One Earth Solar Farm

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Appendix 11.3: Landscape Baseline and Effects

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Contents

A.11 Landscape Baseline and Effects

A.11.1 Natural England, National Character Area 48: Trent and Belvoir Vales, 2014

Baseline

A.11.1.1. National Character Area (NCA) 48: Trent and Belvoir Vales (NCA 48) is centred on the River Trent, and is defined by the Lincolnshire Ridge and the Sherwood Forest to the east and west respectively. NCA 48 is generally characterised by predominantly arable farmland overlaying a gently undulating and low-lying landform with relatively little woodland cover and a dispersed settlement pattern. NCA 48 covers the Order Limits and the study area.

Key characteristics

A.11.1.2. The published profile for NCA 48 sets out the following key characteristics:

- *"A gently undulating and low-lying landform in the main, with low ridges dividing shallow, broad river valleys, vales and flood plains. The mature, powerful River Trent flows north through the full length of the area, meandering across its broad flood plain and continuing to influence the physical and human geography of the area as it has done for thousands of years.*
- *The bedrock geology of Triassic and Jurassic mudstones has given rise to fertile clayey soils across much of the area, while extensive deposits of alluvium and sand and gravel have given rise to a wider variety of soils, especially in the flood plains and over much of the eastern part of the NCA.*
- *Agriculture is the dominant land use, with most farmland being used for growing cereals, oilseeds and other arable crops. While much pasture has been converted to arable use over the years, grazing is still significant in places, such as along the Trent and around settlements.*
- *A regular pattern of medium to large fields enclosed by hawthorn hedgerows, and ditches in low-lying areas, dominates the landscape.*
- *Very little semi-natural habitat remains across the area; however, areas of flood plain grazing marsh are still found in places along the Trent.*
- *Extraction of sand and gravel deposits continues within the Trent flood plain and the area to the west of Lincoln. Many former sites of extraction have been flooded, introducing new waterbodies and new wetland habitats to the landscape.*

- *Extensive use of red bricks and pantiles in the 19th century has contributed to the consistent character of traditional architecture within villages and farmsteads across the area. Stone hewn from harder courses within the mudstones, along with stone from neighbouring areas, also feature as building materials, especially in the churches.*
- *A predominantly rural and sparsely settled area with small villages and dispersed farms linked by quiet lanes, contrasting with the busy market towns of Newark and Grantham, the cities of Nottingham and Lincoln, the major roads connecting them and the cross-country dual carriageways of the A1 and A46.*
- *Immense coal-fired power stations in the north exert a visual influence over a wide area, not just because of their structures but also the plumes that rise from them and the pylons and power lines that are linked to them. The same applies to the gas-fired power station and sugar beet factory near Newark, albeit on a slightly smaller scale."*

A.11.1.3. The NCA profile also provides four Statement of Environmental Opportunities for the Trent and Belvoir Vales, and example management guidance on how these could be achieved. The Environmental Opportunities are given as:

- *"SEO 1: Maximise the use of sustainable agricultural practices that protect and enhance ecological networks in order to help safeguard the long-term viability of farming in the area while benefiting biodiversity, landscape character, carbon storage as well as water quality, availability and flow.*
- *SEO 2: Enhance the woodland and hedgerow network through the planting of small woodlands, tree belts, hedgerow trees and new hedgerows to benefit landscape character, habitat connectivity and a range of ecosystem services, including the regulation of soil erosion, water quality and flow.*
- *SEO 3: Enhance the rivers and their flood plains for their ecological, historical and recreational importance, their contribution to biodiversity, soil quality, water availability and in regulating water flow and the important role they play in underpinning the character of the area.*
- *SEO 4: Maintain and enhance the character of this gently undulating, rural landscape. Promote and carefully manage the many distinctive elements that contribute to the overarching sense of place and history of the Trent and Belvoir Vales."*

A.11.1.4. The 'overall trend' of Super Landscape Objectives is stated as 'mixed change', which includes a declining tranquillity due to the potential impacts of development and associated infrastructure.

A.11.1.5. Whilst the above guidelines are relevant to the iterative design process, it is considered that undue changes to its baseline are very unlikely as the NCA

covers a very large geographic area in relation to the Order Limits. NCA 48 is therefore scoped out of the assessment of landscape effects.

A.11.2 Regional Landscape Character Type 3a: Floodplain Valleys

Baseline

A.11.2.1. With reference to **Figure 7b,** Regional Landscape Character Type 3a: Floodplain Valleys (LCT 3a) is defined by broad, flat belts of alluvium and gravel terrace deposits flanking river channels throughout the East Midlands.

A.11.2.2. The LCT bisects the study area from north to south and covers a large part of the central area of the Order Limits and study area.

Key characteristics

A.11.2.3. As set out in the East Midlands Landscape Character Assessment, the key characteristics of LCT 3a: Floodplain Valleys are as follows:

- *"Deep alluvium and gravel deposits mask underlying bedrock geology to create wide, flat alluvial floodplains surrounded by rising landform of adjacent Landscape Character Types;*
- *River channels, often along managed courses, bordered by riparian habitat;*
- *Predominance of pastoral land use, with cereal growing increasing in some areas. 'Warping' areas subject to more intensive cereal growing;*
- *Limited woodland cover; however, steep riverside bluffs and areas close to settlement or on former gravel extraction sites notable for a higher level of woodland cover;*
- *Regular pattern of medium to large fields defined by hedgerows or post and wire fencing, breaking down and becoming open in some areas;*
- *Hedgerow and riverside trees important component of landscape. Alder, Willow and Poplar are typical riverside trees;*
- *Limited settlement and development in rural areas;*
- *Sewage Treatment Works and power stations common close to larger settlements that fringe the floodplains;*
- *Roads and communication routes often define the outer edges of the floodplain; and*
- *Restoration of sand and gravel extraction sites to open water creates new character across many areas."*

Future baseline

A.11.2.4. Urban expansion, agricultural intensification, mineral extraction and increased flooding are all highlighted as forces for change within LCT 3a. The associated management guidance is primarily about protecting the open character of the landscape by ensuring the type and location of new woodland and tree planting is appropriate.

A.11.2.5. Power stations are also noted as being visually prominent in the flat and open landscape so with the decommissioning and gradual demolition of West Burton power station amongst others, it is likely that the associated chimney stacks and flues will have a reduced influence on the perceptual qualities of the Floodplain Valleys character in the future.

A.11.2.6. In the absence of the Proposed Development, it is assumed that the landscape of the LCT would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the LCT overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.2.7. LCT 3a Floodplain Valleys is not covered by any statutory landscape designations (e.g. National Landscapes).

A.11.2.8. LCT 3a provides an important geodiversity resource with many working sand and gravel quarries in commission. It also contains vast geomorphological features associated with the rivers, including meanders, ox-bow lakes, abandoned channels and terrace features. Despite low woodland cover in the Floodplain Valleys, wet woodlands and, to a lesser extent, osier beds are important remnants of semi-natural habitats that were once much more prevalent.

A.11.2.9. There has long been human interest in the Floodplain Valleys as a means of transportation. Hence many archaeological remains can be found buried in the soils. The majority of the riverside settlements also have ancient origins and often a history of being established to control river crossings which can be appreciated by transport relics such as bridges, canal locks and dismantled railway lines. There is also evidence of historic field patterns dating to parliamentary enclosure, and historic farming practices such as ridge and furrow.

A.11.2.10. The Floodplain Valleys are influenced by sand and gravel extraction with both active and restored mineral sites. Former mineral extraction sites are noted for their recreation potential and nature conservation interest, and several sites are designated as Sites of Special Scientific Interest.

A.11.2.11. The aesthetic and perceptual interest of the Floodplain Valleys is derived from its contrasting land cover and uses. The general absence of built development, enclosed views and the intimate character created by the typical pastoral floodplain landscape are all noted as distinctive qualities.

A.11.2.12. Overall, the value attached to the landscape of LCT 3a Floodplain Valleys is High.

Susceptibility to change

A.11.2.13. The following features and characteristics of LCT 3a are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *River channels bordered by riparian habitat.*
- *Limited development in rural areas.*
- *Limited woodland cover and sense of openness.*
- *The prevailing pastoral land use defined by low hedgerows or post and wire fencing*

A.11.2.14. The features and characteristics of the LCT that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Wide, flat floodplain landform.*
- *Regular pattern of medium to large scale fields.*
- *Major roads and energy infrastructure around the floodplain fringes.*

A.11.2.15. Overall, the susceptibility to change of LCT 3a Floodplain Valleys is Low.

Sensitivity

A.11.2.16. The landscape of LCT 3a Floodplain Valleys contains many indicators of landscape value but is not covered by any landscape designations. The overall character of LCT 3a also offer some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, LCT 3a Floodplain Valleys has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.2.17. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the LCT. The construction

works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.2.18. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the construction of the substation and associated cable corridor would be perceived around the fringes of Floodplain Valleys which together with the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. Trenchless crossing works associated with the river crossing involving send and receive pits, plus drilling rigs, would also be located within the Floodplain Valleys.

A.11.2.19. Whilst these changes would be of a far greater scale than general farming activity, they would however be located and perceived over a very small geographic extent within the LCT. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a Very Low magnitude of change on LCT3a Floodplain Valleys, due to the barely perceptible alteration to the landscape features and character.

A.11.2.20. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the construction phase.

Operation year 1 (winter)

A.11.2.21. The Proposed Development would introduce landscape and ecology land uses across fields to the north and south-west of Fledborough. Beyond these land uses there would be solar panels and ancillary structures in the south-west part of the LCT.

A.11.2.22. There would similarly be landscape and ecology land uses to the north and north-west of North Clifton, extending to the west of the River Trent. Solar panels would be located Solar panels would be located across the western part of the LCT but offset from Ragnall by proposed landscape and ecology areas. Solar panels and ancillary structures would be located between North Clifton and the existing reservoir. There would also be landscape and ecology areas to the south-east of North Clifton within the LCT.

A.11.2.23. The remainder of the LCT landscape features and land uses within the study area would remain as existing, due to being beyond the Order Limits.

A.11.2.24. The above changes would have direct effects on the LCT. Land within the Order Limits within the LCT would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the LCT would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, whilst newly planted trees, hedgerows and grassland would yet to mature, they would still increase the vegetation cover in comparison to the existing fields.

A.11.2.25. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of pasture and arable farmland, partial loss of hedgerows and riverside trees and a perceived increase in human influence in comparison to the limited settlement and development in rural areas. The network of river channels and limited woodland cover would however be retained within the Order Limits, along with the pattern of landform and floodplains. The Proposed Development would respond positively to the stated guidance of the LCT by strengthening the character of river channels and providing biodiversity improvements within the Order Limits via the extent of landscape and ecology land uses stated above.

A.11.2.26. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the LCT. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on LCT3a Floodplain Valleys due to the barely perceptible alteration to its character.

A.11.2.27. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, at year 1 of operation.

Operation year 15 (winter and summer)

A.11.2.28. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1

assessment. The greater density of the new planting would reduce the area over which changes to the character would be perceived beyond the Order Limits, whilst the physical change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.2.29. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on LCT 3a Floodplain Valleys due to the change in land use. However, professional judgement considers that given the balance between the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance), there would be a neutral effect on the character.

A.11.2.30. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in a Negligible neutral effect, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.2.31. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the LCT would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.2.32. These changes would be perceived over a very small geographic extent within the LCT. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore, the decommissioning of the Proposed Development would result in a Very Low magnitude of change on LCT3a Floodplain Valleys.

A.11.2.33. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.2.34. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on LCT3a Floodplain Valleys, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.2.35. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on LCT3a Floodplain Valleys, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.3 Regional Landscape Character Type 4a: Unwooded Vales

Baseline

A.11.3.1. With reference to **Figure 7b**, Regional LCT 4a: Unwooded Vales (LCT4a) is located within the central and northern part of East Midlands and characterised by a mix of cereal crops and cattle-grazed fields defined by low hedgerows.

A.11.3.2. The LCT covers of the eastern and western parts of the study area and Order Limits, bordering LCT 3a: Floodplain Valleys.

Key characteristics

A.11.3.3. As set out in the East Midlands Landscape Character Assessment, the key characteristics of LCT4a Unwooded Vales are:

- *Extensive, low lying rural landscape underlain by Triassic and Jurassic mudstones and clays and widespread superficial deposits;*
- *Expansive long distance and panoramic views from higher ground at the margin of the vales gives a sense of visual containment;*
- *Low hills and ridges gain visual prominence in an otherwise gently undulating landscape;*
- *Complex drainage patterns of watercourses that flow within shallow undulations often flanked by pasture and riparian habitats;*
- *Limited woodland cover; shelter belts and hedgerow trees gain greater visual significance and habitat value as a result;*
- *Productive arable and pastoral farmland, with evidence of increasing reversion to arable cropping in recent times;*
- *Regular pattern of medium sized fields enclosed by low and generally well maintained hedgerows and ditches in low lying areas; large modern fieldscapes evident in areas of arable reversion; and*
- *Sparsely settled with small villages and dispersed farms linked by quiet rural lanes.*

Future baseline

A.11.3.4. New development around the urban fringe and disused airfields, road widening schemes, agricultural intensification, and woodland planting are all highlighted as forces for change within LCT 4a. The associated management guidance is primarily about any new interventions in the landscape are appropriately integrated.

A.11.3.5. In the absence of the Proposed Development, it is assumed that the landscape of the LCT would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the LCT overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.3.6. LCT 4a Unwooded Vales is not covered by any statutory landscape designations.

A.11.3.7. Local variations in the underlying geology create low hills and ridges, and together with the hilltop settlements provide a sense of visual containment and contribute to the distinctiveness of the Unwooded Vales. The underlying geology has also influenced the distribution of various soil types which provides geodiversity interest and has attracted quarrying specifically for mudstone and gypsum extraction.

A.11.3.8. The complex network of rivers and stream channels are also noted as important landscape features as they connect the uplands with the main river systems. Biodiversity interest is found in the hedgerows with hedgerow trees, canals such as Rutland Water and Grantham Canal as well as sand and gravel pits at Whisby.

A.11.3.9. The Unwooded Vales contains several Roman roads, and the dispersed settlement pattern can be traced to the late Saxon period. This is most evident by the nucleated villages with a church at the convergence point of two or more roads. There is also evidence of enclosure field patterns dating to the Tudor period, and medieval farming practices such as ridge and furrow.

A.11.3.10. The Unwooded Vales are perceived as having a deeply rural and tranquil character consisting of a planned pattern of mixed farmland defined by hedgerows and drainage ditches, interspersed with nucleated villages and remote farmsteads. The lower-lying valley areas are also noted as being more visually contained and having a more intimate character.

A.11.3.11. Overall, the value attached to the landscape of LCT 4a Unwooded Vales is High.

Susceptibility to change

A.11.3.12. The following features and characteristics of LCT 4a are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Expansive long distance and panoramic views from higher ground*
- *Low hills and ridges in a gently undulating landscape*
- *Complex drainage systems of watercourses flanked by pasture and riparian habitats*
- *Sparsely settled with small villages and dispersed farmsteads*
- *Fields defined by low hedgerows and ditches*

A.11.3.13. The features and characteristics of the LCT that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Limited woodland cover*
- *Mixed farmland with increasingly more arable cropping*
- *Regular pattern of medium sized fields*
- *Extensive, low-lying landscape*

A.11.3.14. Overall, the susceptibility to change of LCT 4a Unwooded Vales is Medium.

Sensitivity

A.11.3.15. The landscape of LCT 4a Unwooded Vales contains many indicators of landscape value but is not covered by any landscape designations. The overall character of LCT 4a also offer few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, LCT 4a Unwooded Vales has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.3.16. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.3.17. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and primary and secondary construction compounds, and the construction of the substation and associated cable corridor would be located within the Unwooded Vales which together with the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits including mobile cranes and other related plant and machinery.

A.11.3.18. Whilst these changes would be of a far greater scale than general farming activity, they would however be located and perceived over a very small geographic extent within the LCT. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a Very Low magnitude of change on LCT4a Unwooded Vales, due to the barely perceptible alteration to the landscape features and character.

A.11.3.19. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.3.20. The Proposed Development would introduce solar panels and ancillary structures within a very localised part of the LCT, along with areas of landscape and ecology land uses. This would have direct effects on the LCT, across land to the north-east and east of North Clifton, west of Ragnall and to the north and south of the dismantled railway line, in the south-west part of the Order Limits.

A.11.3.21. The substation and BESS would also be located within the Unwooded Vales, which would introduce taller equipment than the solar panels and therefore a localised increase in the perception of energy infrastructure.

A.11.3.22. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required.

A.11.3.23. Land within the Order Limits within the LCT would therefore change from predominantly agricultural to an operational solar farm with associated lighting and security features, within an otherwise open landscape. However, the existing trees and hedgerows in and around the Order Limits within the LCT would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be

fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.3.24. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of pasture and arable farmland, partial loss of hedgerows and shelter belts and a perceived increase in human influence within a sparsely settled landscape. The modern field pattern, complex network of drainage channels and limited woodland cover would however be retained within the Order Limits due to the proposed panels and equipment being located within the pattern of fields and offset from retained field boundaries. The Proposed Development would respond positively to the stated guidance of the LCT by restoring and creating new hedgerows as well as permanent pasture within the Order Limits, albeit low in height and not fully established at year 1.

A.11.3.25. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the LCT. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on LCT4a Unwooded Vales due to the barely perceptible alteration to its character.

A.11.3.26. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, at year 1 of operation.

