Walpole
Battery Energy Storage System

Landscape and Visual Appraisal

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Landscape and Visual Appraisal

SUMMARY

1. This appraisal has examined the likely effects of the Proposed Development on the landscape and visual amenity of the Site and surrounding area.

2. The effects of this Proposed Development would be limited to:

    - The character of the landscape of the Site and surrounding area up to approximately 1.0km from the Site. This includes only limited parts of the Settled Fens and the Fens – Settled Inland Marshes LCTs. The Proposed Development would only be intermittently and partially visible within limited parts of these LCTs where very limited parts of the Proposed Development would be visible, even in winter months, and seen consistently in conjunction with the surrounding Sutton Bridge Solar Development as well as other nearby industry and development. This limited visibility of the Proposed Development would not alter any of the key characteristics of these LCTs and would result in very limited changes to landscape character, especially given the developed context of this part of the Settled Fens LCT.
    - The visual amenity of a limited number of residents in properties in the surrounding landscape. This would predominantly be limited to residents within the two single storey properties at Gibbons Farm to the west of the Proposed Development. These views would be extremely limited and seen in the context of the foreground solar farm, and are expected to result in a moderate/ minor adverse effect on the visual amenity of residents.
    - The visual amenity of motorists on a few short sections of the public highway network in the vicinity of the Site. These would generally be fleeting views of very limited parts of the Proposed Development visible in the context of the operational solar farm and – at worst – would be expected to result in minor/ negligible effects.

3. There would not be any effects on landscape fabric, landscape designations, or the visual amenity of most residents, walkers, equestrians and cyclists on long distance recreational routes or local public rights of way, or motorists on the majority of roads within the study area.

4. On the whole, the Proposed Development would predominantly be entirely screened from the majority of the 2.0km radius study area. The Site lies entirely within the Sutton Bridge Solar Development which was consented in 2021. Sutton Bridge Solar Development included a range of planting proposals which provide screening benefits for the Proposed Development, reducing visibility from several potential receptors. Visibility of the Proposed Development would be limited by the surrounding operational solar farm and areas of mature vegetation. As a result, any effects on landscape character and visual amenity would be extremely contained.

1.0 INTRODUCTION

5. Viento Environmental Ltd was appointed by Envams on behalf of Hollygreen Energyfarm Ltd (100% owned by EDF Renewables) ('the Applicant') to prepare a Landscape and Visual Appraisal in support of a planning application to be submitted to South Holland District Council. The application requests permission for a Battery Energy Storage System (BESS) (hereafter referred to as 'the Proposed Development'). The Proposed Development is located on land 'hereafter referred to as 'The Site') within the consented Sutton Bridge Solar Farm centred on grid reference 548402, 319426.

6. The Site is located within the existing Sutton Bridge Solar Farm. The Site lies to the east of the River Nene and 500m south-east of Sutton Bridge Power Station, approximately 1.25 km south and east of the village of Sutton Bridge.

7. The Site measures approximately 3.77 ha and is proposed to contain the BESS, associated infrastructure and biodiversity net gain provision.

8. The Site will be accessed via the same point used for the solar farm; from Centenary Way, which connects to the A17 approximately 1.5 km to the east.

9. The Site lies within the Sutton Bridge Solar Farm which was previously consented under an application by EDF Renewables Ltd (planning application ref: H18-1126-20) that was submitted to and approved by South Holland District Council on 12th March 2021.

10. The previous planning application for the existing solar farm (planning ref: H18-1126-20) covered the change of use from agricultural land to solar farm and construction and operation of a solar photovoltaic (PV) development with capacity of up to 49.9MW with associated infrastructure and landscaping. This application did not include a BESS, which is why this planning application and appraisal is required.

11. This report presents the findings of a landscape and visual appraisal (LVA) that has been undertaken to identify the likely effects of the Proposed Development on the landscape character and visual amenity of the locality.

12. Reference is made to the Sutton Bridge Solar Development LVA (Arcus 2020) and its viewpoints within this appraisal.

13. The appraisal has concentrated on a 2.0km radius study area (from the Site centre) which is considered sufficient to identify all likely impacts on landscape and visual amenity (see **Figures LV1 – LV2**).

14. The appraisal is illustrated by **Figures LV1 – LV2 and by Viewpoints 1 - 4** and supporting information is provided in **Appendices LV1 – LV3**. All references are listed at the end of this report.

2.0 METHOD OF ASSESSMENT

2.1 Assessment Approach

15. The appraisal is a study identifying the key views towards the Proposed Development and describing how these views could change as a result of the Proposed Development. In addition, the study identifies the landscape character of the Site and surroundings and sets out the potential changes to landscape character that could occur as a result of the Proposed Development.

16. The Site lies within the Sutton Bridge Solar Farm which was previously consented under an application by EDF Renewables Ltd (planning application ref: H18-1126-20) that was submitted to and approved by South Holland District Council on 12th March 2021. In order to allow comparison with the existing solar development and its associated mitigation planting, four of the original viewpoints from the consented Sutton Bridge Solar Development LVA (Arcus 2020) have been used to illustrate this LVA.

17. The appraisal has examined the effects of the Proposed Development in the context of the existing landscape and visual baseline which currently contains some renewable energy developments, but no existing BESS developments. As mentioned above, the Sutton Bridge Solar Development has been built and completed in 2024 within the study area. In addition the Grange Wind Farm is also partially located within the study area, as is the Sutton Bridge Power Station. All of these developments are considered within the baseline of the appraisal. At the time of this appraisal (November 2024) the study area contains no BESS proposals in the planning system.

18. The methodology used in this study conforms to the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3)(IEMA, LI, 2013). GLVIA3 recommends that for non-EIA development, an assessment of significance is not required and that the assessment should also be proportionate to the scale of the project and the nature of its likely effects.

2.2 Good Practice Guidance and Data

19. The appraisal has drawn on information provided within the local development plans that cover the study area (see list of references), and landscape character assessments which cover the study area (see list of references).

20. As mentioned above, the appraisal has utilised guidance set out within the GLVIA3. In line with Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals, photographs illustrating views from each viewpoint have been taken using a Canon EOS 6D digital camera using a fixed lens with a 50mm focal length. Individual frames from each viewpoint illustrate the existing view at a set viewing distance (in line with guidance within Landscape Institute TGN 06/19 – Visual Representation of Development Proposals) and are labelled with relevant notes for information purposes. In addition, panoramic views from each viewpoint are also provided to give the local context to each view. These views do not have a set viewing distance. These viewpoint images should not be considered as a substitute to visiting a viewpoint in the field.

2.3 Appraisal Process

21. The appraisal has involved information review, fieldwork observations and photography, and computer-based data processing and analysis, and has been undertaken in several stages, as presented in the following sections of this report:

    - Predicted effects and mitigation – a review of the visual characteristics of Proposed Development to identify the aspects with the potential to give rise to landscape and visual effects and a description of the measures that have been incorporated into the design to mitigate these effects.
    - Landscape and visual context – a review of the landscape and visual baseline of the study area, to identify landscape character, landscape designations and visual receptors in the study area.
    - Visual analysis – a viewpoint analysis to predict the changes to views as a result of the Proposed Development from a selection of viewpoints that represent some of the main visual receptors in the study area.
    - Landscape appraisal – an appraisal of the potential effects of the Proposed Development on landscape fabric, landscape character and landscape designations in the landscape study area including potential cumulative effects.
    - Visual appraisal – an appraisal of the potential effects of the Proposed Development on the visual amenity of receptors in the visual study area including potential cumulative effects.
    - Conclusions – a summary of the findings of the landscape and visual appraisals.

