the cable corridor is not estimated in the Applicant’s ALC Report or Environmental Statement. Members of our Group farm and grow viable crops within the land allocated for the cable corridor. They crop yield is high. It is expected ‘that 50+% of the cable route will be BMV’ (Landscape, Paragraph 5.3).
- 11.4 The Applicant has not explained the use of Best and Most Versatile land for the proposed development.
- 11.5 Local knowledge of the area has highlighted (in minuted meetings) that during last years (2022) abnormally hot and dry summer months, the arable crops in this area survived and were viable, in contrast to many other areas and regions. This shows that land which may be classed as 3b by the Applicant makes a special contribution to the environment, local economy and nation.
- 11.6 Also, with the loss of agricultural production for more than one generation (40+ years) there will be a negative impact on the farming industry and economy in the region. When this issue is considered in relation to the other three solar NSIP projects in the West Lindsey District, it is apparent that there will be a cumulative negative impact in this regard. It is noted that Lincolnshire County Council have concluded that; ‘as technology improves the

solar infrastructure will be in place for longer than this and therefore the impacts are also much greater.’

- 11.7 During construction of the CSP, Landscape (Paragraph 6.1) have considered that soil structure ‘can be significantly damaged during the construction phase of the process, particularly on heavy clay soils. There is inevitably a lot of trafficking of vehicles on the land to erect the panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post construction, but not all and it is possible that long term drainage issues occur on the site due to the construction.’
- 11.8 Several of our members are involved in farming in the region. They advise us that the landscape produces high yields of good quality crops regardless of any perceived ALC grade. Landscape state (Paragraph 7.1) that ‘Lincolnshire is very much an agricultural area with substantial areas of land within the Best and Most Versatile category. Much of the non BMV land will be Grades 3b, still considered to be ‘moderate’ quality and still productive land.’
- 11.9 The Applicant has not assessed implications of the proposed scheme for all soil life.

10.Mental Health and Wellbeing

- 10.1 Spatial Planning for Health: An evidence resource for planning and designing healthier places.

The above review states that ‘there is a very significant and strong body of evidence linking contact and exposure to the natural environment with improved health and wellbeing. For the purpose of this review, the natural and sustainable environment is comprised of neighbourhood ecosystems and the resulting co-benefits between the environment and health. Protecting the natural environment is essential to sustaining human civilization’ (PHE, Spatial Planning for Health 2017, pg. 38 (Ref 4).

- 10.2 In a response to the Department of Health and Social Care, 7 July 2022, the Landscape Institute (LI) 'make the case that landscape and green infrastructure have a key part to play in supporting better mental health outcomes for communities everywhere'.
- 10.3 In regard to the Cottam Solar Project the LI's relevant statements to Government are that the:
- 'access to green spaces and nature is a demonstrably effective tool to manage and prevent poor mental health, as well as to promote physical health and wellbeing';
- 'level of access to nature in urban areas varies, with disadvantaged communities generally less able to access high-quality green spaces';
- 'Green social prescribing is a welcome addition to the NHS approach, and there is scope to develop NHS estates to support the roll-out of programmes and activities'.
- 10.4 These above statements highlight that access and enjoyment of green space, either active or passive have a positive effect on mental health and wellbeing. There is a lack of access to quality green space in the nearby town of Gainsborough and therefore the surrounding local rural landscape is important to health. Green social prescribing is being promoted by DEFRA with the use of 'walking schemes, dementia walks, community gardens, conservation volunteering, green gyms, and high-quality outdoor play areas'. The LI go on to say that, 'creating spaces for recreation, connecting with others, and connecting with nature can play a significant role in supporting mental health. Making these spaces accessible and in close proximity to local communities...is crucial'.
- 10.5 The Environmental Statement for Cottam Solar Project indicates that there are several Public Right of Way (PRoW) routes that will be temporarily stopped and/or diverted. The term 'temporary' is open ended and so residents and users of the PRoW's will have their enjoyment of their usual walks negatively impacted potentially for a lengthy and undefined period of time.
- 10.6 This infringement on the health and social benefits people gain from the recreational value and use of PRoW's, coupled with any cumulative effect from potential development of the

Gate Burton, West Burton and Tillbridge Schemes, means that people's mental and health and wellbeing will suffer.

- 10.7 Therefore, the PRoW's will no longer provide access to green space and open countryside but to an industrialised landscape.
- 10.11 Some members of the 7000 Acres Group have shared with us that they already feel anxious and worried about the prospect of these proposed solar developments and that their mental health and wellbeing has been harmed as a consequence. If the proposed development goes ahead, the likelihood is that these harms or negative effects will be worsened.

11. Tranquillity

- 11.1 Tranquillity is defined in the glossary of the third edition of the Guidelines for Landscape and Visual Impact Assessment (GLVIA) (LI and IEMA 2013) as 'a state of calm and quietude associated with peace, considered to be a significant asset of landscape'.
- 11.2 Several residents have stated that the landscape and green space affords them a degree of peace. This in turn we equate to mean tranquillity.
- 11.3 It is acknowledged that there are various definitions of tranquillity, the Guidelines for Landscape and Visual Impact Assessment (LI and IEMA 2013), also convey that a 'landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity'.
- 11.4 It is clear, from the conversations the group has had with residents from the neighbouring villages to the Cottam Solar Project, they value the peace and quiet of the landscape setting and that the proposed negative impacts of the transport noise, construction and industrial development will significantly harm that degree of peace and/or tranquillity.

12. Conclusion

- 12.1 This written representation has shown that the Applicant has failed on multiple occasions to provide robust and clear findings.
- 12.2 Significant impacts have been shown to affect the majority of the issues raised in this report.
- 12.3 Mitigation measures have been found to be inadequate.
- 12.4 Biodiversity and biodiversity net gain claims have been shown to be lacking validity.
- 12.5 Soil analysis results have also proven inadequate in terms of yield.
- 12.6 Negative impacts on mental health and wellbeing and enjoyment of the landscape as it exists have been highlighted.
- 12.7 Finally, the landscape as a whole is much loved and enjoyed by users and local communities. The members of our group regularly convey their dismay and disbelief that such a vast solar scheme is being considered to cover the landscape in our region. It is clear to our members that the harms significantly outweigh any perceived benefits and as such we continue to argue our case before the Examining Authority.

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