Operation year 15 (winter and summer)

A.11.3.27. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.3.28. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on LCT4a Unwooded Vales due to the change in land use. However, professional judgement considers that given

the balance between the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance), there would be a neutral effect on the character.

A.11.3.29. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible neutral effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.3.30. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures, plus the substation and BESS. The effects on the LCT would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.3.31. These changes would be perceived over a very small geographic extent within the LCT. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore, the decommissioning of the Proposed Development would result in a Very Low magnitude of change on LCT4a Unwooded Vales.

A.11.3.32. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.3.33. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on LCT4a Unwooded Vales, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.3.34. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on LCT4a Unwooded Vales, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.4 Regional Character Area: East Nottinghamshire Sandlands

Baseline

A.11.4.1. With reference to **Figure 7**, the Greater Nottingham Landscape Character Assessment area East Nottinghamshire Sandlands Landscape Character Area (LCA) is situated within the Trent valley, north of Newark on Trent, and along the eastern fringe of Nottinghamshire. The landscape has a simple agricultural character with few dramatic features or modern development. East Nottinghamshire Sandlands covers the eastern part of the study area most of the eastern part of the Order Limits, to the east of the River Trent Floodplain and the Trent Washlands LCA.

Key characteristics

A.11.4.2. The key characteristics of the East Nottinghamshire Sandlands are:

- *A broad, low-lying vale that extends from the Trent Valley to the Jurassic escarpment.*
- *A network of small streams, drains and dykes draining into the Witham and Trent to the east and west respectively.*
- *Predominantly arable farming with smaller areas of grassland and grass heaths managed for rough grazing and nature conservation.*
- *Variable woodland cover with numerous broadleaved woodland connected by field boundaries, and other smaller, more dispersed plantation woodlands.*
- *Scattered pattern of small, rural villages where red brick is common.*
- *Power stations and overhead cables form visually intrusive features in the landscape.*

Future baseline

A.11.4.3. The forces of change within the East Nottinghamshire Sandlands include pressure for development around the urban areas, as well as renewable energy infrastructure and flooding defence works in the open countryside.

A.11.4.4. In the absence of the Proposed Development, it is assumed that the landscape of East Nottinghamshire Sandlands would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the East Nottinghamshire Sandlands overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.4.5. The East Nottinghamshire Sandlands is not covered by any statutory landscape designations.

A.11.4.6. The landscape has a history of agricultural production and became renowned for the production of carrots in the early part of the twentieth century. Where it survives, the late enclosure field pattern provides evidence of the evolution of the landscape, and together with the dispersed pattern of small red brick villages provide some historic interest.

A.11.4.7. The area has long been intensively managed for arable farmland which has resulted in many historic landscape features being removed. Ancient replanted woodland at Kelwick Wood and small parklands at Coddington, Barnby Manor and Thorney are therefore valued for their rarity in the agricultural landscape. On the blown sands, grass heaths established as hummocky dunes and in an otherwise intensively arable fieldscape provide some biodiversity interest.

A.11.4.8. Overall, the value attached to the landscape of East Nottinghamshire Sandlands is Medium.

Susceptibility to change

A.11.4.9. The following features and characteristics of East Nottinghamshire Sandlands are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *A network of small streams, drains and dykes.*
- *Variable woodland cover.*
- *Smaller areas of grassland and grass heaths.*
- *Scattered pattern of small, rural villages*

A.11.4.10. The features and characteristics of the East Nottinghamshire Sandlands that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility include:

- *Broad, low-lying vale.*
- *Predominantly arable farmland.*
- *Visually intrusive features such as power stations and overhead cables.*

A.11.4.11. Overall, the susceptibility to change of East Nottinghamshire Sandlands is Medium.

Sensitivity

A.11.4.12. The landscape of East Nottinghamshire Sandlands contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of East Nottinghamshire Sandlands also offers few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, East Nottinghamshire Sandlands has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.4.13. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) site as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.4.14. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the establishment of construction access and temporary haul roads would result in the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the west of the East Nottinghamshire Sandlands including mobile cranes and other related plant and machinery.

A.11.4.15. Whilst these changes would be of a far greater scale than general farming activity, they would however be located and perceived over a very small geographic extent within the East Nottinghamshire Sandlands. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on East Nottinghamshire Sandlands, due to the barely perceptible alteration to the landscape features and character.

A.11.4.16. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.4.17. The Proposed Development would introduce landscape and ecology land uses to the north of North Clifton. Solar panels, ancillary structures and landscape

and ecology land uses would be located across most of the LCA (as within the Order Limits) to the east and south-east of North Clifton.

A.11.4.18. The substation and BESS would also be located within the East Nottinghamshire Sandlands, resulting in taller equipment than the solar panels and a localised increase in the influence of energy infrastructure on the landscape character.

A.11.4.19. The above changes would have direct effects on the East Nottinghamshire Sandlands, with the character changing from predominantly agricultural to an operational solar farm with associated lighting and security features. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the East Nottinghamshire Sandlands would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields. The Proposed Development would therefore result in new renewable energy equipment and structures within an otherwise open landscape.

A.11.4.20. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable farming, partial loss of field boundaries, and the perceived increase in human influences and therefore a more developed character in comparison to the existing scattered settlement pattern. The underlying pattern of landform and the network of watercourses would however be retained within the Order Limits, with the proposed landscape and ecology land uses responding positively to the key characteristics of rough grazing and nature conservation land within the LCA. These changes would occur to an LCA which includes for the key characteristics existing energy infrastructure being visually intrusive features in the landscape, but unlike the height of these existing structures, the proposed solar panels would be lower in height and therefore less evident.

A.11.4.21. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the East Nottinghamshire Sandlands. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on East Nottinghamshire Sandlands due to the barely perceptible alteration to its character.

A.11.4.22. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.4.23. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.4.24. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on East Nottinghamshire Sandlands due to the change in land use. However, professional judgement considers that given the balance between the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance), there would be a neutral effect on the character.

A.11.4.25. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible neutral effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.4.26. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the East Nottinghamshire Sandlands would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.4.27. These changes would be perceived over a very small geographic extent within the East Nottinghamshire Sandlands. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore, the decommissioning of the Proposed Development would result in a Very Low magnitude of change on the East Nottinghamshire Sandlands.

A.11.4.28. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the decommissioning phase.

Cumulative effects of construction

A.11.4.29. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on the East Nottinhamgshire Sandlands and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.4.30. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on the East Nottinghamshire Sandlands and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.5 Regional Character Area: Mid-Nottinghamshire Farmlands

Baseline

A.11.5.1. The Greater Nottingham Landscape Character Assessment area Mid-Nottinghamshire Farmlands extends from the edge of Nottingham up to the Idle Lowlands, and has a traditional rural character with a prevalence of agricultural land uses and pattern of small, nucleated villages connected by quiet lanes. With reference to **Figure 7**, LCA Mid-Nottinghamshire Farmlands covers the western part of the study area and more of the western part of the Order Limits, to the west of LCA Trent Washlands.

Key characteristics

A.11.5.2. The key characteristics of the Mid-Nottinghamshire Farmlands are:

- *A low, rolling escarpment incised by numerous streams and becks in well-defined valleys.*
- *Predominantly arable farmland with pasture concentrated along watercourses and around the settlement edges, as well as remnant orchards associated with smaller villages.*
- *Largely intact field pattern defined by species-rich hedgerows some of which are ancient and contain hedgerow trees.*
- *Small and medium deciduous woodland with a relatively high proportion of ancient semi-natural woodland typically on hilltops and rising ground.*
- *Historic settlement pattern defined by small, nucleated villages and isolated farmsteads and linked by narrow country lanes.*

- *Cottam and West Burton power stations and associated power lines form dominant and visually intrusive features in the landscape.*
- *Sense of enclosure influenced by the generally high levels of woodland cover.*

Future baseline

A.11.5.3. The forces of change within the Mid-Nottinghamshire Farmlands include pressure for development around the urban areas, as well as renewable energy infrastructure and flooding defence works in the open countryside.

A.11.5.4. In the absence of the Proposed Development, it is assumed that the landscape of the Mid-Nottinghamshire Farmlands would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the Mid-Nottinghamshire Farmlands overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.5.5. Mid-Nottinghamshire Farmlands is not covered by any landscape designations.

A.11.5.6. The landscape has long been dominated by arable farming which has resulted in a notable decrease in the variety of other land uses. Pasture and orchard land are therefore particularly valued where they survive such as around settlement edges and along watercourses.

A.11.5.7. The Mid-Nottinghamshire Farmlands exhibit a strong rural character influenced by scattered nucleated settlements that are integrated into the landscape by small scale pasture well-defined by species-rich hedgerows. The Mid Nottinghamshire Farmland also contains a high proportion of deciduous woodland which contributes to a general sense of enclosure and some of which are designated as ancient woodland.

A.11.5.8. The C12 Southwell Minster is also located within the Mid-Nottinghamshire Farmlands (outside the study area) and is set within a shallow bowl with wooded streams which provides an attractive landscape setting. Pockets of parkland is a special feature of the Mid-Nottinghamshire Farmlands and contributes to the scenic quality.

A.11.5.9. Overall, the value attached to the landscape of Mid Nottinghamshire Farmlands is Medium.

Susceptibility to change

A.11.5.10. The following features and characteristics of Mid Nottinghamshire Farmlands are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *A low, rolling escarpment with well-defined valleys.*
- *Deciduous woodland typically on hilltops and rising land.*
- *Pasture along watercourses and remnant orchards associated with settlement edges*
- *Historic settlement pattern of small villages and isolated farmsteads*

A.11.5.11. The features and characteristics of the Mid Nottinghamshire Farmlands that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Predominantly arable farmland.*
- *Largely intact field pattern defined by species-rich hedgerows with hedgerow trees.*
- *Sense of enclosure created by high levels of woodland cover.*
- *Visually intrusive features such as power stations and power lines.*

A.11.5.12. Overall, the susceptibility to change of Mid-Nottinghamshire Farmlands is Medium.

Sensitivity

A.11.5.13. The landscape of Mid-Nottinghamshire Farmlands contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of the Mid-Nottinghamshire Farmlands also offer few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Mid-Nottinghamshire Farmlands has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.5.14. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the

physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.5.15. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and primary and secondary construction compounds, and the construction of the BESS, substation, and associated cable corridor would be located within the Mid-Nottinghamshire Farmlands which together with the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the east of the Mid-Nottinghamshire Farmlands including mobile cranes and other related plant and machinery.

A.11.5.16. Whilst these changes would be of a far greater scale than general farming activity, they would however be located and perceived over a very small geographic extent within the Mid-Nottinghamshire Farmlands. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on the Mid Nottinghamshire Farmlands, due to the barely perceptible alteration to the landscape features and character.

A.11.5.17. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the construction phase

Operation year 1 (winter)

A.11.5.18. The Proposed Development would introduce solar panels and ancillary structures, as well as landscape and ecology land uses into the landscape covering most of the western part of the Order Limits, which would have direct effects on the Mid-Nottinghamshire Farmlands.

A.11.5.19. The substation and BESS would also be located within the Mid-Nottinghamshire Farmlands which would be of a taller height than the solar panels and locally increase the perception of energy infrastructure on the landscape.

A.11.5.20. Land within the Order Limits within the Mid-Nottinghamshire Farmlands would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the Mid-Nottinghamshire Farmlands would integrate the

Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.5.21. In respect of the stated key characteristics of the Mid-Nottinghamshire Farmlands, the Proposed Development would result in the localised loss of arable farmland and some pasture, and the partial loss of hedgerows and hedgerow trees within field boundaries. The prevailing field pattern would be retained along with the hilltop woodlands which would maintain the general sense of enclosure. The Proposed Development would be located in a character area which is noted by the published assessments as containing dominant and visually intrusive energy infrastructure; however, the Proposed Development would be lower in height than existing pylons with a reduced perception due to the generally high levels of woodland cover and stated enclosure across the LCA.

A.11.5.22. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the Mid-Nottinghamshire Farmlands. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on the Mid-Nottinghamshire Farmlands due to the barely perceptible alteration to its character.

A.11.5.23. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.5.24. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.5.25. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on the Mid-Nottinghamshire Farmlands due to the change in land use. However, professional judgement considers that given the balance between the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance), there would be a neutral effect on the character.

A.11.5.26. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible neutral effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.5.27. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures, plus the substation and BESS. The effects on the Mid-Nottinghamshire Farmlands would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.5.28. These changes would be perceived over a very small geographic extent within the Mid-Nottinghamshire Farmlands. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore, the decommissioning of the Proposed Development would result in a Very Low magnitude of change on the Mid-Nottinghamshire Farmlands.

A.11.5.29. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the decommissioning phase.

Cumulative effects of construction

A.11.5.30. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on the Mid-Nottinghamshire Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.5.31. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on the Mid-Nottinghamshire Farmlands and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.6 Regional Character Area: Trent Washlands

Baseline

A.11.6.1. The Greater Nottingham Landscape Character Assessment area Trent Washlands follows the broad valleys of the River Trent, and with reference to **Figure 7**, broadly covers the central part of the study area and Order Limits, along the alignment of the River Trent and its plains.

A.11.6.2. Trent Washlands is generally characterised as a linear landscape along the River Trent, consisting of flat broad valleys of alluvial and river terrace drift deposits.

Key characteristics

A.11.6.3. The key characteristics of the Trent Washlands are:

- *Flat broad valleys associated with two tributaries to the River Trent: the Tame and the Soar.*
- *Nucleated pattern of villages and isolated farmsteads, generally concentrated on sand and gravel terraces.*
- *Predominance of arable land use with large fields divided by low trimmed hedges, with occasional small scale pasture fields defined by full hedgerows.*
- *Meandering river channels.*
- *An area rich in archaeological features including deserted medieval villages and ridge and furrow.*
- *Views to power stations and overhead power lines.*
- *A large influence from quarrying, active and past workings that have since been reclaimed including some for nature conservation.*

Future baseline

A.11.6.4. Future pressures on the Trent Washlands are expected to derive from new housing, diversification of farming practices and cropping. Additionally, equestrian activities are becoming increasingly popular and are leading to the division of existing fields into smaller paddocks. The energy generation industry is expected to continue to be a dominant feature, including wind farms which have a large influence on the landscape character of the Trent Washlands.

A.11.6.5. There are currently striking views to power stations, however with their recent decommissioning and likely demolition of their cooling towers, they will have a

reduced influence on the perceptual qualities of the Trent Washlands in the future.

A.11.6.6. In the absence of the Proposed Development, it is assumed that the landscape would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the Trent Washlands overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.6.7. Trent Washlands is not covered by any statutory landscape designations.

A.11.6.8. Trent Washlands provides an important geodiversity resource with many working sand and gravel quarries in commission. It also contains a rich resource of archaeological remains and historic features such as deserted medieval villages, ridge and furrow, crop marks and Roman fort sites. The wet conditions created by the alluvium deposited by the Trent have helped preserve organic remains which are of historical interest.

A.11.6.9. The River Trent serves as a key transportation route for gravel extracted from the Trent Valley as well as being a commercial waterway downstream of Nottingham. Two canals join the Trent which provide recreational opportunities.

A.11.6.10. Villages and farmsteads generally retain their distinctive vernacular character of red brick and pantile roof construction, despite some limited modern development with a more suburban character.

A.11.6.11. Detracting features in the Trent Washlands include power stations, pylon lines, mineral extraction, busy roads and railways. The intensive management of arable farmland has led to the fragmentation of landscape structure and the loss of much permanent grassland, however less improved permanent grassland continues to be a notable feature of the region.

A.11.6.12. Overall, the value attached to the Trent Washlands is Medium.

Susceptibility to change

A.11.6.13. The following features and characteristics of Trent Washlands are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Nucleated pattern of villages and farmsteads.*
- *Fields divided by lowly-trimmed hedgerows*

- *Meandering river channels*
- *Rich archaeological features.*

A.11.6.14. The features and characteristics of the RCA Trent Washlands that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Flat broad river valleys.*
- *Intensive arable farmland in large fields*
- *Views to power stations and power lines.*
- *Active and reclaimed mineral workings.*

A.11.6.15. Overall, the susceptibility to change of Trent Washlands is Low.

Sensitivity

A.11.6.16. The landscape of LCA Trent Washlands contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of the Trent Washlands also offers some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Trent Washlands has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.6.17. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.6.18. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the activity of construction plant and machinery which would also be perceived from areas within the Trent Washlands immediately surrounding the Order Limits. Mobile cranes associated with the construction of the substation and BESS would be perceived in views out of the Trent Washlands close to the eastern LCA boundary, whilst the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. Trenchless crossing works associated with the river crossing involving send and receive

pits plus drilling rigs would also be located within the Trent Washlands which would further be perceived as activity of a greater scale than general farming.

A.11.6.19. Whilst these changes would be of a far greater scale than general farming activity, they would however be located and perceived over a very small geographic extent within the Trent Washlands. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a Very Low magnitude of change on the Trent Washlands, due to the barely perceptible alteration to the landscape features and character.

A.11.6.20. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.6.21. The Proposed Development would introduce landscape and ecology land uses across the eastern plains of the River Trent (within the Order Limits).

A.11.6.22. To the west of the River Trent, landscape and ecology land uses would similarly be located adjacent to the River.

A.11.6.23. Solar panels and ancillary structures would be located in the western part of the LCA into the landscape which would have directs effects on the Trent Washlands due to the change from a predominantly agricultural landscape to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the Trent Washlands would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.6.24. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable land use and partial loss of hedgerows defining field boundaries. The flat broad valley landform and network of river channels would however be maintained. The Proposed Development would also be located in a landscape noted by the published studies for the visual influence of energy infrastructure.