2.4 Prediction Methodologies

22. The prediction methodologies for the viewpoint analysis, landscape appraisal and visual appraisal are provided at the beginning of these sections, with a more detailed methodology provided in paragraph 57 below.

3.0 PREDICTED EFFECTS AND MITIGATION

23. A detailed description of the proposed development and information on the installation of the various components of this proposed development are provided within the Planning, Design and Access Statement**.**

24. It is the visual appearance of the Proposed Development and associated activities and any proposed changes to landscape fabric that are the main aspects of the development with the potential to affect landscape and visual amenity and these are summarised below for each of the three distinct phases of the development – the construction, operational and decommissioning phases.

3.1 Construction Phase

25. The construction phase would be approximately 9-12 months, and the activities and temporary features which would be visible on the Site would include:

    - Set-up of a temporary construction compound.
    - Creation of a compound area and earth bund surrounding it and within this, installation of the battery storage units, DNO substation, auxiliary and earth transformers, control room, PCS/ MVS,

BESS switch room, LV substation, spare parts container, welfare facilities, harmonic filter, water tank, perimeter fencing with CCTV, access track and access gates.

- Excavation of cable trenches and laying of cabling.
- The presence of the HGV deliveries to Site and movement of vehicles on-site.
- Reinstatement works around areas disturbed during construction.

26. The visual effects of the various aspects of the construction phase would be temporary, intermittent and short-term with each aspect lasting only part of the approximate 9-12 month construction programme.
27. As the Site for the Proposed Development is currently open ground there would be extremely limited loss of ground vegetation as a result of the temporary construction activities. Ground disturbance would be minimised by good site management with full reinstatement over all temporarily disturbed and excavated areas.
28. The likely effects of the construction phase on the landscape fabric of the Site are considered in the Landscape Appraisal below.

3.2 Operational Phase

29. The main elements that would be visible over the 40-year operational life of the Proposed Development would be:

- Access track, earth bunding and hardcore area.
- Battery storage units.
- PCS (power conversion systems) or MVS (medium voltage skid).
- DNO substation.
- Auxiliary and earthing transformers.
- Control room.
- BESS Switchroom.
- LV substation.
- Spare parts container.
- Welfare facilities.
- Harmonic filter.
- Water tank.
- Fencing with CCTV – palisade fencing and acoustic fencing.
- Access gates.
- Periodical visits to the Site for operational maintenance purposes, involving a commercial van type vehicle.
- Biodiversity enhancements – grassland areas to be created within the Site over areas outside of the main BESS development. See Biodiversity Gain Assessment Report (BSG Ecology, 2024) for details.

30. Details and dimensions of all these elements are provided in the Planning, Design and Access Statement.
31. From a landscape and visual perspective, the number of visual elements present over the anticipated 40 year operational phase has been minimised by siting the Proposed Development within the centre of an operational solar farm.

32. Great care has been taken to limit the height and extent of the Proposed Development so as to minimise its resulting potential visibility, allowing the applicant to maximise the screening potential provided by surrounding solar panels.

3.3 Decommissioning Phase

33. The decommissioning phase would be short term and temporary and the activities and temporary features which would be visible on the Site would include:

    - The presence of HGV vehicles collecting materials and components from the Site and the movement of vehicles on-site.
    - Dismantling and removal of the battery storage units, DNO substation, auxiliary and earth transformers, control room, PCS/ MVS, BESS switch room, LV substation, spare parts container, welfare facilities, harmonic filter, water tank, perimeter fencing with CCTV, access track and access gates. Hardcore areas would also be removed and returned to agricultural land, although some tracks may remain for use by the land owner.
    - Reinstatement works over the other areas disturbed by the works.

34. The effects on landscape and visual amenity during the decommissioning phase would be minimised by the limited duration of the works, by removing all above ground structures and materials, where applicable, and by restoring the ground disturbed by the works.

35. The likely effects of the decommissioning phase on the landscape fabric of the Site are considered in the Landscape Appraisal below.

4.0 LANDSCAPE AND VISUAL CONTEXT

36. The Site comprises open ground within the centre of an operational solar farm which is adjacent to Sutton Bridge Power Station and the A17.

37. A number of infrastructure elements and major developments are located in the vicinity of the Site including Sutton Bridge Solar Development, Sutton Bridge Power Station, the old Sutton Bridge Crop Storage Research unit and Grange Wind Farm are all sizeable developments within the local area.

38. Whilst the A17 runs through the northern section of the study area, only local minor roads service the majority of the study area.

39. The nearest public right of way (PRoW) to the Site is Bridleway SuBr/6/3 which follows the route of the local road west of the Site and immediately east of the Nene Outfall Cut, and is located approx. 700m from the Proposed Development at its closest point. A footpath (SuBr/2/1) is located west of Nene Outfall Cut near Peterspoint Farm at a distance of approx. 1.2km northeast of the Proposed Development at its closest point and a further very short section of footpath (SuBr/10/1) is located north of the A17 at a distance of approx.1.2km northwest of the Proposed Development. The Nene Way is a long distance route which passes through the west of the study area alongside the Nene Outfall Cut at a distance of approx. 800m from the Proposed Development.

40. The nearest residential properties to the Proposed Development are Gibbons Farm (approx. 800m west of the Proposed Development), a series of individual properties along King John Bank (ranging between approx. 700m and 1.4km southeast of the Proposed Development), a series of properties along Chalk Lane (approx. 1.0km north of the Proposed Development) and properties on Gunthorpe Bank (approx. 1.4km – 1.6km south of the Proposed Development). The southeastern outskirts of Sutton Bridge (not including Railway Lane South) are located approx. 1.4km northwest of the Proposed Development.

41. The landform of the Site and entire study area are broadly very flat, located at approx. 4m – 8m AOD. The Nene Outfall Cut is the main watercourse within the study area although drains and ditches are a very common feature of this landscape. Roads are mainly set out in straight lines, as are the drainage ditches, with a regular and angular character to the landscape.

42. No other BESS developments are currently located within the study area.

4.1 Landscape Fabric

43. The Proposed Development would be located across open ground within the centre of an operational solar farm. A line of mature trees is located just outside of the application boundary and these would be protected by the developer using appropriate fencing, relevant British Standards and suitable construction procedures. Therefore, there are no landscape elements within the Site itself.

4.2 Landscape Character

44. At a national level, Natural England has divided England into 159 National Character Areas (NCAs). The proposed Site and the study area are located within NCA 46: The Fens. The full NCA description for this area is included within **Appendix LV1**, with the key characteristics set out below.