A.11.6.25. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the Trent Washlands. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on the Trent Washlands due to the barely perceptible alteration to its character.

A.11.6.26. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, at year 1 of operation.

Operation year 15 (winter and summer)

A.11.6.27. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.6.28. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on the Trent Washlands due to the change in land use. However, professional judgement considers that given the balance between the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance), there would be a neutral effect on the character.

A.11.6.29. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible neutral effects, which is not significant, during the year 15 operational phase.

Decommissioning (winter)

A.11.6.30. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the Trent Washlands would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and

would be retained, which would reduce the extent over which the changes would be perceived.

A.11.6.31. These changes would be perceived over a very small geographic extent within the Trent Washlands. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore, the decommissioning of the Proposed Development would result in a Very Low magnitude of change on the Trent Washlands.

A.11.6.32. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the decommissioning phase.

Cumulative effects of construction

A.11.6.33. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on the Trent Washlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.6.34. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on the Trent Washlands and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.7 East Nottinghamshire Sandlands Policy Zone 01: North Clifton Village Farmlands (ENS PZ 01)

Baseline

A.11.7.1. With reference to **Figure 8**, the Newark and Sherwood Landscape Character Assessment East Nottinghamshire Sandlands Policy Zone 01: North Clifton Village Farmlands comprises the villages of North Clifton and South Clifton, and the surrounding farmland either side of the A1133, between the plains of the River Trent and ENS PZ 02. ENS PZ 01 covers the central south-east part of the Order Limits and study area.

A.11.7.2. ENS PZ 01 is generally characterised by nucleated villages with historic cores surrounded by flat, intensively managed farmland defined by gappy hedgerows and post and wire fencing.

Key characteristics

A.11.7.3. As set out in the Newark and Sherwood Landscape Character Assessment, the key characteristics of the North Clifton Village Farmlands are as follows:

- *"Flat with occasional undulating landform around villages.*
- *Medium distance views to frequent shelterbelts and mixed plantations.*
- *Dominant views to the west and north of power stations and power lines.*
- *Mixture of intensive arable fields with strongly trimmed hedges and some low intensity farming with permanent improved pasture."*

Future baseline

A.11.7.4. Future pressures on the North Clifton Village Farmlands are expected to derive from further intensification of farming practices, and as a result, the management guidance for the PZ is generally about creating new landscape features such as hedgerows and returning land to pasture to improve ecological diversity.

A.11.7.5. In the absence of the Proposed Development, it is assumed that the landscape of the PZ would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the PZ overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.7.6. ENS PZ 01: North Clifton Village Farmlands is not covered by any statutory landscape designations.

A.11.7.7. There are some pockets of valuable grassland habitats associated with road verges and the Marnham to Harby dismantled railway, which are covered by SINC designations. The historic cores of North Clifton and South Clifton also contain some listed buildings and in the case of South Clifton is designated as a conservation area. North Clifton is bordered by the Order Limits and South Clifton is located to the south of the Order Limits.

A.11.7.8. The PZ is also influenced by the intensive management of arable farmland which has resulted in the loss of hedgerows and the weakening of the historic field pattern. This prevailing character of an intensively managed farmed landscape is notable by the presence of bulky poultry sheds. The inherent rural character is also weakened by busy roads and wider views of power stations and associated infrastructure of overhead pylons and turbines.

A.11.7.9. Overall, the value attached to ENS PZ 01: North Clifton Village Farmlands is Medium.

Susceptibility to change

A.11.7.10. The following features and characteristics of ENS PZ 01 are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Small scale pasture fields within the vicinity of settlements.*
- *Small farming villages with intact historic cores.*
- *Rising land across Clifton Hill.*
- *Fields defined by low, clipped hedgerows.*

A.11.7.11. The features and characteristics of the PZ that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility include:

- *Mostly flat landform.*
- *Intensive arable farmland.*
- *Views to the north and west dominated by power stations and associated infrastructure, and other views frequently interrupted by shelterbelts and woodland plantations.*

A.11.7.12. Overall, the susceptibility to change of ENS PZ 01: North Clifton Village Farmlands is High.

Sensitivity

A.11.7.13. The landscape of ENS PZ 01: North Clifton Village Farmlands contains few indicators of landscape value and is not covered by any landscape designations. The overall character of ENS PZ 01 also offers limited opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, ENS PZ 01: North Clifton Village Farmlands has a High sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.7.14. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the northern part of the PZ, to the north-west, north and north-east of North Clifton. This would include the construction activity for the proposed solar panels, as well as the construction of the landscape and ecology areas. There would also be similar construction activity to the south-east of South Clifton, all of which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery

of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.7.15. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the north, east and west of the PZ including mobile cranes and other related plant and machinery.

A.11.7.16. These changes would be of a greater scale than general farming activity, and would be located and perceived over the northern and eastern parts of the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Medium magnitude of change on ENS PZ 01: North Clifton Village Farmlands, due to the partial alteration to the landscape features and character.

A.11.7.17. Overall, the High sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effect, which is significant, during the construction phase.

Operation year 1 (winter)

A.11.7.18. The Proposed Development would introduce landscape and ecology land uses to the north of North Clifton, along with solar panels and ancillary structures extending to the northern and north-eastern edges of the PZ, bordered by a reservoir and existing infrastructure. There would be new landscape and ecology land uses to the south-west of South Clifton, with solar panels and ancillary equipment to the east of the A1133, extending to the edge of the PZ in comparison to the arable fields.

A.11.7.19. These changes in land use would have directs effects on the PZ. Land within the Order Limits within the PZ would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape, as well as areas of improved vegetation cover, albeit not established at year 1. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the PZ would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and

grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.7.20. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable farmland and partial loss of hedgerows and shelterbelts defining the field boundaries. The change in land use would occur to a PZ noted for the visual influence of existing energy infrastructure on its character, with a localised increase from the proposed solar panels and ancillary structures to the north of North Clifton. However, the intervening undeveloped character between North Clifton and South Clifton would remain, with improved vegetation cover via the landscape and ecology zones, albeit not fully established at year 1. The perception of the proposed solar panels to the east of the A1133 from North and South Clifton would also be negated by the distance and intervening vegetation patterns.

A.11.7.21. The Proposed Development would respond positively to the stated guidance by restoring and creating new hedgerows within field boundaries and new roadside vegetation along the A1133.

A.11.7.22. These changes to land use, vegetation cover and the open character of the fields to the north of North Clifton and east of the A1133 would be perceived locally. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Medium magnitude of change on ENS PZ 01: North Clifton Village Farmlands due to the partial alteration to its character and setting to North Clifton.

A.11.7.23. Overall, the High sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.7.24. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment, particularly across land between North Clifton and South Clifton. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.7.25. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Low magnitude of change on ENS PZ 01: North Clifton Village Farmlands due to the change in land use.

A.11.7.26. Overall, the High sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.7.27. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.7.28. These changes would be perceived over the northern part of the PZ. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Medium magnitude of change on ENS PZ 01: North Clifton Village Farmlands.

A.11.7.29. Overall, the High sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which are significant during the decommissioning phase.

Cumulative effects of construction

A.11.7.30. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on ENS PZ 01: North Clifton Village Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.7.31. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on ENS PZ 01: North Clifton Village Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.8 East Nottinghamshire Sandlands Policy Zone 02: Wigsley Village Farmlands with Plantations (ENS PZ 02)

Baseline

A.11.8.1. With reference to **Figure 8**, East Nottinghamshire Sandlands PZ 02: Wigsley Village Farmlands with Plantations covers land across the south-east part of the study area, to the south of the A57 and extends beyond the study area.

A.11.8.2. ENS PZ 02 covers the eastern and south-eastern parts of the Order Limits and it is characterised by a large scale arable landscape with woodland, situated across generally flat topography. Thorney is within the northern part of the PZ, Wigsley in the south-eastern part and Spalford in the southern part of the PZ.

Key characteristics

A.11.8.3. As set out in the Newark and Sherwood Landscape Character Assessment, the key characteristics of the Wigsley Village Farmlands with Plantations are as follows:

- *"Flat with occasional undulating landform around villages.*
- *Medium distance views to frequent shelterbelts and mixed plantations.*
- *Dominant views to the west of power stations and power lines.*
- *Mixture of intensive arable fields with strongly trimmed hedges and some low intensity farming with permanent improved pasture.*
- *Numerous fragmented blocks of mixed deciduous woodland, coniferous plantations and some remnant Parkland.*
- *Watercourses drain land to the east, (Ox Pasture Drain and Wigsley Drain)."*

Future baseline

A.11.8.4. Stated future pressures on the Wigsley Village Farmlands with Plantations are expected to derive from further intensification of farming practices and as a result the management guidance for ENS PZ 02 is generally about creating and restoring hedgerows, recreating field patterns and returning land to pasture to improve ecological diversity.

A.11.8.5. In the absence of the Proposed Development, it is assumed that the landscape of ENS PZ 02 would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of ENS PZ 02 overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.8.6. ENS PZ 02: Wigsley Village Farmlands with Plantations is not covered by any statutory landscape designations.

A.11.8.7. ENS PZ 02 contains leisure facilities including fishing lakes and caravan parks, and there are some surviving parkland features at Thorney Hall which contributes to the cultural interest.

A.11.8.8. All the villages in ENS PZ 02 have a historic core with a collection of listed buildings. However, recent development has eroded the sense of place within some of these villages such as Wigsley and Thorney.

A.11.8.9. There are numerous SINC designations throughout ENS PZ 02, which include habitats associated with woodlands, grasslands, drains and road verges, as well as the Marnham to Harby dismantled railway. The dismantled railway runs east west through the Order Limits and study area. Water courses in ENS PZ 02 provide flood-relief and drainage as well as ecological benefits.

A.11.8.10. ENS PZ 02 is also influenced by the intensive management of arable farmland which has resulted in the loss of the field pattern and the fragmenting of numerous woodland areas.

A.11.8.11. Overall, the value attached to ENS PZ 02: Wigsley Village Farmlands with Plantations is Medium.

Susceptibility to change

A.11.8.12. The following features and characteristics of ENS PZ 02 are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Permanent improved pasture.*
- *Closely trimmed hedges defining field boundaries.*
- *Fragmented blocks of deciduous woodlands, coniferous plantations and remnant parkland.*
- *Watercourses draining land to the east.*

A.11.8.13. The features and characteristics of the PZ that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility include:

- *Intensive arable fields.*

- *Mostly flat landform.*
- *Medium distance views to shelterbelts and mixed plantations, and dominant views to the west of power stations and power lines.*

A.11.8.14. Overall, the susceptibility to change of ENS PZ 02: Wigsley Village Farmlands with Plantations is Medium.

Sensitivity

A.11.8.15. The landscape of ENS PZ 02: Wigsley Village Farmlands with Plantations contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of ENS PZ 02 also offers few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, ENS PZ 02: Wigsley Village Farmlands with Plantations has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.8.16. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the central and northern parts of the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.8.17. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the west of the PZ including mobile cranes and other related plant and machinery.

A.11.8.18. These changes would be of a far greater scale than general farming activity, they would however be located and perceived over a small geographic extent within the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Low magnitude of change on ENS PZ 02: Wigsley Village Farmlands with Plantations, due to the subtle alteration to the landscape features and character.

A.11.8.19. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.8.20. The Proposed Development would introduce solar panels and ancillary structures into the landscape which would have directs effects on the PZ. Land within the Order Limits within the PZ, covering the north-west part of the PZ, would change from predominantly agricultural land uses to an operational solar farm with associated lighting and security features, with routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the PZ would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.8.21. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable fields and partial loss of hedgerows and shelterbelts defining field boundaries. The stated flat and occasionally undulating landform would be unaffected, and the network of watercourses would remain intact. The general landscape pattern would be maintained, along with the areas of woodland, due to the Proposed Development being offset from these features. The Proposed Development would be located in a PZ noted for its views of power stations and associated overhead lines to the west; but the Proposed Development would be lower in height via the panels and more integrated into the landscape. The Proposed Development would respond positively to the stated guidance by creating and restoring existing field boundaries and new roadside vegetation along the A1133, albeit the perception of this would be less at year 1 whilst new planting is yet to establish.

A.11.8.22. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a small geographic extent within the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Low magnitude of change on ENS PZ 02: Wigsley Village Farmlands with Plantations due to the subtle alteration to its character.

A.11.8.23. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant, at year 1 of operation.

Operation year 15 (winter and summer)

A.11.8.24. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.8.25. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Low magnitude of change on ENS PZ 02: Wigsley Village Farmlands with Plantations due to the change in land use.

A.11.8.26. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Minor neutral effects, which is not significant at year 15 of operation. This on the balance between the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance).

Decommissioning (winter)

A.11.8.27. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.8.28. These changes would be perceived over the north-western parts of the PZ The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Low magnitude of change on ENS PZ 02: Wigsley Village Farmlands with Plantations.

A.11.8.29. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant at decommissioning.

Cumulative effects of construction

A.11.8.30. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on ENS PZ 02: Wigsley Village Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.8.31. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on ENS PZ 02: Wigsley Village Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.9 Trent Washlands Policy Zone 17: Besthorpe River Meadowlands (TW PZ 17)

Baseline

A.11.9.1. With reference to Figure 8, Trent Washlands PZ 17: Besthorpe River Meadowlands follows the course of the River Trent, and runs north-south through the centre of the Order Limits and study area.

A.11.9.2. It is generally characterised as a low lying landscape with intensive arable farming, the River Trent and mineral extraction as the main land uses.

Key characteristics

A.11.9.3. As set out in the Newark and Sherwood Landscape Character Assessment, the key characteristics of the Besthorpe River Meadowlands are as follows:

- *"A flat, low lying landscape against the River Trent.*
- *Medium to large scale fields in arable production.*
- *Hawthorn hedgerows with hedgerow trees along lanes and tracks.*
- *Deciduous woodland scrub associated with restored quarry sites.*
- *Open long distance views often with pylon lines and power stations on the skyline."*

Future baseline

A.11.9.4. Stated future pressures on the Besthorpe River Meadowlands are expected to derive from further intensification of farming practices, and as a result the management guidance is primarily about creating and reinforcing landscape features such as historic field patterns, woodland, hedgerow trees and stream and ditch corridors, as well as returning land to pasture.

A.11.9.5. In the absence of the Proposed Development, it is assumed that the landscape of the PZ would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the PZ overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.9.6. TW PZ 17: Besthorpe River Meadowlands is not covered by any statutory landscape designations.

A.11.9.7. Several sand and gravel quarries are located in the area, both active and restored, and have a detracting influence on the landscape. Some former quarry sites have been restored to open water or wetland habitats and offer recreational opportunities. There are also several SINCs and a SSSI which are associated with the more established habitats around former quarries, providing ecological interest.

A.11.9.8. However, the PZ is influenced by the intensive management of arable farmland which has resulted in the loss of much of the historic field pattern, and current boundaries are generally gappy hedgerows with few hedgerow trees.

A.11.9.9. Overall, the value attached to TW PZ 17: Besthorpe River Meadowlands is Medium.

Susceptibility to change

A.11.9.10. The following features and characteristics of TW PZ 17 are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Deciduous woodland scrub associated with restored quarry sites.*
- *Floodplain and river*
- *Open, long-distance views*

A.11.9.11. The features and characteristics of the PZ that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Flat, low-lying landform.*
- *Medium to large scale arable fields.*
- *Hawthorn hedgerows with hedgerow trees along lanes and tracks.*

- *Pylon lines and power stations on the skyline.*

A.11.9.12. Overall, the susceptibility to change of TW PZ 17: Besthorpe River Meadowlands is Low.

Sensitivity

A.11.9.13. The landscape of TW PZ 17: Besthorpe River Meadowlands contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of TW PZ 17 also offers some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, TW PZ 17: Besthorpe River Meadowlands has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.9.14. During the construction period there would be a presence of construction activity associated with the trenchless crossing of the river, plus ancillary, landscape and ecology works within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.9.15. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, and landscape and ecology works. There would be the establishment of construction access and temporary haul roads which would contribute to the removal of hedgerows and trees. Trenchless crossing works associated with the river crossing involving send and receive pits plus drilling rigs would also be located within the PZ which would further be perceived as activity of a greater scale than general farming. There would also be a wider perception of construction activity within the Order Limits to the east and west of the PZ including mobile cranes and other related plant and machinery.

A.11.9.16. Whilst these changes would be of a greater scale than general farming activity, they would however be located and perceived over a very small geographic extent within the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development directly within the PZ, along with the perception of the construction beyond the PZ would result in a Low magnitude of change on TW PZ 17: Besthorpe River Meadowlands, due to the subtle alteration to the landscape features and character.

A.11.9.17. Overall, the Low sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.9.18. At year 1 of operation, the new landscape and ecology works within the PZ would be yet to mature but still provide an increased and more varied vegetation cover than the existing fields. There would also be a wider perception of solar panels within the Order Limits on the immediate east and west of the PZ.

A.11.9.19. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable fields and partial loss of hedgerows and hedgerow trees defining the field boundaries to accommodate maintenance tracks. Existing deciduous woodland and the prevailing field pattern would however be maintained. Open, long-distance views would also be kept. The Proposed Development would respond positively to the stated guidance by conserving and enhancing the alluvial grasslands and the biodiversity of streams and drainage ditches, albeit at year 1 not fully established.

A.11.9.20. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on TW PZ 17: Besthorpe River Meadowlands due to the barely perceptible alteration to its character.

A.11.9.21. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Negligible beneficial effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.9.22. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows within the landscape and ecology land uses would have established and matured, along with the proposed grassland forming a continuous sward. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment.

A.11.9.23. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Low magnitude of change on TW PZ 17: Besthorpe River Meadowlands due to the change in land use.

A.11.9.24. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Negligible beneficial effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.9.25. During the decommissioning phase, there would be activity adjacent to the PZ arising from the disassembly and removal of all above ground structures within the Order Limits which would be perceived from around the PZ boundary. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.9.26. These changes, along with the decommissioning phase across the wider parts of the Order Limits would be perceived across the PZ. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on TW PZ 17: Besthorpe River Meadowlands.

A.11.9.27. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.9.28. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on TW PZ 17: Besthorpe River Meadowlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.9.29. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on TW PZ 17: Besthorpe River Meadowlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Trent Washlands Policy Zone 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands (TW PZ 18)

Baseline

A.11.9.30. With reference to **Figure 8**, the Trent Washlands PZ 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands is located outside of the Order Limits in the southern part of the study area, and extends to cover an larger geographic area of land beyond the study area, covering Carlton on Trent and Sutton on Trent.

A.11.9.31. Within the study area, the northern part of TW PZ 18 is flat, open and mainly in arable use, consisting of fields bordering Low Marnham, as well as the village. In the southern part of TW PZ 18 within the study area, there smaller scale pasture fields.

Key characteristics

A.11.9.32. As set out in the Newark and Sherwood Landscape Character Assessment, the key characteristics of the Low Marnham, Carlton and Sutton on Trent River Meadowlands are as follows:

- *"A flat, low lying landscape.*
- *Medium scale fields in arable production.*
- *Smaller fields of pasture around villages.*
- *Red brick and pantile roofed villages.*
- *Narrow lanes often enclosed by mixed species hedges."*

Future baseline

A.11.9.33. Stated future pressures on the Low Marnham, Carlton and Sutton on Trent River Meadowlands are expected to derive from further intensification of farming practices, and as a result the management guidance is primarily about conserving and creating landscape features such as hedged fields, historic field patterns, woodland and hedgerow trees and stream and ditch corridors, as well as returning land to pasture.

A.11.9.34. In the absence of the Proposed Development, it is assumed that the landscape of the PZ would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the PZ overtime would be gradual. Therefore a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.9.35. TW PZ 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands is not covered by any statutory landscape designations.

A.11.9.36. The villages of Carlton on Trent and Sutton on Trent (outside the study area) comprise traditional red brick historic cores and both contain several listed buildings and are designated as conservation areas in recognition of their special architectural and historic interest.

A.11.9.37. There is one SINC site associated with grassland, however in general, fields are in intensive arable use. The limited tree cover and hedgerows provide a

general sense of visual containment, but occasional gaps allow for long distance views across the flat open landscape albeit there are some detracting features from industrial units and major roads.

A.11.9.38. Overall, the value attached to TW PZ 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands is Medium.

Susceptibility to change

A.11.9.39. TW PZ 18 is situated outside the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by the published assessment as a general sense of visual containment, with some occasional long-distance views influenced by existing detracting features. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 300m between the PZ and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.9.40. Overall, the susceptibility to change of TW PZ 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands is Very Low.

Sensitivity

A.11.9.41. The landscape of TW PZ 18: Besthorpe River Meadowlands contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of TW PZ 18 also offer many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, TW PZ 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands has a Low sensitivity.

Magnitude of change and significance

A.11.9.42. TW PZ 18: Low Marnham Carlton and Sutton on Trent River Meadowlands is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation and built form plus undulating landform would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning phases of the Proposed Development would

have no change and therefore no effect on the character of TW PZ 18: Low Marnham Carlton and Sutton on Trent River Meadowlands.

A.11.10 Trent Washlands Policy Zone 20: Dunham on Trent Village Farmlands (TW PZ 20)

Baseline

A.11.10.1. With reference to **Figure 8** Trent Washlands PZ 20: Dunham on Trent Village Farmlands is a flat, arable landscape comprising the village of Dunham on Trent in the northern part of the PZ and a relatively narrow area of smaller scale pastoral fields within the floodplain of the River Trent, extending to the south of the dismantled railway line in the south of the PZ.

A.11.10.2. Dunham on Trent Village Farmlands runs north-south through the central part of the Order Limits and study area.

Key characteristics

A.11.10.3. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the Dunham on Trent Village Farmlands are as follows:

- *"Predominantly a large scale arable landscape.*
- *Small scale pastoral landscape around Dunham.*
- *Views dominated by power stations and pylons.*
- *Hedgerows often missing or gappy.*
- *Some hedgerow trees and roadside trees present.*
- *Busy road to the north (A57)*
- *Nucleated village characterised by red brick and pantile roofed buildings.*
- *Long distance views across open landscape."*

Future baseline

A.11.10.4. There are stated currently long distance views to Cottam power station and High Marnham once dominated views to the south, however both have been decommissioned so it is likely that with demolition they will have a reduced influence on the perceptual qualities of the PZ in the future.

A.11.10.5. Stated future pressures on the Dunham on Trent Village Farmlands are expected to derive from further intensification of farming practices. Management guidance for the Dunham on Trent Village Farmlands is therefore largely around conserving remaining hedged fields near the village

and creating new ones where appropriate. Ditch and stream corridors should also be reinforced.

A.11.10.6. In the absence of the Proposed Development, it is assumed that the landscape of the Dunham on Trent Village Farmlands would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the Dunham on Trent Village Farmlands overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.10.7. TW PZ 20: Dunham on Trent Village Farmlands is not covered by any statutory landscape designations.

A.11.10.8. The lagoon to the north of High Marnham power station (in the southern part of TW PZ 20) is of ecological interest and is designated as a SINC. There are relatively intact small scale historic field patterns near Dunham on Trent, where pasture is enclosed by tall hedgerows, which provides landscape connectivity and offers a dimension of time depth. However, further south, due to agricultural intensification, fields have been expanded and hedgerows lost.

A.11.10.9. The Bassetlaw Landscape Character Assessment also identifies some detracting features including the A57 to the north and power stations and pylons dominating the skyline to the west and south, although High Marnham power station has since been decommissioned and the cooling towers demolished leaving a substation in its place.

A.11.10.10. Overall, the value attached to the landscape of TW PZ 20: Dunham on Trent Village Farmlands is Low.

Susceptibility to change

A.11.10.11. The following features and characteristics of TW PZ 20 are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Small scale pastoral farmland near Dunham on Trent.*
- *Fields bound by intermittent and gappy hedgerows creating a sense of openness.*
- *Long distance views across an open landscape.*

A.11.10.12. The features and characteristics of the PZ that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Large scale arable farmland.*
- *Views dominated by power stations and pylons.*
- *The busy A57 road.*

A.11.10.13. Overall, the susceptibility to change of TW PZ 20: Dunham on Trent Village Farmlands is Medium.

Sensitivity

A.11.10.14. The landscape of TW PZ 20: Dunham on Trent Village Farmlands contains few indicators of landscape value and is not covered by any statutory landscape designations. The overall character of TW PZ 20 also offers few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, TW PZ 20: Dunham on Trent Village Farmlands has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.10.15. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the southern part of the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.10.16. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the construction of the cable corridor would be located within the PZ which together with the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. Trenchless crossing works associated with the river crossing involving send and receive pits plus drilling rigs would also be located within the PZ, and there would be a wider perception of construction activity within the Order Limits to the east and west of the PZ including mobile cranes and other related plant and machinery.

A.11.10.17. These changes would be of a far greater scale than general farming activity, and would be located and perceived over a large geographic extent within the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a High magnitude of change on TW PZ 20: Dunham on Trent Village Farmlands, due to the substantial alteration to the landscape features and character.

A.11.10.18. Overall, the Medium sensitivity assessed against the High magnitude of change would result in Major adverse effects, which is significant during the construction phase.

Operation year 1 (winter)

A.11.10.19. The Proposed Development would introduce solar panels and ancillary structures into the landscape which would have directs effects on the PZ. Land within the Order Limits within the southern part of the PZ would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the PZ would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.10.20. In respect of the stated key characteristics, the Proposed Development would result in the loss of arable farmland and the partial loss of hedgerows defining field boundaries. Long distance views across the open landscape would generally be retained with the Proposed Development located in a landscape where the power stations pylons and the A57 have a strong influence. Unlike the power stations and pylons, the solar panels would be lower in height, such that their perception would be less. The Proposed Development would respond positively to the stated guidance by creating and restoring hedgerows and improving the biodiversity of the watercourse network, albeit the new planting is yet to fully established at year 1.

A.11.10.21. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a medium geographic extent within the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Medium magnitude of change on TW PZ 20: Dunham on Trent Village Farmlands due to the partial alteration to its character.

A.11.10.22. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Major adverse effects, which is significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.10.23. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.10.24. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Medium magnitude of change on TW PZ 20: Dunham on Trent Village Farmlands due to the change in land use.

A.11.10.25. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant at year 15 of operation.

Decommissioning (winter)

A.11.10.26. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.10.27. These changes would be perceived over a large geographic extent within the PZ. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a High magnitude of change on TW PZ 20: Dunham on Trent Village Farmlands.

A.11.10.28. Overall, the Medium sensitivity assessed against the High magnitude of change would result in Moderate adverse effects, which is significant, at decommissioning.

Cumulative effects of construction

A.11.10.29. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on TW PZ 20: Dunham on Trent Village Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.10.30. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on TW PZ 20: Dunham on Trent Village Farmlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.11 Trent Washlands Policy Zone 43: Grassthorpe River Meadowlands (TW PZ 43)

Baseline

A.11.11.1. With reference to **Figure 8**, the Trent Washlands PZ 43: Grassthorpe River Meadowlands is located outside but adjacent to the Order Limits in the south-west of the study area.

A.11.11.2. It is characterised as a largely flat valley rising to the west. It contains the village of Normanton on Trent and the hamlet of Grassthorpe and has small, semi-irregular fields of species-rich pasture surrounding the settlement.

Key characteristics

A.11.11.3. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the Grassthorpe River Meadowlands are as follows:

- *"Small to medium-sized irregular fields of species rich pasture.*
- *Strong mixed species hedgerows.*
- *Hedgerow trees including Ash, Sycamore and Horse Chestnut.*
- *Large mature trees along Grassthorpe Beck/Town Lane are a prominent feature.*
- *Nucleated village characterised by red brick and pantile roof buildings.*
- *Restricted views within Grassthorpe and along roads/tracks with tall hedgerows."*

Future baseline

A.11.11.4. Stated future pressures on the Grassthorpe River Meadowlands are expected to derive from further intensification of farming practices, and as a result the

management guidance is primarily about conserving and reinforcing landscape features such as hedged fields, stream and ditch corridors, as well as restoring land to permanent pasture. The ecological diversity of alluvial grasslands should be enhanced and meadowland hedgerows should be conserved and enhanced.

A.11.11.5. In the absence of the Proposed Development, it is assumed that the landscape of Grassthorpe River Meadowlands would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of Grassthorpe River Meadowlands overtime would be gradual. Therefore a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.11.6. TW PZ 43: Grassthorpe River Meadowlands is not covered by any statutory landscape designations.

A.11.11.7. The historic interest of the PZ is concentrated within the village of Grassthorpe which is located on the edge of the study area. It comprises predominantly vernacular style houses some of which are listed. The prevailing historic field pattern still remains intact which offers a dimension of time depth, and mixed species hedgerows with hedgerow trees are generally in good condition.

A.11.11.8. There are few detracting features and are generally limited to degraded farm buildings.

A.11.11.9. Overall, the value attached to the landscape of TW PZ 43: Grassthorpe River Meadowlands is Medium.

Susceptibility to change

A.11.11.10. TW PZ 43 is situated adjacent to the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by the published assessment as restricted views out of Grassthorpe with few detracting features. However, the likelihood of undue changes to these perceptual qualities is reduced by the generally enclosed character of the PZ and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.11.11. Overall, the susceptibility to change of TW PZ 43: Grassthorpe River Meadowlands is Low.

Sensitivity

A.11.11.12. The landscape of TW PZ 43: Grassthorpe River Meadowlands contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of TW PZ 43 offers some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, TW PZ 43: Grassthorpe River Meadowlands has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.11.13. TW PZ 43: Grassthorpe River Meadowlands is located outside but adjacent to the Order Limits. There would be no physical changes to the landscape features, but the installation of solar arrays, presence of secondary workers compound and landscape and ecology works would be perceived in views out of the PZ near to the PZ boundary, such that the perception would be of an unsettled landscape character adjacent to the PZ.

A.11.11.14. These changes would be perceived over a very small geographic extent within the PZ, focused on the northern part of the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on TW PZ 43: Grassthorpe River Meadowlands, due to the barely perceptible alteration to the landscape features and character, given the extent of pylons which already border the northern part of the PZ.

A.11.11.15. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.11.16. Given the approximately 100m between the proposed solar panels in the southern part of the Order Limits to the north of the TW PZ 43: Grassthorpe River Meadowlands, there would be no physical changes to the landscape features at operation. Also given the visual influence of High Marnham substation nearby and that the proposed panels would be located beneath several rows of overhead pylons, the solar panels and ancillary structures would not make a noticeable difference on the perceptual qualities of the PZ. Therefore, the Proposed Development would have no effect on TW PZ 43: Grassthorpe River Meadowlands at year 1 of operation.

Operation year 15 (winter and summer)

A.11.11.17. At year 15, the new trees and hedgerows would have established and matured within the Order Limits. This would reduce the perception of the Proposed

Development to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting.

A.11.11.18. At year 15, the Proposed Development would have no impact on TW PZ 43: Grassthorpe River Meadowlands, which is not significant.

Decommissioning (winter)

A.11.11.19. During the decommissioning phase, there would be activity arising beyond the PZ from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.11.20. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore, the decommissioning of the Proposed Development would result in a Very Low magnitude of change on TW PZ 43: Grassthorpe River Meadowlands.

A.11.11.21. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effect, which is not significant, during the decommissioning phase.

Cumulative effects of construction

A.11.11.22. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on TW PZ 43: Grassthopre River Meadowlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.11.23. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on TW PZ 43: Grassthorpe River Meadowlands, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.12 Trent Washlands Policy Zone 44: Fledborough Holme River Meadowlands (TW PZ 44)

Baseline

A.11.12.1. With reference to **Figure 8**, Trent Washlands PZ 44: Fledborough Holme River Meadowlands is located within the Trent Valley floodplain, between the villages of Fledborough to the west and North Clifton to the East.

A.11.12.2. It comprises a relatively very small area at the centre of the study area, with the very northern part of the PZ extending into the Order Limits and is characterised by a flat, open riverside landscape.

Key characteristics

A.11.12.3. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the Fledborough Holme River Meadowlands are as follows:

- *"Flat, open topography.*
- *Irregular fields of species-rich flood meadow and pasture.*
- *Small area of "holme" grassland.*
- *Unimproved pasture with wetter areas containing Willow and Thorn.*
- *Small oxbow.*
- *Trees and riparian vegetation associated with ditches and watercourses.*
- *Open views."*

Future baseline

A.11.12.4. Stated future pressures on the Fledborough Holme River Meadowlands are expected to derive from further intensification of farming practices, and as a result the management guidance for Fledborough Holme River Meadowlands is primarily about conserving landscape features such as hedged fields, the pastoral character, stream and ditch corridors, "holme" grassland and meadowland hedgerows. Arable land should be converted to permanent pasture where possible and small-scale tree and woodland planting should enhance visual cohesion.

A.11.12.5. In the absence of the Proposed Development, it is assumed that the landscape of Fledborough Holme River Meadowlands would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the Fledborough Holme River Meadowlands overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.12.6. TW PZ 44: Fledborough Holme River Meadowlands is not covered by any statutory landscape designations.

A.11.12.7. Riparian habitats form wildlife corridors in Fledborough Holme River Meadowlands and contribute to the wider green infrastructure network in the Trent valley. Further ecological interest is provided by the Fledborough Holme

SINC site which contains a small distinctive oxbow lake and unimproved pasture.

A.11.12.8. There are relatively few detracting features and are generally limited pylons running north-south. Views to the south encompass the Fledborough Viaduct which is a local landmark which adds to the scenic qualities of Fledborough Holme River Meadowlands. There is also a recreational value via several PRoW within the PZ.

A.11.12.9. Overall, the value attached to TW PZ 44: Fledborough Holme River Meadowlands is Medium.

Susceptibility to change

A.11.12.10. The following features and characteristics of TW PZ 44: Fledborough Holme River Meadowlands are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Open landscape.*
- *Irregular fields of species-rich flood meadow and pasture including holme grassland*
- *Small oxbow.*
- *Trees and riparian vegetation associated with ditches and watercourses.*
- *Open views.*

A.11.12.11. The features and characteristics of the PZ that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Flat topography.*

A.11.12.12. Overall, the susceptibility to change of TW PZ 44: Fledborough Holme River Meadowlands is High.

Sensitivity

A.11.12.13. The landscape of TW PZ 44: Fledborough Holme River Meadowlands contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of TW PZ 44 also offer limited opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, TW PZ 44: Fledborough Holme River Meadowlands has a High sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.12.14. During the construction period, there would be ancillary, landscape and ecology works in the north of the PZ which would represent a slight change from general agricultural activity. There would also be a wider perception of construction activity within the Order Limits to the north, east and west of the PZ including mobile cranes and other related plant and machinery.