NCA46 – The Fens

- Expansive, flat, open, low-lying wetland landscape influenced by the Wash estuary, and offering extensive vistas to level horizons and huge skies throughout, provides a sense of rural remoteness and tranquillity.
- Jurassic clays are overlain by rich, fertile calcareous and silty soils over the coastal and central fens and by dark, friable fen peat further inland. The soils are important for agriculture, which is hugely significant for the rural economy in the Fens. There are over 4,000 farms in the Fens; enough wheat is grown here annually to produce a quarter of a million loaves of bread and one million tons of potatoes are grown here. In addition to traditional vegetables, exotics such as pak choi are now cultivated. Some 40 per cent of England's bulbs and flowers are also produced in the Fens.
- The Wash is the largest estuarine system in Britain, supporting internationally important intertidal and coastal habitats influenced by constant processes of accretion and deposition, forming salt marsh and mudflats and providing habitats for wildfowl, wading birds and other wildlife, including grey seals and approximately 90 per cent of the UK's common seals. It also provides important natural sea defences and plays a key role in climate change regulation. Flood storage areas on the Nene, Cam, Lark and Ouse washes also provide significant biodiversity interest. True fen mainly occurs at remnant conservation sites, such as Baston or Wicken Fen.
- Overall, woodland cover is sparse, notably a few small woodland blocks, occasional avenues alongside roads, isolated field trees and shelterbelts of poplar, willow and occasionally leylandii hedges around farmsteads, and numerous orchards around Wisbech. Various alders, notably grey alder, are also used in shelterbelts and roadside avenues.
- The predominant land use is arable – wheat, root crops, bulbs, vegetables and market gardening made possible by actively draining reclaimed land areas. Associated horticultural glasshouses are a significant feature. Beef cattle graze narrow enclosures along the banks of rivers and dykes and on parts of the salt marsh and sea banks.
- Open fields, bounded by a network of drains and the distinctive hierarchy of rivers (some embanked), have a strong influence on the geometric/rectilinear landscape pattern. The structures create local enclosure and a slightly raised landform, which is mirrored in the road network that largely follows the edges of the system of large fields. The drains and ditches are also an important ecological network important for invertebrates, fish including spined loach, and macrophytes.
- The area is very rich in geodiversity and archaeology, with sediments containing evidence for past environmental and climate changes and with high potential for well-preserved waterlogged site remains at the fen edge, within some of the infilled palaeo-rivers and beneath the peat.
- Large, built structures exhibit a strong vertical visual influence, such as the 83 m high octagonal tower of 'Boston Stump' (St Botolph's Church), Ely Cathedral on the highest part of the Isle of Ely dominating its surrounding fen, wind farms and other modern large-scale industrial and agricultural buildings, while drainage and flood storage structures and embanked rail and road routes interrupt the horizontal fen plain.

- Settlements and isolated farmsteads are mostly located on the modestly elevated 'geological islands' and the low, sinuous roddon banks (infilled ancient watercourses within fens). Elsewhere, villages tend to be dispersed ribbon settlements along the main arterial routes through the settled fens, and scattered farms remain as relics of earlier agricultural settlements. Domestic architecture mostly dates from after 1750 and comprises a mix of late Georgian-style brick houses and 20thcentury bungalows.

45. The Site and study area are characterised in more detail as part of the South Holland Strategic Landscape Capacity Study (SHDC, 2003) and the Kings Lynn and West Norfolk Borough Landscape Character Assessment (CBA 2007). Within the study area, these assessments identify a total of two Landscape Character Types (LCTs). The Site itself would be located entirely within The Settled Fens LCT, with LCT D – The Fens, Settled Inland Marshes located within the southeast of the study area. These LCTs are shown on **Figure LV1** and full descriptions of each LCT are included within **Appendix LV1**. The key characteristics of the LCTs within the study area are set out below, extracts from the South Holland Strategic Landscape Capacity Study and the Kings Lynn and West Norfolk Borough Landscape Character Assessment.

46. Fieldwork has broadly concurred with the findings within these landscape character assessments.

Settled Fens

- ***Flat topography***
- ***Dominant land cover and landscape elements:*** *buildings* - farms, masts, poles, pylons, industrial, commercial, settlements. *Vernacular style* – buildings, country houses, field systems, ecclesiastical. *Farming style* – hedges, fields, fences, arable, market gardening, orchards. *Woodland and trees* – deciduous, mixed, shelterbelts, hedgerows, orchards, clumps and alien coniferous screening. *Hydrology* – rivers, drainage channels, ditches. *Communication* – roads, railways, airfields, pylons, masts.
- ***Description*** – predominantly flat topography, dissected by main roads, rivers, drainage channels and drainage ditches often on raised banks (1-3m). Primarily nucleated settlements with associated mature trees. Church spires and towers often rise above the mature vegetation to provide prominent landmark features. Medium to large fields with intensive market garden crops. Locally strong hedgerow elements. Views are restricted or foreshortened by shelterbelts and woodland or mature hedgerows. This contributes to a sense of enclosure with a more open feel between settlements. The main visual detractors are the 440kV and 132kV overhead lines on towers, electricity sub stations and power stations and urban fringe visual clutter (dominated by light industry and glasshouse horticulture).

  Key characteristics *– flat landform, nucleated settlements with mature vegetation and church spires, organic lines dominate eg winding roads.*

  Condition *– average but ranges from good (farmland) to poor (urban fringe clutter).*

- ***Visual criteria***

  Pattern – strong

  Scale – medium – large

  Texture – textured

  Colour – muted – colourful

  Complexity – diverse

  Remoteness – active

  Unity – fragmented

  Form – curved

Enclosure – open-enclosed

- ***Perception***

  Security – comfortable

  Stimulus – bland

  Tranquillity – vacant

  Pleasure - pleasant

- ***Architecture*** – new build around traditional core with church as the primary mode. Building materials are predominantly brick and a combination of brick and stone. The settlement form is primarily nucleated, interspersed with some linear settlement.

LCTD: The Fens - Settled Inland Marshes

- *A large scale, low lying landscape offering distant, panoramic views that evoke a sense of openness. This open character is less evident where settlements, shelterbelts and orchards occur.*
- *Simplistic terrain characterised by a distinctly flat landform providing wide horizons. Earthworks in the form of rivers and creek embankments bring topographic change and strong, straight lines of contrast.*
- *An intensively farmed arable landscape comprising predominantly geometric fields divided by straight drainage channels and dykes and underlain predominantly by silts. Field size is variable in places with small units defining settlement edges.*
- *Fruit orchards are a relatively common (yet declining) feature with rectangular plots ordered into rows. These rows often channel views and where orchards occur alongside roads, views across the landscape are more restricted. Conifer planting is also a relatively common feature.*
- *Buildings and storage associated with horticulture and food production industries, as well as power stations, pumping stations and sluices, provide visible human built elements.*
- *Well served by a network of rural roads that follow an irregular path.*
- *The landscape appears well settled – with villages, town edges, large houses, individual farms and properties generally in view. Settlement is predominantly found aligning secondary roads and has a linear arrangement with villages often merging through ribbon development.*
- *The skyline appears cluttered in places due to the varied heights, forms and textures of vertical elements including trees, pylons and buildings.*
- *Lines of pylons are dominant features slicing diagonally across the field system. The pylons and posts carrying overhead wires are frequently in view.*
- *Views can be gained to the edge of King's Lynn and Wisbech.*
- *The change to the adjacent Coastal Marshes and Open Inland Marsh landscapes is transitional and not always obvious.*
- *Large churches (which are often situated in an elevated position) within villages are key landmark features - visible from long distances.*
- *The main roads – the A17(T) and A47(T) are busy through routes and the operation of farm machinery brings constant movement to the landscape.*
- *The sense of remoteness and tranquillity varies and is largely dependent on proximity to roads and settlement edges.*

47. There is a large degree of commonality between these two LCAs and their key characteristics and fieldwork has indicated that it is purely the district boundary that has created these two different LCAs. Therefore, for the purposes of this appraisal they will be discussed together.