A.11.12.15. Whilst these direct changes would be of a slightly scale than general farming activity, they would however be located over a small geographic extent within the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. In combination with the perception of the wider construction activity beyond the PZ, the construction of the Proposed Development would result in a Low magnitude of change on TW PZ 44: Fledborough Holme River Meadowlands, due to the subtle alteration to the landscape features and character.

A.11.12.16. Overall, the High sensitivity assessed against the Low magnitude of change would result in Moderate adverse effects, which is significant, during the construction phase.

Operation year 1 (winter)

A.11.12.17. At year 1 of operation, the new landscape and ecology works within the north of the PZ would be yet to mature but still provide an increased and more varied vegetation cover than the existing fields. There would also be a wider perception of solar panels within the Order Limits on the north-west of the PZ.

A.11.12.18. In respect of the stated key characteristics, the Proposed Development would retain and enhance the riparian vegetation associated with drainage ditches and watercourses. The irregular field pattern, water features and sense of openness would also be retained as only landscape and ecology works would be located in the PZ. The Proposed Development would therefore respond positively to the stated guidance by conserving the pastoral character and promoting the biodiversity of alluvial grasslands, albeit the perception of this would be less at year 1 whilst new planting is yet to established.

A.11.12.19. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a small geographic extent within the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on PZ 44: Fledborough Holme River Meadowlands due to the barely perceptible alteration to its character.

A.11.12.20. Overall, the High sensitivity assessed against the Very Low magnitude of change would result in Negligible beneficial effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.12.21. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the landscape and ecology areas would have established and matured, along with the proposed grassland forming a continuous sward. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment.

A.11.12.22. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on TW PZ 44: Fledborough Holme River Meadowlands due to the change in land use.

A.11.12.23. Overall, the High sensitivity assessed against the Very Low magnitude of change would result in Negligible beneficial effects, which is not significant at year 15 of operation.

Decommissioning (winter)

A.11.12.24. During the decommissioning phase, there would be activity adjacent to the PZ arising from the disassembly and removal of all above ground structures within the Order Limits which would be perceived from around the PZ boundary. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.12.25. These changes, along with the decommissioning phase across the wider parts of the Order Limits would be perceived across the PZ. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on TW PZ 44: Fledborough Holme River Meadowlands.

A.11.12.26. Overall, the High sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.12.27. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on TW PZ 44: Fledborough Holme River Meadowlands, and the cumulative landscape

effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.12.28. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on LCT3a Floodplain Valleys, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.13 Trent Washlands Policy Zone 45: Dunham Laneham River Meadowlands (TW PZ 45)

Baseline

A.11.13.1. The Trent Washlands PZ 45: Dunham Laneham River Meadowlands is located along the western side of the River Trent, in the northern part of the study area, and extends beyond the study area and to the east of Church Laneham.

A.11.13.2. The PZ forms a narrow strip in the north of the study area, 1km to the north of the Order Limits and it is characterised by a pastoral, generally flat riverside landscape.

Key characteristics

A.11.13.3. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the Dunham Laneham River Meadowlands are as follows:

- *"Flat topography.*
- *Linear strips of improved and unimproved pasture which follow the course of the River Trent.*
- *Willows and scrubby riparian vegetation associated with watercourses.*
- *Pollarded willows.*
- *Grass flood bank."*

Future baseline

A.11.13.4. Stated future pressures on the Dunham Laneham River Meadowlands are expected to derive from further intensification of farming practices, and as a result the management guidance is primarily about conserving landscape features such as the existing hedgerows, pastoral character, alluvial grasslands and pollarded Willows. There is also guidance to enhance the diversity of alluvial grasslands and marginal riverside vegetation.

A.11.13.5. In the absence of the Proposed Development, it is assumed that the landscape of the PZ would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the PZ overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.13.6. TW PZ 45: Dunham Laneham River Meadowlands is not covered by any statutory landscape designations.

A.11.13.7. The historic field pattern is clearly defined by intact hedgerows which provides a sense of time depth and landscape connectivity. However, there has been some encroachment of arable fields in the western part of the PZ.

A.11.13.8. Dunham Laneham River Meadowlands contains a rich mosaic of improved and unimproved pasture, riparian vegetation, species-rich hedgerows and trees which provide ecological interest. Dunham Drain is also located within Dunham Laneham River Meadowlands comprises a drain with lush emergent vegetation and is designated as a SINC.

A.11.13.9. The Trent Valley Way long distance trail runs through Dunham Laneham River Meadowlands along the western bank of the river, providing wider opportunities for outdoor recreation and a recreational value. The Dunham Laneham River Meadowlands has few detracting features which contributes to the scenic quality.

A.11.13.10. Overall, the value attached to TW PZ 45: Dunham Laneham River Meadowlands is Medium

Susceptibility to change

A.11.13.11. TW PZ 45 is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by the published assessment as a relatively high scenic quality with few detracting features. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 1km between the PZ and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.13.12. Overall, the susceptibility to change of TW PZ 45: Dunham Laneham River Meadowlands is Very Low.

Sensitivity

A.11.13.13. The landscape of TW PZ 45: Dunham Laneham River Meadowlands contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of TW PZ 45 Dunham Laneham River Meadowlands also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, PZ 45: Dunham Laneham River Meadowlands has a Low sensitivity.

Magnitude of change and significance

A.11.13.14. TW PZ 45: Dunham Laneham River Meadowlands is located 1km to the north of the Order Limits, beyond the A57, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation, A57 and undulating landform between the PZ and the Order Limits to the east of Dunham on Trent would also prevent any changes to the perceptual qualities of the PZ. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no effect on the character of TW PZ 45: Dunham Laneham River Meadowlands.

A.11.14 Mid-Nottinghamshire Farmlands Policy Zone 08: Upton, Laneham (MNF PZ 08)

Baseline

A.11.14.1. With reference to Figure 8, the Mid-Nottinghamshire Farmlands PZ 08: Upton, Laneham comprises small scale mixed farmland defined by hedgerows and woodlands, all situated across flat and low-lying land, within the north-west part of the study area. The PZ extends beyond the study area to cover Laneham and Darlton, as well as part of Darlton.

Key characteristics

A.11.14.2. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the Upton, Laneham PZ are as follows:

- *"North Beck with network of streams and associated woodland corridors.*
- *Arable landscape.*
- *Hedgerows and water channels as field boundaries.*
- *Small scale settlement.*
- *Small clumps/linear sections of woodland along watercourses.*
- *Improved and unimproved grassland adjacent to watercourses.*
- *Five SINCs; predominantly grassland."*

Future baseline

A.11.14.3. Stated future pressures on the Upton, Laneham PZ are expected to derive from further intensification of farming practices, and as a result the management guidance for the PZ is generally about conserving landscape features such as the historic field pattern, existing watercourses and hedgerows, woodland, grassland areas and areas of ridge and furrow. Opportunities should be sought to restore arable land to pasture.

A.11.14.4. In the absence of the Proposed Development, it is assumed that the landscape of the Upton, Laneham PZ would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the Upton, Laneham overtime would be gradual. Therefore a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.14.5. MNF PZ 08: Upton, Laneham is not covered by any statutory landscape designations.

A.11.14.6. The MNF PZ 08: Upton, Laneham contains many areas of ecologically rich grassland some of which is designated as a SINC. The network of woodland corridors and intact hedgerows are also of biodiversity value and provide connectivity with the surrounding landscape.

A.11.14.7. There is an area of ridge and furrow close to East Drayton which is a distinctive feature and contributes to the cultural time depth. A number of listed buildings can be found in the villages including Darlton and Laneham which offers historic interest.

A.11.14.8. The PZ exhibits a generally high scenic quality with detracting features limited to busy transport corridors on its fringes.

A.11.14.9. Overall, the value attached to MNF PZ 08: Upton, Laneham is Medium.

Susceptibility to change

A.11.14.10. MNF PZ 08: Upton, Laneham is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by the published assessment as a generally high scenic quality with few detracting features. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 300m between the PZ and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.14.11. Overall, the susceptibility to change of MNF PZ 08 is Low.

Sensitivity

A.11.14.12. The landscape of MNF PZ 08: Upton, Laneham contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of MNF PZ 08: Upton, Laneham also offer some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, MNF PZ 08: Upton, Laneham has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.14.13. Construction of the Proposed Development would be located 300m to the south of the PZ. There would be no physical changes to the landscape features, but the installation of solar arrays, presence of secondary workers compounds, and landscape and ecology works would be perceived on rising land to the immediate south of the A57, near to the PZ boundary.

A.11.14.14. Whilst the perception of these changes would be of an activity of a greater scale than farming, they would however be perceived over a very small geographic extent within the PZ and beyond the A57. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on MNF PZ 08: Upton Laneham, due to the barely perceptible alteration to the landscape features and character of the PZ and the unsettled character to part of its immediate setting.

A.11.14.15. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.14.16. Given the approximately 300m distance between the proposed solar panels within the Order Limits and the PZ boundary, there would be no physical changes to the landscape features of the PZ at operation. Newly planted trees and hedgerows within the Order Limits would be yet to mature and offer little in terms of screening, and so solar panels and ancillary structures would be perceived beyond the PZ boundary, on the rising land to the south of the A57. This would introduce renewable energy equipment in the setting of the PZ, in contrast to undeveloped arable land and a more rural character.

A.11.14.17. These changes to land use, vegetation cover and the open character of the fields in the setting of the PZ, would be perceived over a very small

geographic extent within the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on MNF PZ 08: Upton Laneham due to the barely perceptible alteration to its character.

A.11.14.18. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.14.19. At year 15, the new trees and hedgerows within the Order Limits would have established and matured. The greater height and density of new planting would reduce the perception of the panels and associated equipment to the south of the PZ. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.14.20. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on MNF PZ 08: Upton Laneham due to the limited perception of the Proposed Development.

A.11.14.21. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the operational phase.

Decommissioning (winter)

A.11.14.22. During the decommissioning phase, there would be activity arising beyond the PZ from the disassembly and removal of all above ground structures within the Order Limits which would be perceived 300m to the south of the PZ boundary due to being located across more elevated land to the south of the A57. The impacts on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.14.23. These changes would be perceived over a very small geographic extent within the PZ. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on MNF PZ 08: Upton Laneham.

A.11.14.24. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.14.25. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on MNZ PZ 08: Upton Laneham, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.14.26. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on MNZ PZ 08: Upton Laneham, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.15 Mid-Nottinghamshire Farmlands Policy Zone 09: East Drayton (MNF PZ 09)

Baseline

A.11.15.1. With reference to **Figure 8**, Mid-Nottinghamshire Farmlands PZ 09: East Drayton is located in the north-west of the study area within the Order Limits extending to the A57.

A.11.15.2. MNF PZ 09 is generally characterised by a large scale flat landscape with a network of watercourses defining intensive arable farmland and also includes part of Darlton, to the east of the Order Limits.

Key characteristics

A.11.15.3. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the East Drayton PZ are as follows:

- *"Irregularly shaped agricultural fields; intensive arable farmland dominant.*
- *Strongly trimmed well maintained hedgerows, particularly along roadsides.*
- *Network of streams and ditches across the landscape.*
- *Small areas of settlement; predominantly of traditional style, including listed buildings.*
- *Low tree cover.*

- *Large scale flat landscape with open views."*

Future baseline

A.11.15.4. Stated future pressures on the East Drayton PZ are expected to derive from further intensification of farming practices, and as a result the management guidance for the East Drayton PZ is generally about conserving landscape features such as the historic field pattern, drainage ditches, hedgerows, permanent pasture, tree cover and areas of ridge and furrow.

A.11.15.5. In the absence of the Proposed Development, it is assumed that the landscape of the East Drayton PZ would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the East Drayton PZ overtime would be gradual. Therefore a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.15.6. MNF PZ 09: East Drayton is not covered by any statutory landscape designations.

A.11.15.7. Villages within the East Drayton PZ generally retain their traditional character and many contain listed buildings and/or are designated as conservation areas in recognition of the special architectural and historic interest.

A.11.15.8. The wider landscape of the East Drayton PZ is heavily influenced by the intensive management of arable farmland which has resulted in the erosion of the historic field pattern and fragmentation of woodland and hedgerows. Nonetheless the large scale field pattern gives rise to open views which are generally absent of detracting features, except for distant pylons, which contributes to a strong rural character.

A.11.15.9. Overall, the value attached to MNF PZ 09: East Drayton is Medium.

Susceptibility to change

A.11.15.10. The following features and characteristics of MNF PZ 09: East Drayton are particularly susceptible the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Irregularly shaped agricultural fields*
- *Low tree cover and clipped hedgerows contributing to a sense of openness.*
- *Network of streams and ditches.*

A.11.15.11. The features and characteristics of the PZ that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Mostly flat landform*
- *Predominantly large-scale arable farmland.*

A.11.15.12. Overall, the susceptibility to change of MNF PZ 09: East Drayton is Medium.

Sensitivity

A.11.15.13. The landscape of MNF PZ 09: East Drayton contains some indicators of landscape value and is not covered by any landscape designations. The overall character of MNF PZ 09: East Drayton also offer few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, MNF PZ 09: East Drayton has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.15.14. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.15.15. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and primary and secondary construction compounds, and the establishment of construction access and temporary haul roads would also result in the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the south-east of the PZ including mobile cranes and other related plant and machinery.

A.11.15.16. Whilst these changes would be of a far greater scale than general farming activity, located and perceived across the eastern part of the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Medium magnitude of change on MNF PZ 09: East Drayton, due to the partial perceptible alteration to the landscape features and character.

A.11.15.17. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant, during the construction phase.

Operation year 1 (winter)

A.11.15.18. The Proposed Development would introduce solar panels and ancillary structures, along with landscape and ecology zones into the landscape which would have directs effects on the PZ. Land within the Order Limits within the PZ would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the PZ would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.15.19. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable farmland, which would lead to localised reduction in the sense of openness and partial loss of hedgerows defining field boundaries and roadsides. The prevailing landscape pattern and network of streams and ditches would however be retained due to the proposed panels being set within the field boundaries and offset from retained vegetation. The Proposed Development would respond positively to the stated guidance by maintaining existing drainage ditches and restoring and reinforcing poor hedgerow boundaries, albeit the perception of this would be less at year 1 whilst new planting is yet to established.

A.11.15.20. These changes to land use, vegetation cover and the open character of the fields, would result in direct and perceived changes within the eastern part of the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Medium magnitude of change on MNF PZ 09: East Drayton due to the partial alteration to its character.

A.11.15.21. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.15.22. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.15.23. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Medium magnitude of change on MNF PZ 09: East Drayton due to the change in land use.

A.11.15.24. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate neutral adverse effects, which is not significant at year 15 of operation. Given the balance between introduction of renewable energy development and the continued change in land use and improved green infrastructure (in accordance with the identified landscape management guidance), the effect would overall be neutral.

Decommissioning (winter)

A.11.15.25. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.15.26. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Medium magnitude of change on MNF PZ 09: East Drayton.

A.11.15.27. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant, during the decommissioning phase.

Cumulative effects of construction

A.11.15.28. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on MNF PZ 09: East Drayton, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.15.29. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on MNF PZ 09: East Drayton, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.16 Mid-Nottinghamshire Farmlands Policy Zone 12: Normanton-on-Trent (MNF PZ 12)

Baseline

A.11.16.1. With reference to **Figure 8**, the Mid-Nottinghamshire Farmlands PZ 12: Normanton-on-Trent covers land in the western part of the study area, to the north and south of the dismantled railway line, including High Marnham and Skegby and therefore most of the Order Limits to the west of the River Trent.

A.11.16.2. MNF PZ 12: Normanton-on-Trent is generally characterised by arable farmland with some pastoral land located near settlements and farmsteads, along with the sub-station and associated overhead pylons and wires.

Key characteristics

A.11.16.3. As set out in the Bassetlaw Landscape Character Assessment, the key characteristics of the Normanton-on-Trent PZ are as follows:

- *"Marnham power station.*
- *Open arable farmland.*
- *Vernacular building style throughout the Policy Zone and at Normanton-on-Trent.*
- *Site of the mediaeval village of Woodcotes.*
- *Ditch/watercourse network across the area, sometimes alongside hedgerows.*
- *Long distance views.*
- *Pylons and high voltage overhead power lines.*
- *Railway line.*

- *Narrow hedged lanes."*

Future baseline

A.11.16.4. Stated future pressures on the Normanton-on-Trent PZ are expected to derive from further intensification of farming practices, and as a result the management guidance for MNF PZ 12: Normanton-on-Trent is generally about conserving landscape features such as the historic field pattern, drainage ditches, hedgerows, permanent pasture, tree cover and areas of grassland.

A.11.16.5. In the absence of the Proposed Development, it is assumed that the landscape of MNF PZ 12: Normanton-on-Trent would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of MNF PZ 12: Normanton-on-Trent overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.16.6. MNF PZ 12: Normanton-on-Trent is not covered by any statutory landscape designations.

A.11.16.7. The PZ contains a number of listed buildings within the villages as well as scattered farmsteads and manor houses. The site of the medieval village of Woodcoates provides further historical interest (located in the northern central part of the PZ).

A.11.16.8. The historic field pattern of smaller pasture fields generally remains intact, offering a sense of time depth, despite some evidence of hedgerow loss as a result of agricultural intensification. Hedgerow trees together with scattered deciduous woodland contribute to the visual interest of the landscape and the wider green infrastructure network.

A.11.16.9. The flat open farmland landscape also lends itself to long distance views.

A.11.16.10. Overall, the value attached to MNF PZ 12: Normanton-on-Trent is Medium.

Susceptibility to change

A.11.16.11. The following features and characteristics of MNF PZ 12 are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Site of the medieval village of Woodcoates.*
- *Vernacular building style throughout the PZ.*

- *Network of ditches and watercourses.*
- *Long distance views.*

A.11.16.12. The features and characteristics of MNF PZ 12: Normanton-on-Trent that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility are:

- *Open arable farmland.*
- *Marnham substation*
- *Pylons and overhead power lines.*
- *Railway line.*

A.11.16.13. Overall, the susceptibility to change of MNF PZ 12: Normanton-on-Trent is Medium.

Sensitivity

A.11.16.14. The landscape of MNF PZ 12: Normanton-on-Trent contains some indicators of landscape value and is not covered by any landscape designations. They key characteristics of MNF PZ 12 also offer some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, MNF PZ 12: Normanton-on-Trent has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.16.15. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.16.16. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the construction of the substation, BESS and associated cable corridor would be located within the PZ which together with the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the north-east of the PZ including mobile cranes and other related plant and machinery.

A.11.16.17. These changes would be of a far greater scale than general farming activity, and located and perceived across the eastern part of the PZ. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a High magnitude of change on MNF PZ 12: Normanton on Trent, due to the substantial alteration to the landscape features and character.

A.11.16.18. Overall, the Medium sensitivity assessed against the High magnitude of change would result in Major adverse effects, which is significant, during the construction phase.

Operation year 1 (winter)

A.11.16.19. The Proposed Development would introduce solar panels and ancillary structures into the landscape which would have directs effects on the PZ. The substation and BESS would also be located within the Normanton on Trent PZ which would locally be perceived to a greater degree than the lower height panels. Land within the Order Limits within the PZ would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the PZ would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.16.20. In respect of the stated key characteristics, the Proposed Development would result in the localised loss of arable farmland and the partial loss of hedgerows within field boundaries and along roadsides, which would lead to a localised reduction in openness. These changes would be located in a character area with a noted existing influence of energy and transport infrastructure. The Proposed Development would respond positively to the stated guidance by maintaining existing network of drainage ditches and the conserving and restoring of hedgerow boundaries, albeit the perception of this would be less at year 1 whilst new planting is yet to established.

A.11.16.21. These changes to land use, vegetation cover and the open character of the fields, would be perceived over the eastern part of the PZ. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a

Medium magnitude of change on MNF PZ 12: Normanton on Trent due to the partial alteration to its character.

A.11.16.22. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.16.23. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.16.24. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Low magnitude of change on MNF PZ 12: Normanton on Trent due to the change in land use.

A.11.16.25. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.16.26. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures, plus the substation and BESS. The effects on the PZ would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.16.27. These changes would be perceived over the eastern part of the PZ. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Medium magnitude of change on MNF PZ 12: Normanton on Trent.

A.11.16.28. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant during the decommissioning.

Cumulative effects of construction

A.11.16.29. The addition of the cumulative scheme ID 27 with the Proposed Development would noticeably increase the extent over which changes to the landscape character would be perceived at construction, extending across the south-western area of the PZ. At construction, this would likely result in a High magnitude of change which assessed against the Medium sensitivity of the PZ would result in Major adverse effect, which is significant.

Cumulative effects of operation

A.11.16.30. The addition of the cumulative scheme ID 27 with the Proposed Development would noticeably increase the extent over which changes to the landscape character would be perceived at operation, extending across the south-western area of the PZ. At operation, this would likely result in a Medium magnitude of change which assessed against the Medium sensitivity of the PZ would result in a Moderate adverse effect, which is significant.

A.11.17 Landscape Character Area 2: Trent Valley (LCA 2)

Baseline

A.11.17.1. With reference to **Figure 8**, Landscape Character Area 2: Trent Valley covers much of the north-east of the study area, encompassing the villages of Newton on Trent, Kettlethorpe and Laughterton. The LCA extends beyond the study area to Gainsborough.

A.11.17.2. The character of LCA 2 is largely defined by gently undulating landform, large blocks of deciduous woodland, and varied land uses including some historic parklands.

Key characteristics

A.11.17.3. As set out in the West Lindsey Landscape Character Assessment, the key characteristics of the Trent Valley are as follows:

- *"Low-lying gently undulating landform with higher terrain to east and south of Gainsborough.*
- *Significant blocks of deciduous woodland, good hedgerows and hedgerow trees create a relatively enclosed landscape.*
- *River Trent and its adjacent washlands are enclosed by steep flood embankments.*

- *Historic parkland landscapes including a medieval deer park, and landmarks such as the ruins of Torksey Castle.*
- *Main roads are significant features in the landscape; recent development concentrated along the main roads, bypassing original village centres.*
- *Views towards the west are dominated by the power stations along the River Trent."*

Future baseline

A.11.17.4. The West Lindsey Landscape Character Assessment notes general forces for change and landscape management guidance for landscape management as well as specific forces for change and landscape management guidance for accommodating new development, and it is expected that the landscape would evolve in line with these.

A.11.17.5. In the absence of the Proposed Development, it is assumed that the landscape of the LCA would evolve in line with these forces for change and landscape management guidance and any resulting changes to the key characteristics of the LCA overtime would be gradual. Therefore, a separate assessment on the future baseline has not been undertaken.

Landscape sensitivity

Value

A.11.17.6. LCA 2: Trent Valley is not covered by any statutory landscape designations.

A.11.17.7. LCA 2: Trent Valley does contain some important historic parkland landscapes such as at Kettlethorpe and many of the woodlands are designated as ancient woodland. LCA 2: Trent Valley comprise valuable wet meadow habitat and some areas such as Lea Marshes are designated as a Site of Special Scientific Interest in recognition of their importance for breeding waders.

A.11.17.8. However, major roads cross the landscape which have localised influences on the tranquillity of more open areas within LCA 2: Trent Valley. Views of power stations and associated infrastructure to the west and south also detract from the scenic quality.

A.11.17.9. Overall the value attached to the LCA 2: Trent Valley is Medium.

Susceptibility to change

A.11.17.10. The following features and characteristics of LCA 2 are particularly susceptible to the type and nature of development proposed within the Order Limits and indicate a higher susceptibility:

- *Historic parkland landscapes and a medieval deer park.*

- *Large blocks of deciduous woodland, hedgerows and hedgerow trees, including ancient woodland.*
- *River Trent and associated washlands.*

A.11.17.11. The features and characteristics of the LCA that are less susceptible to the type and nature of development proposed within the Order Limits and indicate a lower susceptibility include:

- *Low-lying, gently undulating landform.*
- *High vegetation cover creating a relatively enclosed landscape.*
- *Major roads traversing the landscape and modern ribbon development.*
- *Westerly views dominated by local power stations.*

A.11.17.12. Overall, the susceptibility to change of LCA 2: Trent Valley is Medium.

Sensitivity

A.11.17.13. The landscape of LCA 2: Trent Valley contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of LCA 2: Trent Valley also offer few opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, LCA 2: Trent Valley has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.17.14. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.17.15. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the establishment of construction access and temporary haul roads would contribute to the removal of hedgerows and trees. There would also be a wider perception of construction activity within the Order Limits to the south of the LCA including mobile cranes and other related plant and machinery.

A.11.17.16. Whilst these changes would be of a far greater scale than general farming activity, they would however be concentrated to the southern part of the LCA and to the south of the A57, which represents a very small part of the wider LCA The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on LCA 2: Trent Valley, due to the barely perceptible alteration to the landscape features and character.

A.11.17.17. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant during the construction phase.

Operation year 1 (winter)

A.11.17.18. The Proposed Development would introduce solar panels and ancillary structures into the landscape which would have directs effects on the LCA. The substation and BESS would also be located within the Trent Valley LCA which would locally increase the perception of renewable energy infrastructure on the landscape. Land within the Order Limits within the southern part of the LCA would change from predominantly agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within the LCA would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.17.19. In respect of the stated key characteristics, the Proposed Development would retain the general sense of enclosure. Where there would be intervisibility with the Proposed Development there would be a slight increase in the visual influence of energy infrastructure in westerly views. Historic parkland in the northern part of the study area would be unaffected due to the intervening features preventing any perception of the Proposed Development. Proposed Development would respond positively to the stated guidance by conserving and restoring hedgerows and hedgerow trees to retain the existing landscape pattern.

A.11.17.20. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a very small geographic extent within the LCA. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term

and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on LCA 2: Trent Valley due to the barely perceptible alteration to its character.

A.11.17.21. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.17.22. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.17.23. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on LCA 2: Trent Valley due to the change in land use.

A.11.17.24. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.17.25. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures, plus the substation and BESS. The effects on the LCA would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.17.26. These changes would be perceived over a very small geographic extent within the LCA. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on LCA 2: Trent Valley.

A.11.17.27. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant during the decommissioning.

Cumulative effects of construction

A.11.17.28. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on LCA 2: Trent Valley, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.17.29. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on LCA 2: Trent Valley, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.18 Local Village Character Area: Darlton

Baseline

A.11.18.1. With reference to **Figure 9**, Darlton is located in the north-west of the study area and within Bassetlaw, Nottinghamshire. It is situated along the A57 at the junction with Woodcoates Road and is not within the Order Limits, being 200m to the west of the Order Limits.

Key characteristics

A.11.18.2. The key characteristics of Darlton are as follows:

- *A small farming village with historic references in the Domesday Book.*
- *The A57 forms the primary movement corridor and a busy through road.*
- *Two and single storey semi-detached properties extending along the northern side of the A57, with a small number of farmsteads extending along Woodcoates Road.*
- *A mix of modern ribbon development and C18 farm buildings.*
- *Red brick and clay pantiles common, particularly within farm buildings.*
- *A concentration of grade listed buildings and structures at the eastern end including the Grade II* St Giles Church.*
- *A settlement edge character defined by mixed farmland including an osier plantation (area of coppiced willow trees).*

Landscape sensitivity

Value

A.11.18.3. Darlton is not covered by any statutory landscape designations.

A.11.18.4. St Giles Church together with the associated grade listed buildings and structures create a historic gateway into the settlement from the east and provide some sense of time depth.

A.11.18.5. Darlton is also connected by public footpaths to the surrounding countryside and neighbouring villages in the north.

A.11.18.6. Modern residential development has introduced new architectural styles and a variety of building materials which partly erodes the sense of place. The busy A57 also detracts from the tranquillity of the character area.

A.11.18.7. Overall, the value attached to Darlton is Medium.

Susceptibility to change

A.11.18.8. Darlton is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are already influenced by modern development and busy transport corridors which detract from the tranquillity. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 200m between Darlton and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.18.9. Overall, the susceptibility to change of Darlton is Very Low.

Sensitivity

A.11.18.10. The landscape of Darlton contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of Darlton also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Darlton has a Low sensitivity.

Magnitude of change and significance

A.11.18.11. Darlton is located 200m from the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation and built form along the village edge would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no impact on the character of Darlton.

A.11.19 Local Village Character Area: Dunham on Trent

Baseline

A.11.19.1. With reference to **Figure 9**, Dunham on Trent is located in the north of the study area and within Bassetlaw, Nottinghamshire. It is situated along the A57 on the western bank of the River Trent and is not within the Order Limits, but borders part of the north-west edge of the Order Limits.

Key characteristics

A.11.19.2. The key characteristics of Dunham on Trent are as follows:

- *A small village with a rich history dating back to the Roman times and reflected in a collection of grade listed buildings and landmarks.*
- *The A57 bisects the village and forms a busy through route.*
- *Mostly two storey properties with single storey mobile homes around the fringes.*
- *A mix of modern and traditional architectural styles and materiality including red brick and render together with clay pantiles.*
- *The C12 Church of St Oswald's (Grade I listed) forms a local landmark and well-preserved example of Norman architecture.*
- *Cultural associations with Dunham Bridge which was originally built from a group of Lincolnshire businessmen.*
- *Views of neighbouring electricity pylons and overhead cables in the Trent valley.*

Landscape sensitivity

Value

A.11.19.3. Dunham on Trent is not covered by any statutory landscape designations.

A.11.19.4. The village exhibits a well-preserved historic core which is reflected in the concentration of grade listed buildings around the Church of St Oswalds. It has links with Dunham Bridge which is valued at a local level and contributes to the settlement identity. Dunham on Trent is also relatively well-connected by public footpaths to the surrounding countryside including to the River Trent along the Trent Valley Way long distance trail.

A.11.19.5. The modern development around the settlement fringes introduces incongruent and unremarkable architectural styles which partly erodes the sense of place. Views out of the settlement are also largely influenced by electricity pylons in the Trent valley which detracts from the appreciation of the surrounding landscape and rural setting.

A.11.19.6. Overall, the value attached to Dunham on Trent is Medium.

Susceptibility to change

A.11.19.7. Dunham on Trent is situated outside, but adjacent to part of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by a generally weak sense of place and relatively poor scenic quality with influences from existing electricity infrastructure within the Trent Valley.

A.11.19.8. Overall, the susceptibility to change of Dunham on Trent is Very Low.

Sensitivity

A.11.19.9. The landscape of Dunham on Trent contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of Dunham on Trent also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Dunham on Trent has a Low sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.19.10. Construction of the Proposed Development would be located partly adjacent to the southern edge of Dunham on Trent. There would be no physical changes to the landscape features, but the installation of solar arrays, presence of secondary workers compounds, and landscape and ecology works would be perceived on open land to the immediate south of the A57, near to the boundary of Dunham on Trent

A.11.19.11. Whilst the perception of these changes would be of an activity of a greater scale than farming, they would however be perceived over a very small geographic extent within Dunham on Trent and beyond the A57. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on MNF PZ 08: Upton Laneham, due to the barely perceptible alteration to the landscape features and character of Dunham on Trent and the unsettled character to part of its immediate setting.

A.11.19.12. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.19.13. Given the approximately 100m between the proposed solar panels within the Order Limits and the boundary of Dunham on Trent, there would be no physical changes to the landscape features of Dunham on Trent at operation. Newly planted trees and hedgerows within the Order Limits would be yet to mature and offer little in terms of screening, and so solar panels and ancillary structures would be perceived beyond the boundary of Dunham on Trent, on the open land to the south of the A57. This would introduce renewable energy equipment in the setting of Dunham on Trent, in contrast to undeveloped arable land and a more rural character.

A.11.19.14. These changes to land use, vegetation cover and the open character of the fields in the setting of Dunham on Trent, would be perceived over a very small geographic extent within Dunham on Trent. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on Dunham on Trent due to the barely perceptible alteration to its character.

A.11.19.15. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.19.16. At year 15, the new trees and hedgerows within the Order Limits would have established and matured. The greater height and density of new planting would reduce the perception of the panels and associated equipment to the south of Dunham on Trent. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.19.17. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on Dunham on Trent due to the limited perception of the Proposed Development.

A.11.19.18. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the operational phase.

Decommissioning (winter)

A.11.19.19. During the decommissioning phase, there would be activity arising beyond Dunham on Trent from the disassembly and removal of all above ground structures within the Order Limits which would be perceived approximately 100m to the south of Dunham on Trent due to being located across more open

land to the south of the A57. The impacts on Dunham on Trent would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.19.20. These changes would be perceived over a very small geographic extent within Dunham on Trent. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on Dunham on Trent.

A.11.19.21. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.19.22. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on Dunham on Trent, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.19.23. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on Dunham on Trent, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.20 Local Village Character Area: East Drayton

Baseline

A.11.20.1. East Drayton is located in the north-west of the study area and within Bassetlaw, Nottinghamshire. It is situated at the cross road junction centred on the Church of St Peter and is 1km to the north-west of the Order Limits.

Key characteristics

A.11.20.2. The key characteristics of East Drayton are as follows:

- *A nucleated village with a historic core defined by a collection of two storey farmsteads and cottages in red brick with clay pantiles.*
- *Modern ribbon development and conversion of farmsteads to industrial sheds around the fringes with more varied architecture and building materials.*

- *Relatively peaceful and strong sense of remoteness influenced by the small to medium scale farmland adjoining the settlement edge.*
- *Cultural associations with Nicholas Hawksmoor, a famous architect in the C17 and C18.*
- *The Grade I listed Church of St Peter forms a local landmark in the centre of the village and dates from the end of the C12.*
- *Public rights of way connecting with neighbouring villages.*

Landscape sensitivity

Value

A.11.20.3. East Drayton contains an abundance of historic buildings and structures, many of which are listed and/or within the conservation area. The historic core remains in good condition and with very limited incongruent development which contributes to a strong sense of place and time depth. East Drayton is also associated with famous architect Nicholas Hawksmoor.

A.11.20.4. East Drayton is well-connected to the countryside and neighbouring villages by public right of ways and the general absence of urbanising features in and around the village contributes to the sense of remoteness.

A.11.20.5. Overall, the value attached to East Drayton is High.

Susceptibility to change

A.11.20.6. East Drayton is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined as being relatively peaceful and a strong sense of remoteness influenced by the small to medium scale farmland adjoining the settlement edge. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 1km between East Drayton and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.20.7. Overall, the susceptibility to change of East Drayton is Very Low.

Sensitivity

A.11.20.8. The landscape of East Drayton contains many indicators of landscape value and is not covered by any statutory landscape designations. The overall character of East Drayton also offer many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, East Drayton has a Medium sensitivity.

Magnitude of change and significance

A.11.20.9. East Drayton is located 1km to the north-west of the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation and undulating landform would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no effect on the character of East Drayton.