4.3 Landscape Designations

48. There are no national or local landscape designations located within the 2.0km radius study area.

4.4 Visual Receptors

49. The visual receptor locations within the study area are illustrated on **Figure LV2** and include:

- Settlements – the southeast edge of Sutton Bridge and the hamlet of Walpole Marsh.
- Individual residential properties – scattered houses, cottages and farmsteads.
- Long distance recreational routes – The Nene Way.
- Local public rights of way – footpaths, bridleways and byways open to all traffic (BOATs).
- Public highways – including the A17 and a number of minor roads.

50. The Countryside and Rights of Way (CRoW) Access Land Maps on the Natural England website [1] have been checked and there are no areas of access land within 2.0km of the Site.

5.0 VISUAL ANALYSIS

5.1 Viewpoint Analysis

51. A Zone of Theoretical Visibility (ZTV) has not been generated for this Proposed Development. Given the very flat nature of the local terrain and the newly operational solar farm surrounding the proposal Site on all sides, a ZTV would not accurately indicate the potential visibility, or lack of visibility, of the Proposed Development. Instead this appraisal has relied on fieldwork and viewpoint analysis.

Viewpoint Locations

52. The viewpoints were selected to represent the most open views of the Proposed Development from a range of distances, directions and viewpoint receptor locations. They have been selected from the LVA undertaken on the Sutton Bridge Solar Development as a way of providing a comparison tool. The Sutton Bridge Solar Development incorporates within it some mitigation planting which has been instigated as part of the development and which will establish and grow over time to screen this solar development. As the Proposed Development is located within the centre of this solar development these planting measures will also grow to provide screening of the Proposed Development. Therefore, the choice of viewpoints from the Sutton Bridge Solar Development LVA (Arcus 2020) allows us to see what this mitigation planting will look like at Year 10 by referring back to those viewpoints from the solar LVA.

53. The viewpoints are listed in **Table LV1** below and show the solar LVA viewpoint number and the associated viewpoint letter within this appraisal.

54. The locations of these viewpoints are shown on the figures (**Figures LV1 – LV2**). A description of these viewpoint panoramas and the potential changes that would occur through the introduction of the Proposed Development are contained below. It is important to note that the viewpoint panoramas cover varying horizontal widths of view and so no set viewing distance should be ascribed to these individual views. The viewpoints are also produced as Type 1 single frame images and should be viewed at a set viewing distance at A3 size which is clearly stated on each viewpoint. The viewpoint images are provided for information purposes and are labelled with relevant notes and should not be considered as a substitute to visiting a viewpoint in the field.

[1] http://www.openaccess.naturalengland.org.uk/wps/portal/oasys/maps/MapSearch

55. A detailed description of the viewpoints and the potential changes that would occur to each through the introduction of the Proposed Development are contained below.

56. These findings are summarised below in **Table LV4**. The findings in **Table LV4** take into account the screening effects of intervening topography, existing vegetation and built form and assume excellent visibility conditions.

Table LV1: Viewpoint comparisons

Viewpoint number in Sutton Bridge Solar Development LVA	**Viewpoint letter within this appraisal**
1	A
5	B
6	C
4	D

Table LV2: Viewpoint Locations

Vp No	Location	Easting	Northing	Elevation (approx.)	Distance (km)	Bearing (approx) to Site	Landscape Character Type	Landscape Designations	Recreational and Transport Routes	Visual receptors
A	Local road south of Sutton Bridge	547700	319810	7m AOD	0.7	W	Settled Fens	None	Public Right of Way & local road	Horse riders, Walkers, Cyclists, Motorists
B	King John Bank	548965	318850	6m AOD	0.8	SE	Boundary of Settled Fens & The Fens – Settled Inland Marshes	None	Local road	Motorists, nearby residents
C	Centenary Way	549425	320030	6m AOD	1.1	NE	Settled Fens	None	Local road	Motorists
D	Gunthorpe Road	548040	318010	4m AOD	1.4	S	Boundary of Settled Fens & The Fens – Settled Inland Marshes	None	Local road	Motorists, nearby residents

Prediction Methodology

57. The following viewpoint analysis has identified the visual receptor sensitivity and landscape sensitivity at each viewpoint location and combined these with the predicted magnitude of change in the view in order to determine the overall impact for each visual receptor type and landscape character unit at each location.

58. In accordance with GLVIA3, the sensitivity of each visual receptor group at each location is a function of the susceptibility of visual receptors to change at that location and the value attached to these views.

59. All visual receptors are people and are assumed to be equally sensitive to change. However, the location and activities of visual receptors influence the way in which they currently experience the landscape and views, the extent to which views of the surrounding landscape may contribute to their existing visual amenity, the value they place on these views and their susceptibility to changes in these views. Accordingly, at any one location there may be different levels of sensitivity for the different receptor groups, the sensitivity may vary depending on the direction of the view, and any one receptor group may be accorded different levels of sensitivity at different locations.

60. Receptor susceptibility levels of very susceptible, susceptible, moderate susceptibility, slight susceptibility and negligible susceptibility are used taking into account the following factors:

    - Receptor location, occupation or activity,
    - Movement of receptor and duration and frequency of view experienced,
    - Focus of attention and interest.

61. The judgement of value is based on a five point scale – National value, County/Borough/District value, Community value, private value, unvalued. The value attached to a location or to a particular view at a location can influence the purpose and expectation of receptors at the location and the judgement of value takes into account:

    - Recognised value – for example by the presence of planning designations or designated heritage assets,
    - Indicators of value – to individuals, communities and society generally, such as the popularity of a location.

62. Accordingly, within this assessment visual receptor sensitivity is determined in terms of the sensitivity of each location for each receptor type (rather than the sensitivity of the receptors *per se*), using a five point relative scale (high, high/medium, medium, medium/low and low).

63. In accordance with GLVIA3, the sensitivity of each landscape unit is judged on the basis of its value and its susceptibility to change arising from the specific type, scale and location of development proposed.

64. The susceptibility to change of a landscape unit is based on a five point scale (very susceptible, susceptible, moderate susceptibility, slight susceptibility and negligible susceptibility)and depends on:

    - The key characteristics of the landscape, and the clarity and robustness of these characteristics,
    - Nature of views (visual enclosure/openness of views and extent to which views contribute to landscape character),
    - Landscape planning policies and strategies for the landscape unit,
    - The nature of the changes to landscape character and views that could be brought about by the type, scale and location of the Proposed Development and the compatibility of these with the above factors.

65. The same five point value scale is used for landscape units as for visual receptors. Judgements on landscape value are based on those given in published landscape character assessments (where given) and/or checked in the field from fieldwork observations.

66. Accordingly, the assessment of landscape sensitivity for each landscape unit is derived from the judgement of value and combined with the judgement of susceptibility to give a level of landscape sensitivity as part of a five point scale – high, high/medium, medium, medium/low or low sensitivity.

67. The magnitude of the change in the views and in landscape character from the viewpoints has been assessed using a four point scale – substantial, moderate, slight and negligible. This magnitude of change scale is a relative scale and is not an absolute scale. It is based on the assessor's interpretation of largely quantifiable parameters, including:

    - Distance and direction of the viewpoint from the development.
    - Extent of the development visible from the viewpoint.
    - Field of view occupied by the development (horizontal and vertical angles of view) and proportion of view (as a percentage of the panorama).
    - Context of the view and degree of contrast with the existing landscape and built elements (background, form, composition, pattern, scale and mass, line, movement, colour, texture, etc).
    - Scale of change with respect to the loss or addition of features in the view. For the addition of built form, this includes the relative scale of the development and whether the development would be overwhelming, overbearing, dominant, prominent, visible, noticeable, discernible or barely discernible.
    - Duration and nature of the effect, eg direct/ indirect, secondary, cumulative, temporary/ permanent, short term/ long term, intermittent/ continuous, reversible/ irreversible, etc (as related to the nature of the development).

68. The resulting overall degree of impact is a combination of receptor sensitivity and the magnitude of change and is divided into eight levels of impact (major, major/moderate, moderate, moderate/ minor, minor, minor/ negligible, negligible and imperceptible) as indicated in the matrix below.

Table LV3: Assessment of overall impact

Location sensitivity	Magnitude of change			
	Substantial	Moderate	Slight	Negligible
High	Major	Major/ moderate	Moderate	Moderate/ minor
High/ medium	Major/ moderate	Moderate	Moderate/ minor	Minor
Medium	Moderate	Moderate/ minor	Minor	Minor/ negligible
Medium/ low	Moderate/ minor	Minor	Minor/ negligible	Negligible
Low	Minor	Minor/ negligible	Negligible	Imperceptible

Viewpoint A – Local road south of Sutton Bridge

69. This viewpoint is located at approximately 7m AOD and 700m from the proposed BESS compound and is located on a local road within the Settled Fens LCT which is also the route of Bridleway SuBr/6/3. The road runs between the A17 and Walpole Marsh along the Nene Outfall Cut and has no hedgerows on either side of it. There is a section next to Sutton Bridge Power Station that has mature vegetation to the east of the road, but the remainder of the road is open on either side. The viewpoint is located close to the power station and looks broadly east across the recently completed Sutton Bridge Solar Development. Nearby pylon lines and mature lines of trees are the other main elements within this simple view of strong horizontals and verticals.

70. Initially post construction of the Proposed Development: the BESS compound and water tank would all be located to the east of the existing mature tree line and within the centre of the operational solar farm. Both these elements would combine to entirely screen the Proposed Development from view, even in winter months.

71. Year 10 post construction: the mitigation planting proposals associated with the operational solar farm include hedgerow and tree planting along the western boundary of the solar farm. By Year 10 these would be established and mature and the Proposed Development would remain screened from view, although now the solar farm would also be screened as well.

72. The viewpoint represents views of horse riders, walkers and cyclists on the public right of way (PRoW) (high/ medium sensitivity) and motorists (medium sensitivity). The magnitude of change in the view would be *none* as the Proposed Development would be entirely screened from view, resulting in *no effect* on the visual amenity of horse riders, walkers, cyclists or motorists at this point.

Viewpoint B – King John Bank

73. This viewpoint is located at approximately 6m AOD and 800m from the proposed BESS compound and is located on a local road (King John Bank) on the boundary of the Settled Fens LCT and the Fens – Settled Inland Marshes LCT. The road runs between the A17 and Walpole Marsh and is broadly open to the surrounding fields on either side of it. The viewpoint is located close to Glenville Nurseries and Allington Lodge looking northwest towards Sutton Bridge Power Station. The power station and solar farm are clearly visible elements within this view, along with the mature tree line within the centre of the solar farm.

74. Initially post construction of the Proposed Development: the top of the battery stores and the water tank may just be discernible occupying a limited extent of the view above the intervening solar panels although at a distance of approx. 0.8km away they would not be seen as distinct from the solar farm and would be viewed as part of the same development.

75. Year 10 post construction: the mitigation planting proposals associated with the operational solar farm include hedgerow and tree planting along the eastern boundary of the solar farm. By Year 10 these would be established and mature and the Proposed Development would be entirely screened from view, as would the solar farm.

76. The viewpoint represents views of motorists (medium sensitivity) and a few nearby residents (high sensitivity). Initially post construction of the Proposed Development the magnitude of change in the view would be *negligible* as the Proposed Development would be barely discernible amongst the existing development, resulting in a *minor/ negligible effect* on the visual amenity of motorists at this point and a *moderate/ minor* effect on the visual amenity of nearby residents with this view. However, over time the hedgerows and trees on the eastern boundary of the solar farm would establish and grow to screen the Proposed Development entirely, even in winter months, so that at a point of 10 years growth, a magnitude of change of *none* is expected, resulting in *no effect* for motorists and residential receptors at this point.

Viewpoint C – Centenary Way

77. This viewpoint is located at approximately 6m AOD and 1.1km from the proposed BESS compound and is located on a local road (Centenary Way) within the Settled Fens LCT. The road runs between King John Bank and the power station and industrial estate and is broadly open to the surrounding fields on either side of it with a few nearby tree belts and sections of existing vegetation. The viewpoint looks southwest towards Sutton Bridge Power Station. The power station and solar farm are visible elements within this view, along with the Grange Wind Farm and some mature tree lines within the local landscape.

78. Initially post construction of the Proposed Development: the top of the water tank may just be discernible occupying an extremely limited extent of the view above the intervening solar panels. The main BESS compound would be positioned within the centre of the solar farm and behind some mature vegetation along Centenary Way where the BESS compound would be entirely screened from view, even in winter months, with only the top portion of the water tank expected to be located to the left of this intervening vegetation. At a distance of 1.1km away the top of the water tank would be viewed as part of the solar development.

79. Year 10 post construction: the mitigation planting proposals associated with the operational solar farm include hedgerow and tree planting along the northern boundary of the solar farm. By Year 10 these would be established and mature and the Proposed Development would be entirely screened from view, as would the solar farm.

80. The viewpoint represents views of motorists (medium sensitivity). Initially post construction of the Proposed Development the magnitude of change in the view would be *negligible* as the Proposed Development would be barely discernible amongst the existing development, resulting in a *minor/ negligible effect* on the visual amenity of motorists at this point. However, over time the hedgerows and trees on the northern boundary of the solar farm would establish and grow to screen the Proposed Development entirely, even in winter months, so that at a point of 10 years growth, a magnitude of change of *none* is expected, resulting in *no effect* for motorists at this point.

Viewpoint D – Gunthorpe Road

81. This viewpoint is located at approximately 4m AOD and 1.4km from the proposed BESS compound and is located on a local road on the boundary of the Settled Fens LCT and the Fens – Settled Inland Marshes LCT. The road typically has a hedgerow on its northern side, although not at this point. The viewpoint is located close to Wingland Farm and looks broadly north towards the recently completed Sutton Bridge Solar Development and to Sutton Bridge Power Station. Nearby pylon lines, the Grange Wind Farm and mature lines of trees are the other main elements within this simple view of strong horizontals and verticals.

82. Initially post construction of the Proposed Development: the BESS compound and water tank would all be located to the north of the existing mature tree line and within the centre of the operational solar farm. Both these elements would combine to entirely screen the Proposed Development from view, even in winter months.

83. Year 10 post construction: the mitigation planting proposals associated with the operational solar farm include hedgerow and tree planting along the southern boundary of the solar farm. By Year 10 these would be established and mature and the Proposed Development would remain screened from view, although now the solar farm would also be screened.

84. The viewpoint represents views of motorists (medium sensitivity) and a few nearby residents (high sensitivity). The magnitude of change in the view would be *none* as the Proposed Development would be entirely screened from view, resulting in *no effect* on the visual amenity of motorists or residents at this point.