A.11.21 Local Village Character Area: Fledborough

Baseline

A.11.21.1. With reference to **Figure 9**, Fledborough is located in the centre of the study area and within Bassetlaw, Nottinghamshire. It is situated along the western bank of the River Trent, north of Fledborough Viaduct and includes land within the Order Limits

Key characteristics

A.11.21.2. The key characteristics of Fledborough are as follows:

- *A small, dispersed hamlet with historic references in the Domesday Book.*
- *Large farmsteads and detached cottages in red brick and white render with clay pantiles, infrequently spaced along rural lanes.*
- *Views out across the Trent valley heavily influenced by electricity pylons, substation and cooling towers.*
- *Cultural associations with Fledborough Viaduct which historically carried the double-track Lancashire, Derbyshire and East Coast Railway over the River Trent.*
- *The Grade I listed Church of St Gregory forms a modest landmark and features many architectural alterations which provides a sense of time depth.*

Landscape sensitivity

Value

A.11.21.3. Fledborough contains a few well-kept listed historic buildings on the banks of the River Trent that offer a dimension of time depth. There are also strong ties with the Fledborough Viaduct which adds to its cultural interest. Fledborough is served by many public right of ways which provide good recreation links with the wider countryside within the Trent valley.

A.11.21.4. Electricity pylons and overhead cables however detract from the appreciation of the landscape surrounding the hamlet. Further, the dispersed character of generally unremarkable agricultural buildings weakens the settlement identity.

A.11.21.5. Overall, the value attached to Fledborough is Medium.

Susceptibility to change

A.11.21.6. Fledborough is situated partly within the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are its dispersed character and associations with the Fledborough Viaduct. The settlement setting is also particularly susceptible to the Proposed Development although the existing presence of electricity infrastructure within the Trent valley partly reduces the susceptibility of the perceptual qualities to change.

A.11.21.7. Overall, the susceptibility of change of Fledborough is High.

Sensitivity

A.11.21.8. The landscape of Fledborough contains some indicators of landscape value but is not covered by any statutory landscape designations. The overall character of Fledborough also offer limited opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Fledborough has a High sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.21.9. During the construction period there would be a presence of construction activity, workers compounds and partially completed structures within the Order Limits which would have direct effects on the character area. The construction works and activity would represent a change of land use from predominantly agricultural to an active construction site (and therefore activity and machinery of a far greater scale than general farming) as well as the physical loss of landscape features such as hedgerows and riparian vegetation.

A.11.21.10. The construction works would mirror that set out at the Site level, and involve topsoil stripping and storage, the gradual installation of solar arrays, and landscape and ecology works. There would be a temporary presence of construction lighting and secondary construction compounds, and the activity of construction plant and machinery within the north, west and south of the character area within the Order Limits would also be perceived from areas within Fledborough. The construction of the cable corridor would be located within Fledborough and together with the establishment of construction access

and temporary haul roads would contribute to the removal of hedgerows and trees.

A.11.21.11. These changes would be of a far greater scale than general farming activity and would be located and perceived over a large geographic extent within Fledborough. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a High magnitude of change on Fledborough, due to the substantial alteration to the landscape features and character.

A.11.21.12. Overall, the High sensitivity assessed against the High magnitude of change would result in Major effects, which is significant.

Operation year 1 (winter)

A.11.21.13. The Proposed Development would introduce solar panels and ancillary structures into the landscape which would have directs effects on Fledborough due to being located across the western part of the character area within the Order Limits. There would be extensive landscape and ecology areas across the eastern part of the character, within the Order Limits. Land within the Order Limits within Fledborough would therefore change in part from agricultural to an operational solar farm with associated lighting and security features, resulting in equipment and structures within an otherwise open landscape, as well as to an area of improved vegetation cover, even in winter and at year 1 in comparison to the fields. The operation phase would include the routine servicing of solar equipment including panel cleaning via tractor-mounted lighting every two years, plus further activities associated with panel replacement as required. The existing trees and hedgerows in and around the Order Limits within Fledborough would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1. Similarly, newly planted trees, hedgerows and grassland would be yet to mature at year 1, but still provide an increased and more varied vegetation cover than the existing fields.

A.11.21.14. In respect of the key characteristics, the solar panels would be encompassed by the inherent extent of the Order Limits as well as the proposed landscape and ecology areas to the west and south of the hamlet. . Large farmsteads and detached cottages would still be prevalent within Fledborough and visual links with the Fledborough Viaduct would be retained.

A.11.21.15. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a medium geographic extent within Fledborough. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed

Development would result in a High magnitude of change on Fledborough due to the substantial alteration to its character.

A.11.21.16. Overall, the High sensitivity assessed against the High magnitude of change would result in Major adverse effects, which is significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.21.17. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.21.18. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a High magnitude of change on Fledborough due to the substantial alteration in land use.

A.11.21.19. Overall, the High sensitivity assessed against the High magnitude of change would result in Major neutral effects, which is significant at year 15 of operation.

Decommissioning (winter)

A.11.21.20. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits including solar panels and ancillary structures. The effects on Fledborough would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.21.21. These changes would be perceived over a large geographic extent within Fledborough. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Medium magnitude of change on Fledborough.

A.11.21.22. Overall, the High sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant at decommissioning.

Cumulative effects of construction

A.11.21.23. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on Fledborough, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.21.24. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on Fledborough, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.22 Local Village Character Area: High Marnham

Baseline

A.11.22.1. With reference to **Figure 9**, High Marnham is located in the centre of the study area and within Bassetlaw, Nottinghamshire. It is situated along the western bank of the River Trent, south of Fledborough Viaduct and is to the immediate south of part of the Order Limits

Key characteristics

A.11.22.2. The key characteristics of High Marnham are as follows:

- *A small village centred around Hollowgate Lane with historic references in the Domesday Book.*
- *A mix of two storey properties and single storey mobile homes in a general linear pattern along Hollowgate Lane.*
- *Predominantly modern architectural styles with varied materials, and occasional late C19 cottages and farmsteads.*
- *Intervisibility with electricity infrastructure including the Marnham Substation and distant cooling towers.*
- *Marnham Hall (Grade II listed) has associations with the Cartwright family.*

Landscape sensitivity

Value

A.11.22.3. The cultural and historic interest of High Marnham derives from the large manor house of Marnham Hall which is listed and has ties with the noble Cartwright family. The southern boundary of the associated estate is also defined by deciduous woodland priority habitat which forms part of the wider green infrastructure network along the River Trent and its tributaries.

A.11.22.4. The general abundance of modern development and mobile homes have a negative influence on the distinctiveness of the village and its identity. There are few recreation links with the village and perceived tranquillity is eroded by the nearby electricity substation and associated pylons.

A.11.22.5. Overall, the value attached to High Marnham is Low.

Susceptibility to change

A.11.22.6. High Marnham is situated partly adjacent to the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are influenced by intervisibility with existing electricity infrastructure including the nearby Marnham Substation, which detracts from the tranquillity. However, the likelihood of undue changes to these perceptual qualities is reduced by the generally enclosed character of the village and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.22.7. Overall, the susceptibility to change of High Marnham is Very Low.

Sensitivity

A.11.22.8. The landscape of High Marnham contains few indicators of landscape value and is not covered by any landscape designations. The overall character of High Marnham also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, High Marnham has a Low sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.22.9. Construction of the Proposed Development would be located adjacent to the northern edge of High Marnham. There would be no physical changes to the landscape features, but there would be intervisibility and perception of the construction of the cable corridor.

A.11.22.10. Whilst these changes would be of a greater scale than general farming activity, they would however be located and perceived over a very small

geographic extent within High Marnham. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Low magnitude of change on High Marnham, due to the subtle alteration to the landscape features and character.

A.11.22.11. Overall, the Low sensitivity assessed against the Low magnitude of change would result in Minor adverse effect, which is not significant during construction.

Operation year 1 (winter)

A.11.22.12. There would be no physical changes to the landscape features at operation as the character area is not within the Order Limits. Also, with the grid connection below ground, there would be no perception of the Proposed Development. Therefore, the Proposed Development would result in no change and have no effect on the character of High Marnham.

Operation year 15 (winter and summer)

A.11.22.13. At year 15, the effects of the Proposed Development would mirror those set out above at year 1

A.11.22.14. At year 15, the Proposed Development would therefore result in no change and have no effect on High Marnham.

Decommissioning (winter)

A.11.22.15. During the decommissioning phase, there would be activity arising beyond the PZ from the disassembly and removal of all above ground structures within the Order Limits which would be perceived in views out of High Marnham. The effects on High Marnham would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.22.16. These changes would be perceived over a very small geographic extent within High Marnham. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on High Marnham.

A.11.22.17. Overall, the Low sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant.

Cumulative effects of construction

A.11.22.18. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on High Marnham, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.22.19. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on High Marnham, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.23 Local Village Character Area: Kettlethorpe

Baseline

A.11.23.1. Kettlethorpe is located in the north-east of the study area and within West Lindsey, Lincolnshire. It is situated between the A156 and A1133 to the east and west respectively and is beyond the Order Limits.

Key characteristics

A.11.23.2. The key characteristics of Kettlethorpe are as follows:

- *A small, linear village extending along Kettlethorpe Road.*
- *Predominantly two storey, detached cottages and farmsteads in large plots.*
- *A local vernacular consisting of red brick with clay pantiles and wrought iron detailing.*
- *A strong rural character influenced by connecting rural lanes and mixed farmland around the settlement edge.*
- *Some distant views of wind turbines and cooling towers from the fringes.*
- *Kettlethorpe Hall and the Church of St Peter and St Paul (both Grade II listed) form local landmarks and date back to C14 and C15 respectively.*
- *Associations with the Commonwealth War Graves at St Peter & St Paul's Church. Kettlethorpe Hall has associations with Swynford family.*

Landscape sensitivity

Value

A.11.23.3. Kettlethorpe has a strong sense of place largely influenced by a consistent building aesthetic, well-preserved built heritage assets and limited urbanising

influences. Kettlethorpe Hall and the Church of St Peter and St Paul also provide cultural and historic interest in the village.

A.11.23.4. Kettlethorpe exhibits notable woodland and tree cover, some of which is identified as deciduous woodland priority habitat, and collectively creates a distinctive sense of enclosure.

A.11.23.5. The village is served by recreational routes, whilst the appreciation of the rural and wooded landscape is slightly influenced by distant wind turbines and power stations.

A.11.23.6. Overall, the value attached to Kettlethorpe is High.

Susceptibility to change

A.11.23.7. Kettlethorpe is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by a strong rural character and occasional intervisibility with electricity infrastructure. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 1.5km between Kettlethorpe and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.23.8. Overall, the susceptibility to change of Kettlethorpe is Very Low.

Sensitivity

A.11.23.9. The landscape of Kettlethorpe contains many indicators of landscape value and is not covered by any statutory landscape designations. The overall character of Kettlethorpe also offer many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Kettlethorpe has a Medium sensitivity.

Magnitude of change and significance

A.11.23.10. Kettlethorpe is located 1.5km to the north of the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation and undulating landform would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no effect on the character of Kettlethorpe.

A.11.24 Local Village Character Area: Laughterton

Baseline

A.11.24.1. Laughterton is located in the north-east of the study area and within West Lindsey, Lincolnshire. It is situated along the A1133 to the west of Kettlethorpe and beyond the Order Limits.

Key characteristics

A.11.24.2. The key characteristics of Laughterton are as follows:

- *A medium scale planned village with archaeological links to a medieval settlement.*
- *Predominantly two storey detached properties interspersed with occasional bungalows and small holdings on the fringes.*
- *A range of modern architectural styles, building materials and boundary treatments.*
- *Urbanising influences from the A1133 which forms a busy through route bisecting the village.*
- *Intervisibility wind turbines and electricity pylons from around the southern part of the character areas.*

Landscape sensitivity

Value

A.11.24.3. Laughterton has some recreational value via public footpaths that connect with neighbouring villages to the east.

A.11.24.4. Laughterton is otherwise characterised by modern development with notable urbanising features and, contains no features designated or identified for their landscape value.

A.11.24.5. Overall, the value attached to Laughterton is Low.

Susceptibility to change

A.11.24.6. Laughterton is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by urbanising influences from the A1133 and intervisibility with electricity infrastructure which detracts from the tranquillity. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 1.5km between Laughterton and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.24.7. Overall, the susceptibility to change of Laughterton is Very Low.

Sensitivity

A.11.24.8. The landscape of Laughterton contains few indicators of landscape value and is not covered by any landscape designations. The overall character of Laughterton also offer many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Laughterton has a Low sensitivity.

Magnitude of change and significance

A.11.24.9. Laughterton is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation and undulating landform would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no effect on the character of Laughterton.

A.11.25 Local Village Character Area: Low Marnham

Baseline

A.11.25.1. Low Marnham is located in the south of the study area and within Bassetlaw, Nottinghamshire. It is situated of High Marnham and beyond the Order Limits.

Key characteristics

A.11.25.2. The key characteristics of Low Marnham are as follows:

- *A very small, nucleated village centred on St Wilfrid's Church and with references in the Domesday Book.*
- *Two storey, detached cottages, farmsteads and small holdings defined by clipped hedgerows, estate walls and fencing.*
- *Red brick with clay pantiles and timber-framed windows all common.*
- *Strong rural character and sense of remoteness, with a very limited perception of the neighbouring industrial estate and nearby pylons.*
- *The Grade I listed St Wilfrid's Church dating from the C12 is built in a Norman style and includes a stained-glass window designed by famous artist Edward Burne-Jones.*

Landscape sensitivity

Value

A.11.25.3. Low Marnham has a strong sense of identity defined by intact cottages and farmsteads with a traditional agricultural aesthetic together with perceived high levels of remoteness. St Wilfrid's Church and other listed built heritage assets also contribute to the historic and cultural interest.

A.11.25.4. Public right of ways links Low Marnham to neighbouring villages which allows for the appreciation of the Trent valley landscape, and to some extent creates recreational interest.

A.11.25.5. Overall, the value attached to Low Marnham is Medium.

Susceptibility to change

A.11.25.6. Low Marnham is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by a strong rural character and sense of remoteness with a very limited perception of industrial development or pylons. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 500m between Low Marnham and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.25.7. Overall, the susceptibility to change of Low Marnham is Very Low.

Sensitivity

A.11.25.8. The landscape of Low Marnham contains some indicators of landscape value and is not covered by any landscape designations. The overall character of Low Marnham also offers some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Low Marnham has a Low sensitivity.

Magnitude of change and significance

A.11.25.9. Low Marnham is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation and built form at High Marnham would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no effect on the character of effect on Low Marnham.

A.11.26 Local Village Character Area: Newton on Trent

Baseline

A.11.26.1. Newton on Trent is located in the north of the study area and within West Lindsey, Lincolnshire. It is situated adjacent to the A57 and beyond the Order Limits.

Key characteristics

A.11.26.2. The key characteristics of Newton on Trent are as follows:

- *A small to medium scale village with historic references in the Domesday book.*
- *Predominantly two storey, semi-detached properties and short terraces arranged in a loose grid pattern.*
- *Red brick and clay pantiles common, with some unique instances of painted black and white brick chequered detailing.*
- *Red brick boundary walls and properties fronting immediately onto the pavement contribute to the historic character and sense of time depth.*
- *Well-preserved farmhouses and cottages, some of which date from the C15 and are Grade II listed.*
- *The Church of St Peter (Grade II* listed) has associations with John Hunt, the early C19 missionary known for his Fijian mission.*
- *Links to nearby archaeological remains of Roman vexillation fortress, marching camps and monitoring post which is designated as a scheduled monument.*
- *Localised influences from road noise associated with A roads defining the eastern and southern settlement boundary.*

Landscape sensitivity

Value

A.11.26.3. Newton on Trent contains a collection of well-preserved historic buildings some of which are listed and have associations with renowned people and historic events. The local distinctiveness and sense of time depth is compounded by the building arrangement and other intact historic features. There is also archaeological interest provided by the nearby Roman fort.

A.11.26.4. Overall, the value attached to Newton on Trent is Medium.

Susceptibility to change

A.11.26.5. Newton on Trent is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by relatively strong sense of place with urbanising influences associated with A roads near to the settlement boundaries. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 300m between Newton on Trent and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.26.6. Overall, the susceptibility to change of Newton on Trent is Very Low.

Sensitivity

A.11.26.7. The landscape of Newton on Trent contains some indicators of landscape value and is not covered by any landscape designations. The overall character of Newton on Trent also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Newton on Trent has a Low sensitivity.

Magnitude of change and significance

A.11.26.8. Newton on Trent is located 300m to the north of the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation along the A57 and undulating landform would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning of the Proposed Development would result in no change and have no effect on the character of Newton on Trent.

A.11.27 Local Village Character Area: Normanton on Trent

Baseline

A.11.27.1. With reference to **Figure 9**, Normanton on Trent is located in the south-west of the study area and within Bassetlaw, Nottinghamshire. It is situated to the west of Low Marnham and is not within the Order Limits.

Key characteristics

1.1.1 The key characteristics of Normanton on Trent are as follows:

- *A small, nucleated settlement with its historic core centred on St Matthew's Church.*
- *Two storeys, detached and semi-detached cottages in red brick, clay pantiles and timber-framed windows.*

- *Modern ribbon development along Tuxford Road with a greater variety of building materials.*
- *Occasional intervisibility with electricity pylons and overhead cables from the western edge of the character area but otherwise a strong rural character and sense of remoteness.*
- *Many Grade II listed cottages, farmhouses and outbuildings extending from the C13 Church of St Matthew (Grade II* listed) which provides a sense of time depth.*

Landscape sensitivity

Value

A.11.27.2. The distinctiveness of Normanton on Trent is largely influenced by the many listed buildings concentrated in its historic core. The limited palette of building materials also positively contributes to the historic interest and sense of time depth.