Table LV4: Summary of Viewpoint Analysis – Effects on Landscape Character and Visual Amenity

Viewpoint Information				Landscape Assessment			Visual Assessment		
No	**Location**	**NGR**	**Distance/ direction to Site**	**LCT (sensitivity)**	**Magnitude of change**	**Effects on Landscape Character**	**Receptors (sensitivity)**	**Magnitude of change**	**Effects on Visual Amenity**
A	Local road south of Sutton Bridge	547700 319810	0.7km/ W	Settled Fens (Low)	None	None	Horse, riders, walkers, cyclists (High/ medium)	None	None
							Motorists (Medium)		None
B	King John Bank	548965 318850	0.8km/ SE	Boundary of Settled Fens & The Fens – Settled Inland Marshes (Low)	Negligible	Imperceptible adverse	Nearby residents (High)	Negligible	Moderate/ minor
							Motorists (Medium)		Minor/ negligible
Viewpoint B: Year 10 post construction				Boundary of Settled Fens & The Fens – Settled Inland Marshes (Low)	None	None	Nearby residents (High)	None	None
							Motorists (Medium)		None
C	Centenary Way	549425 320030	1.1km/ NE	Settled Fens (Low)	Negligible	Imperceptible adverse	Motorists (Medium)	Negligible	Minor/ negligible
Viewpoint C: Year 10 post construction				Settled Fens (Low)	None	None	Motorists (Medium)	None	None
D	Gunthorpe Road	548040 318010	1.4km/ S	Boundary of Settled Fens & The Fens – Settled Inland Marshes (Low)	None	None	Nearby residents (High)	None	None
							Motorists (Medium)		None

Findings of Visual Analysis

85. The very flat topography of the Site and study area combined with the existing solar farm and vegetation surrounding the Site and the low elevation of the Proposed Development would result in a Proposed Development that is very well screened. The operational solar farm surrounds the Proposed Development on all sides, creating an area of already developed character to which the Proposed Development would be added. The elements within the solar farm are of a similar height and colour to those within the Proposed Development such that the position of the Proposed Development centrally within the existing solar farm would result in very limited changes to landscape character and visual amenity, especially across such a flat terrain. Publicly accessible locations such as PRoWs and local roads are all located at a distance of approx. 400m or more from the Proposed Development, with the operational solar farm consistently providing a foreground context to the Proposed Development and often combining with local vegetation to entirely screen the Proposed Development from view. Overall, the introduction of the Proposed Development would barely be discernible for the majority of visual receptors within the study area, even in winter months when vegetative cover is less effective.

86. A more detailed discussion of the likely effects on the visual amenity of receptors in settlements and residential properties, on recreational routes, and on public highways is provided in the Visual Appraisal below.

6.0 LANDSCAPE APPRAISAL

87. This appraisal draws on the review of the predicted effects of the Proposed Development, the landscape fabric of the Site, the key characteristics of the LCTs, the purposes/objectives of the landscape designations, the visibility analysis, the viewpoint analysis and fieldwork observations, and discusses the predicted effects on:

- Landscape fabric of the Site.
- Landscape character.
- Purposes of the landscape designations.

6.1 Effects on Landscape Fabric

Prediction Methodology

88. Landscape fabric is composed of the physical components of the landscape (e.g. landform, land cover and landscape elements and features). Developments can bring about both direct and indirect effects on landscape fabric. Direct effects occur where changes to the fabric of the landscape arise as the result of physical disturbance, for example, the loss of landscape elements such as hedgerows, walls and trees. Indirect effects are consequential changes that are separated from the source of the change in a temporal or spatial manner, for example changes in vegetation downstream as the result of modifications to surface water patterns upstream in a catchment area.

89. This appraisal of effects on landscape fabric considers the existing landscape fabric of the Site and the predicted effects of the Proposed Development, and makes a judgement as to whether there are likely to be any beneficial or adverse changes to landscape fabric based on the following two definitions:

- Beneficial effects on landscape fabric - could occur where important/mature/diverse/distinctive components, which had previously been lost or degraded as the result of agricultural operations or other development, would be added, reinstated or improved.
- Adverse effects on landscape fabric - could occur where existing important/ mature/ diverse/ distinctive components would be permanently lost (or long term temporarily lost) and the effects cannot be adequately mitigated.

Construction Phase

90. There would be no adverse effects on landscape fabric during the construction phase as there would be no loss of important, mature, diverse or distinctive landscape components. The Site would be accessed from an existing access point on Centenary Way, thus accommodating access to the Proposed Development without any loss of existing vegetation.

91. As the Site on which the Proposed Development would be located is currently open ground, there would be no loss of ground vegetation as a result of the construction period and hardcore would be placed across the footprint of the Site. Therefore, there would not be any adverse or beneficial effects on landscape fabric as a result of the construction phase.

Operational Phase

92. Once the construction phase has been completed, biodiversity enhancements would be implemented. These are detailed within the Ecological Impact Assessment and broadly encompass grassland within parts of the Site boundary outside of the BESS development. As such, these are improvements to the fabric of the local landscape, which is broadly open ground across the Site itself and so would result in a beneficial effect on landscape fabric lasting throughout the operational phase of the Proposed Development.

Decommissioning Phase

93. There would be minimal disturbance of landscape features during this phase as below ground structures (eg cables) would be left *in situ* and there would be reinstatement of the ground over all ground disturbed by the works. Therefore, there would be a beneficial effect on landscape fabric during the decommissioning phase relative to the operational phase.

6.2 Effects on Landscape Character

Prediction Methodology

94. Landscape character is composed of physical, biological and social components, combined with aesthetic and perceptual factors. This assessment of effects on landscape character considers the existing landscape character of the Site and study area by using the information collected during fieldwork and within the local landscape character assessments for the area. It considers the predicted effects of the development, and assesses the area within which there is likely to be a change to landscape character.

95. Changes to landscape character depend on the sensitivity (susceptibility and value) of the landscape resource and the scale or magnitude of landscape effects, as indicated by fieldwork and the viewpoint analysis. Therefore, fieldwork observations are examined together with the findings of the viewpoint analysis so as to determine the degree and extent of likely effects of the Proposed Development on landscape character within the various landscape character units in the study area.

96. Landscape units are often relatively large geographical areas and the screening effects of topography and vegetation will vary across each unit, so that the predicted extent of effects on landscape character will almost always be intermittent. However, with increasing distance from the proposed Site, the Proposed Development will generally have a decreasing effect on landscape character.

Effects on Character of the Site Landscape

97. There would be some short-term effects on the character of the Site as a result of the construction phase. Overall, the construction phase would be short-term, with the various activities lasting for only small parts of the overall timescale. The presence of construction machinery and activities would be transient (temporary, short-term and reversible) and ground and vegetation disturbance would be extremely limited.

98. The main effects on the landscape character of the Site would occur during the operational phase as a result of the presence of the BESS development. These parts of the Proposed Development would be located within the Settled Fens LCT.

99. The elements of the Proposed Development most likely to be visible across the surrounding area during the initial stages of the operational phase would be the battery storage units, DNO substation, auxiliary and earth transformers, control room, PCS/ MVS, BESS switch room, LV substation, spare parts container, welfare facilities, harmonic filter, water tank, perimeter fencing with CCTV (including acoustic fencing), access track and access gates. These elements would become a key characteristic of the Site landscape and, although no existing key characteristics would be lost or changed, they would contrast with the existing character such that these elements of the Proposed Development would result in an adverse effect on the character of the Site landscape.

100. The decommissioning phase would be short-term, ground disturbance would be limited in extent and there would be the removal of the built form and the reinstatement of the ground on completion of the works, which should return much of the Site to its current character. Therefore, the decommissioning phase would result in a beneficial effect on the landscape character of the Site relative to the operational phase.

101. The aspects of the Proposed Development that are likely to give rise to effects on landscape character (and visual amenity) during the operational phase are the battery storage units, DNO substation, auxiliary and earth transformers, control room, PCS/ MVS, BESS switch room, LV substation, spare parts container, welfare facilities, harmonic filter, water tank, perimeter fencing with CCTV (including acoustic fencing), access track and access gates and the effects of the presence of these features on the character of the wider landscape are considered below.

Effects on Character of Wider Landscape

102. There are two LCTs located within the 2.0km radius study area, although as discussed earlier within the appraisal, these two LCTs broadly have the same key characteristics, but are located within different local authority areas and are described within two different published landscape character assessments. Nevertheless they describe broadly the same landscape character and so have been discussed together below.

Settled Fens/ The Fens – Settled Inland Marshes

103. The key characteristics of these two LCTs are set out below paragraph 33 above, and a more detailed description of each LCT is provided in the extracts in **Appendix LV1**. The LCTs are described within the character assessments (extracts) as comprising *'predominantly flat topography, dissected by main roads, rivers, drainage channels and drainage ditches often on raised banks (1-3m). Primarily nucleated settlements with associated mature trees. Church spires and towers often rise above the mature vegetation to provide prominent landmark features. Medium to large fields with intensive market garden crops. Locally strong hedgerow elements. Views are restricted or foreshortened by shelterbelts and woodland or mature hedgerows. This contributes to a sense of enclosure with a more open feel between settlements. The main visual detractors are the 440kV and 132kV overhead lines on towers, electricity sub stations and power stations and urban fringe visual clutter' (Settled Fens LCT).*

104. Key characteristics are also set out below paragraph 33. This is a landscape that derives its character primarily from its key characteristics and internal features rather than views out of the LCT, which are generally limited. The overall evaluation of the sensitivity of this LCT to the Proposed Development has been identified as **low**. The LCT is considered to be of local value and to have a slight susceptibility to the location and type of development proposed, largely due to the position of the Site adjacent to existing large scale development and the local character of nearby development.

105. Within the Viewpoint Analysis each of the four viewpoints are located within this LCT at distances ranging between 0.7km and 1.4km from the Proposed Development. Each viewpoint illustrates the current influence of existing development on the character within the LCT, derived from the power station, solar farm, wind farm and pylons that are all located in close proximity to the proposal Site. Given the position of the Proposed Development within the centre of the operational Sutton Bridge Solar Development, the Proposed Development would always be seen in the context of development and within a part of the LCT

currently characterised by development. The design and style of the surrounding solar farm with transformers and other infrastructure located within the solar panel layout means that not only would visibility of the Proposed Development be limited by this existing surrounding development, but due to its central location it would be viewed as part of the solar farm around it, with similar colours, height of built form etc.

106. As the viewpoints indicate, the influence of the Proposed Development would be very limited across parts of the LCT; the extent of the development that would be visible would be extremely limited and it would not be viewed as a separate development. In addition, the mitigation planting associated with the solar farm along each of its outer boundaries will gradually screen the solar farm over time which will, in turn, screen any influence of the Proposed Development on local landscape character. This has been indicated by the viewpoints, with two suggesting no potential visibility of the Proposed Development at all (VPs A and D at distances of 0.7km and 1.4km from the Proposed Development) and two suggesting a very limited degree of influence initially, reducing to no effect on landscape character by Year 10 once the solar farm mitigation planting has established and grown (VPs B and C at distances of 0.8km and 1.1km from the Proposed Development). The comprehensive nature of the mitigation planting associated with the existing solar farm means that no additional mitigation planting is necessary as part of the Proposed Development.

107. Fieldwork observations and the viewpoint analysis have suggested that these limited changes to landscape character would occur predominantly within approx. 1.0km of the Proposed Development, although this would not be recurrent, and would be limited by localised vegetation and built form which would screen views of the Proposed Development. Any changes to landscape character within this area are expected – at worst – to result in an imperceptible adverse effect on the character of this LCT initially, reducing down to no effect once mitigation measures associated with the solar farm establish. These effects would be adverse, direct, long-term, temporary and reversible once the Proposed Development is decommissioned.

7.0 VISUAL APPRAISAL

Prediction Methodology

108. Visual amenity arises from a visual receptor's experience of the visual world around them and the value they place on a particular view or views. This appraisal draws on the predicted effects of the Proposed Development, the viewpoint analysis and fieldwork observations, and discusses the predicted effects on the visual amenity of receptors at a range of visual receptor locations within the study area. Within this study area these include settlements, individual residential properties, long distance recreational routes, the local public rights of way network and public highways.

109. Effects on visual amenity as a result of a proposed development can be perceived as beneficial, adverse or neutral and this depends largely on the perceptions and opinions of the individual receptors and, to a certain extent, on the type of development proposed. In order to take a worst case approach, any effects set out below should be considered as adverse.

7.1 Settlements

110. The southeast edge of Sutton Bridge and the hamlet of Walpole Marsh are the only settlements within the study area. Fieldwork found that the levels of mature vegetation associated with the A17 on the southeastern edge of Sutton Bridge and the industrial units on the edge of the settlement as well intervening in the landscape (Sutton Bridge Power Station), would all combine to screen any potential views of the Proposed Development from this settlement.

111. However, Railway Lane South is a road of houses located just beyond the southern edge of the settlement with some more open views to the surrounding landscape, although fieldwork has indicated that the built form of Sutton Bridge Power Station would intervene and block any potential views of the Proposed Development from these properties.

112. Walpole Marsh is a linear settlement set out along several local roads to the south of the Proposed Development, located approx. 1.2km from the Proposed Development at its closest point. Within the Viewpoint Analysis, Viewpoint D is located on the western edge of the settlement at a distance of 1.4km from the Proposed Development and indicates that the operational solar farm and intervening mature line of trees would entirely screen the Proposed Development from view, with no effects on the visual amenity of residents near to the viewpoint. Fieldwork has also indicated that residents on the northern edge of the settlement (near the junction of King John Bank and Gunthorpe Road) broadly have properties orientated east to west and mature vegetation along northern property boundaries that would be expected to screen the Proposed Development from view. As a result, no effects on the visual amenity of residents within this settlement are expected.

7.2 Individual Residential Properties

113. There are a limited number of residents within farmsteads and individual properties local to the Proposed Development who may gain near and open views of the Proposed Development.

114. The nearest residential properties to the Proposed Development are Gibbons Farm (approx. 800m west of the Proposed Development), a series of individual properties along King John Bank (ranging between approx. 700m and 1.4km southeast of the Proposed Development), a series of properties along Chalk Lane (approx. 1.0km north of the Proposed Development) and properties on Gunthorpe Road (approx. 1.4km – 1.6km south of the Proposed Development).

115. Gibbons Farm appears to encompass two single storey properties located approx. 800m west of the Proposed Development and approx. 150m west of the operational solar farm. A line of mature trees is located approx. 600m northeast of these two properties which is located immediately north of the proposed BESS compound and would screen some parts of the Proposed Development from these properties. Nevertheless, very limited parts of the Proposed Development (mainly upper sections of some of the battery units and the upper part of the water tank) may be discernible above the intervening solar panels, where (at worst) a negligible magnitude of change and a moderate/ minor effect on the visual amenity of these high sensitivity residential receptors would occur. These effects would be adverse, long term and reversible once the development is decommissioned.

116. A series of residential properties are located along King John Bank to the east of the Proposed Development, with a number of properties having mature vegetation associated with them, often in the form of shelterbelts or dense hedgerows. These would limit views towards the Proposed Development in some cases. The properties are located at distances of between approx. 700m and 1.4km from the Proposed Development and Viewpoint B illustrates one of the closest views towards the Proposed Development at 0.8km away where very limited parts of the Proposed Development (mainly upper sections of some of the battery units and the upper part of the water tank) may be discernible above the intervening solar panels, and (at worst) a negligible magnitude of change and a moderate/ minor effect on the visual amenity of these high sensitivity residential receptors would occur initially. These effects would be adverse. However, mitigation planting has been included with the solar farm construction along its eastern boundary and over time this will grow and mature in the form of hedgerows and hedgerow trees to screen the solar farm. A by product of this screening is that the Proposed Development would also eventually be screened so that by Year 10 post construction no effects on the visual amenity of these residents would occur. It should be noted that the visibility of the Proposed Development suggested by VPB would not be the case for all properties along King John Bank and that many would gain no view of the Proposed Development.

117. Chalk Lane is located approx. 1.0km to the north of the Proposed Development. Several of these properties are located on a section of Chalk Lane close to the old Sutton Bridge Crop Research unit where this nearby built form will entirely screen views south towards the Proposed Development. However, some properties are located more centrally on the road at a distance of over 1.1km from the proposed BESS compound where intervening vegetation along Centenary Way and also the mature tree line immediately north of the

proposed BESS compound is expected to screen the Proposed Development for these residential receptors, with no effects on their visual amenity expected.

118. Viewpoint D illustrates the type of view available to the north from Gunthorpe Road at a distance of 1.4km from the Proposed Development. A few residential properties are located alongside this road and would have broadly similar views, with the intervening mature tree belt screening any potential visibility of the Proposed Development and no effects on the visual amenity of residents expected.

119. As a result, fieldwork has indicated that most individual properties in the study area are expected to have no view of the Proposed Development at all due to the screening effects of the operational solar farm combined with mature vegetation. In most cases, residential properties will be surrounded or located in close proximity to other associated buildings such as farm buildings, barns, garages and outbuildings which add further screening elements to views.

7.3 Long Distance Recreational Routes

120. The Nene Way is a long distance route which passes through the west of the study area alongside the Nene Outfall Cut at a distance of approx. 800m from the Proposed Development. However, in a similar way to Viewpoint A, which is located on the opposite bank of the Nene Outfall Cut, the Proposed Development would be screened from view by the intervening operational solar development combined with the mature tree line located immediately north of the proposed BESS compound and so no effects on the visual amenity of users of the Nene Way within the study area are expected.

7.4 Local Public Rights of Way

121. The nearest public right of way (PRoW) to the Site is Bridleway SuBr/6/3 which follows the route of the local road west of the Site and immediately east of the Nene Outfall Cut, and is located approx. 700m from the Proposed Development at its closest point. This is represented by Viewpoint A, also at a distance of 700m from the Proposed Development where the intervening solar farm and mature tree line immediately north of the proposed BESS compound are expected to entirely screen the Proposed Development from view, with no effects on users of this PRoW.

122. A footpath (SuBr/2/1) is located west of Nene Outfall Cut near Peterspoint Farm at a distance of approx. 1.2km northeast of the Proposed Development at its closest point. Fieldwork has indicated that the intervening mass of Sutton Bridge Power Station would entirely screen the Proposed Development from view from this footpath, with no effects on users of this PRoW.

123. A further very short section of footpath (SuBr/10/1) is located north of the A17 at a distance of approx.1.2km northwest of the Proposed Development. Given the levels of mature vegetation associated with the A17 at this point, even in winter months it is expected that the Proposed Development would be entirely screened from view.

7.5 Public Highways

124. The A17 and a number of minor roads service the study area. Each of the four viewpoints illustrates a view towards the Proposed Development from the local road network at distances ranging between 700m and 1.4km from the Proposed Development. These viewpoints indicate that the local road network within the study area is often open to the surrounding landscape which is characteristic of local roads in the study area. However, they also recurrently illustrate that the operational solar farm would often be at least partially visible and that this would regularly screen large parts of the Proposed Development from view, sometimes entirely screen the Proposed Development when combined with screening from intervening mature vegetation. The viewpoints also illustrate that the mitigation planting associated with the operational solar farm will, over time, entirely screen the solar farm from view and coincidentally would also screen the entirety of the Proposed Development from view.

125. Therefore, whilst very occasional glimpsed views of the Proposed Development may initially be available from a few local roads, as illustrated by VPs B and C, these views would not be consistently available and would be screened by intervening vegetation over time. It is also worthwhile noting that these views of the Proposed Development would be extremely limited, resulting in a negligible magnitude of change and a minor/ negligible effect on motorists. These effects would be adverse, but as already mentioned, they would gradually be fully screened by mitigation planting associated with the solar farm.

126. The A17 is located within the north of the study area at a distance of approx. 1.2km from the Proposed Development at its closest point. Fieldwork has indicated that this route is characteristically bordered by mature vegetation within the study area, with only one or two sections with less robust roadside vegetation. Given the speed of travel along this route and the consistent distance of the route from the Proposed Development it is expected that the Proposed Development would not be readily discernible for the short duration that roadside vegetation does not screen the view out, with the result that no effects on the visual amenity of these road users is expected.

8.0 CONCLUSIONS

127. This appraisal has examined the likely effects of the Proposed Development on the landscape and visual amenity of the Site and surrounding area.

128. The effects of this Proposed Development would be limited to:

- The character of the landscape of the Site and surrounding area up to approximately 1.0km from the Site. This includes only limited parts of the Settled Fens and the Fens – Settled Inland Marshes LCTs. The Proposed Development would only be intermittently and partially visible within limited parts of these LCTs where very limited parts of the Proposed Development would be visible, even in winter months, and seen consistently in conjunction with the surrounding Sutton Bridge Solar Development as well as other nearby industry and development. This limited visibility of the Proposed Development would not alter any of the key characteristics of these LCTs and would result in very limited changes to landscape character, especially given the developed context of this part of the Settled Fens LCT.
- The visual amenity of a limited number of residents in properties in the surrounding landscape. This would predominantly be limited to residents within the two single storey properties at Gibbons Farm to the west of the Proposed Development. These views would be extremely limited and seen in the context of the foreground solar farm, and are expected to result in a moderate/ minor adverse effect on the visual amenity of residents.
- The visual amenity of motorists on a few short sections of the public highway network in the vicinity of the Site. These would generally be fleeting views of very limited parts of the Proposed Development visible in the context of the operational solar farm and – at worst – would be expected to result in minor/ negligible effects.

129. There would not be any effects on landscape fabric, landscape designations, or the visual amenity of most residents, walkers, equestrians and cyclists on long distance recreational routes or local public rights of way, or motorists on the majority of roads within the study area.

130. On the whole, the Proposed Development would predominantly be entirely screened from the majority of the 2.0km radius study area. The Site lies entirely within the Sutton Bridge Solar Development which was consented in 2021. Sutton Bridge Solar Development included a range of planting proposals which provide screening benefits for the Proposed Development, reducing visibility from several potential receptors. Visibility of the Proposed Development would be limited by the surrounding operational solar farm and areas of mature vegetation. As a result, any effects on landscape character and visual amenity would be extremely contained.

9.0 REFERENCES

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