A.11.27.3. Small blocks of deciduous woodland priority habitat around the settlement edge contribute to the green infrastructure network within the Trent valley, whilst adding to the perceived remoteness of the village. The village is also served by several public right of ways which offer opportunities to experience the Trent valley landscape and add to its recreational interest.

A.11.27.4. Overall, the value attached to Normanton on Trent is Medium.

Susceptibility to change

A.11.27.5. Normanton on Trent is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by occasional intervisibility with electricity pylons and overhead cables from the western edge of the character area but otherwise a strong rural character and sense of remoteness. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 200m between Normanton on Trent and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.27.6. Overall, the susceptibility to change of Normanton on Trent is Very Low.

Sensitivity

A.11.27.7. The landscape of Normanton on Trent contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of Normanton on Trent also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Normanton on Trent has a Low sensitivity.

Magnitude of change and significance

A.11.27.8. Normanton on Trent is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning phases of the Proposed Development would result in no change and have no effect on the character of Normanton on Trent

A.11.28 Local Village Character Area: North Clifton

Baseline

A.11.28.1. With reference to **Figure 9**, North Clifton is located in the centre of the study area and within Newark and Sherwood, Nottinghamshire. It is situated on the eastern bank of the River Trent, and is partly within the Order Limits.

Key characteristics

A.11.28.2. The key characteristics of North Clifton are as follows:

- *A small, clustered village concentrated along the High Street which is defined by narrow pavements and grass verges.*
- *A medieval settlement with historic references in the Domesday Book.*
- *Two storey cottages and farmsteads in varied plot sizes and orientations.*
- *Red brick is common and is sometimes found in combination with white render. Modern infill development introduces greater variety of materiality.*
- *Generally peaceful with only localised urbanising influences from the A1133 in the east.*
- *Occasional inter-visibility with electricity pylons and overhead cables across open farmland within the Trent valley.*
- *Strong cultural ties with Fledborough Viaduct through the former Clifton-on-Trent railway station which was situated along the Lancashire, Derbyshire and East Coast Railway.*
- *Cultural associations with the Pure Land Meditation Centre and Japanese Garden which has featured in the media.*
- *Physical and perceived links with South Clifton through North Clifton School and St George the Martyr Church (Grade II* listed) along Church Lane.*

Landscape sensitivity

Value

A.11.28.3. The value of North Clifton derives predominantly from its cultural heritage interest, local distinctiveness and recreational opportunities.

A.11.28.4. The village contains some grade listed buildings and has cultural associations with local landmarks and renowned features. The abundance of cottages and farmsteads with common materiality and limited urbanising influences also contribute to the settlement identity.

A.11.28.5. There are public right of ways which connect North Clifton with the wider Trent valley and provide a recreational value.

A.11.28.6. Overall, the value attached to North Clifton is Medium.

Susceptibility to change

A.11.28.7. North Clifton is situated partly within the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are its generally peaceful character, cultural ties with the Fledborough Viaduct and, the physical and perceived links with South Clifton. The settlement setting is also particularly susceptible to the Proposed Development although the existing presence of electricity infrastructure within the Trent valley partly reduces its susceptibility to change.

A.11.28.8. Overall, the susceptibility of change of North Clifton is High.

Sensitivity

A.11.28.9. The landscape of North Clifton contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of North Clifton also offers limited opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, North Clifton has a High sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.28.10. During the construction period, there would be landscape and ecology works in the south east of North Clifton which would generally reflect the scale and form of agricultural activity. Construction of the Proposed Development would otherwise be located outside North Clifton, specifically to the immediate north of the character area via solar panel construction and north-west, via landscape and ecology works, along with the trenchless crossing under the River Trent.

A.11.28.11. Whilst these perceived changes in the setting of the character area would be of a greater scale than general farming activity, their perception would be localised within North Clifton. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Medium magnitude of change on North Clifton, due to the partial alteration to the landscape features and character within the character area and adjacent to it.

A.11.28.12. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant, during the construction phase.

Operation year 1 (winter)

A.11.28.13. At year 1 of operation, the new landscape and ecology works in the south of North Clifton would be yet to mature but provide an improved vegetation cover in respect of the fields in winter. The existing trees and hedgerows in and around the Order Limits within North Clifton would reduce the perception of the solar panels to the north of the character area.

A.11.28.14. In respect of the key characteristics, the Proposed Development would result in the additional influence of energy infrastructure in its setting to the north. The physical character of the village would otherwise remain unchanged, along with the existing relationship between South Clifton.

A.11.28.15. These changes to land use, vegetation cover and the open character of the fields, would be perceived over a small geographic extent within North Clifton. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on North Clifton due to the barely perceptible alteration to its character.

A.11.28.16. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible beneficial effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.28.17. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment. The greater density of new planting would reduce the area over which changes to the character would be perceived

A.11.28.18. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Low magnitude of change on North Clifton due to the improved vegetation cover within the character area and its immediate setting.

A.11.28.19. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in a Minor beneficial effect, which is not significant, at year 15 of operation.

Decommissioning (winter)

A.11.28.20. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits which would be perceived adjacent to the boundary of North Clifton. The effects on North Clifton would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.28.21. These changes would be perceived over a small geographic extent within the North Clifton. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on North Clifton.

A.11.28.22. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant.

Cumulative effects of construction

A.11.28.23. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on North Clifton, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.28.24. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on North Clifton, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.29 Local Village Character Area: Ragnall

Baseline

A.11.29.1. With reference to **Figure 9**, Ragnall is located in the north-west of the study area and within Bassetlaw, Nottinghamshire. It is situated to the south-west of Dunham on Trent and north of Fledborough and is partly within the Order Limits.

Key characteristics

A.11.29.2. The key characteristics of Ragnall are as follows:

- *A very small, linear settlement stemming along Main Street and historic records in the Domesday Book.*
- *A mix of two storey, detached cottages and farmsteads with a short row of postwar semi-detached housing in the north.*
- *Predominantly red brick and clay pantiles.*
- *Low, red brick walls and estate fencing form common boundary treatments.*
- *Relatively peaceful with only localised influences from A57 road noise.*
- *Expansive views to the east across rolling farmland interspersed with electricity pylons and overhead cables within the Trent valley.*
- *A concentration of Grade II listed houses and farm buildings around the late C19 Church of St Leonard (Grade II* listed) provide a sense of time depth.*

Landscape sensitivity

Value

A.11.29.3. Ragnall has a strong sense of place defined by the collection of historic buildings and associated features, most of which are listed and in good condition, and limited urbanising influences. The situation of Ragnall on rising land allows for relatively elevated views across the Trent valley which also contributes to the scenic quality of the village.

A.11.29.4. Overall, the value attached to Ragnall is Medium.

Susceptibility to change

A.11.29.5. Ragnall is situated partly within and otherwise largely encompassed by the Order Limits to the east, south and west. Therefore, as well as potential physical changes to land use, landform and vegetation patterns around the village edge, the features of Ragnall that are particularly susceptible to the

Proposed Development are its relatively peaceful character and expansive views out across rolling farmland. The existing presence of electricity infrastructure nearby is likely to some extent reduce the susceptibility of its perceptual qualities to change.

A.11.29.6. Overall the susceptibility of change of Ragnall is Medium.

Sensitivity

A.11.29.7. The landscape of Ragnall contains some indicators of landscape value and is not covered by any statutory landscape designations. The overall character of Ragnall also offer some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Ragnall has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.29.8. During the construction period, there would be landscape and ecology works in the south east of Ragnall which would represent similar scale activity to general farming. The installation of solar arrays, presence of secondary workers compound and landscape and ecology works would be located in the western part of the character area, and also be perceived across part of the wider Order Limits.

A.11.29.9. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a Medium magnitude of change on Ragnall, due to the partial alteration to the landscape features and character and perception of the wider construction activity.

A.11.29.10. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse effects, which is significant, during the construction phase.

Operation year 1 (winter)

A.11.29.11. At year 1 of operation, the new landscape and ecology works within the character area would be yet to mature but would represent an improved vegetation cover in comparison to fields in winter. The existing trees and hedgerows in and around the Order Limits within Ragnall would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1.

A.11.29.12. In respect of the key characteristics, the Proposed Development would alter the land uses and setting to the character area, but the key characteristics of a linear settlement pattern bordered by fields would remain.

A.11.29.13. These changes to land use, vegetation cover and the open character of the fields, would be perceived in the context of overhead pylons extending to the east of the character area. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Medium magnitude of change on Ragnall due to the partial alteration to its character.

A.11.29.14. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate adverse, which is significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.29.15. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured, along with the proposed grassland forming a continuous sward beneath the panels and around the field margins in the western part of the character area. This would integrate the Proposed Development into the landscape to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. This would improve the vegetation cover, habitat connectivity and opportunities for biodiversity in comparison to the year 1 assessment across the south-eastern and north-western parts of the character area. The greater density of new planting would reduce the area over which changes to the character would be perceived, whilst the change in land use across the Order Limits would remain, like at year 1. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.29.16. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Low magnitude of change on Ragnall due to the change in land use.

A.11.29.17. Overall, the Medium sensitivity assessed against the Medium magnitude of change would result in Moderate neutral effects, which is not significant, at year 15 of operation. A neutral effect is considered on balance between the continued change in land use and improved green infrastructure.

Decommissioning (winter)

A.11.29.18. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the western part of the character area (within the Order Limits). The effects on Ragnall would be similar to that as described for construction, although it is assumed

that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.29.19. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Low magnitude of change on Ragnall.

A.11.29.20. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Minor adverse effects, which is not significant at decommissioning.

Cumulative effects of construction

A.11.29.21. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on Ragnall, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.29.22. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on Ragnall, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.30 Local Village Character Area: Skegby

Baseline

A.11.30.1. With reference to **Figure 9**, Skegby is located in the south-west of the study area and within Bassetlaw, Nottinghamshire. It is situated to the north of Normanton on Trent and west of High Marnham and in part adjacent to the Order Limits.

Key characteristics

A.11.30.2. The key characteristics of Skegby are as follows:

- *A small, linear hamlet extending along the western side of Skegby Road and with historic references within the Domesday Book.*
- *Large, detached residential properties and small holdings in large, enclosed plots set back from the road.*
- *A consistent use of red brick and clay pantiles is common.*

- *Relatively peaceful and general sense of remoteness.*
- *Easterly views of electricity network infrastructure towards the background.*
- *The late C18 manor house of Skegby Manor (Grade II listed) has associations with the Wade family.*

Landscape sensitivity

Value

A.11.30.3. Skegby contains well-kept historic buildings and structures some of which are listed and associated with the renowned Wade family. The hamlet also exhibits a relatively high tree cover which contributes to its distinctive rural character and the wider landscape structure.

A.11.30.4. Overall, the value attached to Skegby is Medium.

Susceptibility to change

A.11.30.5. Skegby is situated partly adjacent to the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined as relatively peaceful and general sense of remoteness, with occasional and distant views of electricity network infrastructure to the east. However, the likelihood of undue changes to these perceptual qualities is reduced by the generally enclosed character of the hamlet and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.30.6. Overall the susceptibility of change of Skegby is Low.

Sensitivity

A.11.30.7. The landscape of Skegby contains some indicators of landscape value and is not covered by any landscape designations. The overall character of Skegby also offer some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Skegby has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.30.8. Construction of the Proposed Development would be located outside but adjacent to the eastern edge of Skegby. There would be no physical changes to the landscape features, but the installation of solar arrays, presence of secondary workers compound and landscape and ecology works would be perceived at close range.

A.11.30.9. These changes would be of a greater scale than general farming activity. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore, the construction of the Proposed Development would result in a Low magnitude of change on Skegby, due to the subtle alteration to the landscape features and character.

A.11.30.10. Overall, the Medium sensitivity assessed against the Low magnitude of change would result in Moderate adverse effects, which is significant at year 1 during the construction phase.

Operation year 1 (winter)

A.11.30.11. Given the character area is not within the Order Limits there would be no physical changes to the landscape features at operation. Newly planted trees and hedgerows would yet to mature and offer little in terms of screening along the western edge of the Order Limits, and so solar panels and ancillary structures would be perceived adjacent to the boundary, on land to the east of Skegby Road.

A.11.30.12. However, the existing trees and hedgerows in and around the Order Limits within the PZ would integrate the Proposed Development into the landscape to some extent at year 1, although there would be localised reductions in hedgerow cover, as the new planting to replace that removed for construction access would not be fully established at year 1.These changes to the open character of the neighbouring fields, would be perceived from the settlement edge . As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on Skegby due to the barely perceptible alteration to its character.

A.11.30.13. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.30.14. At year 15, the effects of the Proposed Development would be similar to that described at year 1, except the new trees and hedgerows would have established and matured. This would integrate the Proposed Development into the landscape to a greater extent to a far greater extent than at year 1, even in winter due to the greater height and density of the proposed planting. The greater density of new planting would reduce the area over which changes to the character would be perceived. This, whilst the change in land use across the Order Limits would remain at year 1. The reduction would be most evident during summer months when vegetation and new planting is in leaf.

A.11.30.15. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on Skegby due to the barely perceptible alteration to its character.

A.11.30.16. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant at year 15 of operation.

Decommissioning (winter)

A.11.30.17. During the decommissioning phase, there would be activity arising from the disassembly and removal of all above ground structures within the Order Limits which would be perceived adjacent to the boundary of Skegby. The effects on Skegby would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.30.18. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on Skegby.

A.11.30.19. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant during decommissioning.

Cumulative effects of construction

A.11.30.20. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on Skegby, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.30.21. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on Skegby, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.31 Local Village Character Area: South Clifton

Baseline

A.11.31.1. With reference to **Figure 9**, South Clifton is located in the centre of the study area and within Newark and Sherwood, Nottinghamshire. It is situated on the eastern bank of the River Trent, south of the Fledborough Viaduct and North Clifton, but is not within the Order Limits, which border the northern and part of the eastern edges of the character area.

Key characteristics

A.11.31.2. The key characteristics of South Clifton are as follows:

- *A quaint farming village with historic references within the Domesday Book and well-preserved buildings that reveal its rich history, exemplified by the Conservation Area.*
- *Detached cottages and farmsteads defined by low boundary walls and arranged in a loose grid pattern.*
- *Red brick, painted white brick, and clay pantiles with wrought iron detailing are commonly used throughout. Herringbone brick pattern is also a distinctive feature.*
- *Very peaceful and general sense of remoteness contributing to a strong rural character.*
- *Views out across small scale pasture around the settlement edge, interspersed occasionally by electricity pylons within the Trent valley.*
- *Physical and perceived links with North Clifton through North Clifton School and St George the Martyr Church along Church Lane.*
- *Cultural associations with Dusty Fare, a world record rugby union try scorer who once lived and worked locally.*

Landscape sensitivity

Value

A.11.31.3. South Clifton contains a rich collection of buildings and features with special architectural and historic interest and which are designated as a conservation area and/or listed. The use of a common material palette together with some unique detailing adds to the local distinctiveness. The village remains in great condition and with very limited incongruent development which further contributes to a strong sense of place and time depth.

A.11.31.4. The Trent Valley Way long distance path passes through the village and together with several other public right of ways provides connections with neighbouring villages whilst allowing the Trent valley landscape to be

appreciated. The general absence of urbanising features in and around the village contributes to its scenic quality and sense of remoteness.

A.11.31.5. Overall, the value attached to South Clifton is High.

Susceptibility to change

A.11.31.6. South Clifton is situated partly adjacent to the Order Limits to the east and north. Therefore, the features of South Clifton that are particularly susceptible to the Proposed Development are its very peaceful character, views out across small scale pasture and, its physical and perceived links with North Clifton. The existing presence of electricity infrastructure within the Trent valley is likely to some extent reduce susceptibility of its perceptual qualities to change.

A.11.31.7. Overall, the susceptibility of change of South Clifton is Low.

Sensitivity

A.11.31.8. The landscape of South Clifton contains many indicators of landscape value but is not covered by any statutory landscape designations. The overall character of South Clifton also offers some opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, South Clifton has a Medium sensitivity.

Magnitude of change and significance

Construction (winter)

A.11.31.9. Construction of the Proposed Development would be located partly adjacent to the northern and eastern edge of South Clifton. There would be no physical changes to the landscape features, but the installation of solar arrays, presence of secondary workers compounds, and landscape and ecology works would be perceived on open land to the immediate east of the A1133, near to the boundary of South Clifton

A.11.31.10. Whilst these changes would be of an activity of a greater scale than farming, they would however be perceived over a very small geographic extent within South Clifton and beyond the A1133. The construction phase would last two years, which is considered to be short term and reversible, such that it is inherently temporary. Therefore the construction of the Proposed Development would result in a Very Low magnitude of change on South Clifton, due to the barely perceptible alteration to the landscape features and character of South Clifton and the unsettled character to part of its immediate setting.

A.11.31.11. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant, during the construction phase.

Operation year 1 (winter)

A.11.31.12. Given the approximately 100m between the proposed solar panels within the Order Limits and the boundary of South Clifton, there would be no physical changes to the landscape features of South Clifton at operation. Newly planted trees and hedgerows within the Order Limits would be yet to mature and offer little in terms of screening, and so solar panels and ancillary structures would be perceived beyond the boundary of South Clifton, on the open land to the east of the A1133. This would introduce renewable energy equipment in the setting of South Clifton, in contrast to undeveloped arable land and a more rural character.

A.11.31.13. These changes to land use, vegetation cover and the open character of the fields in the setting of South Clifton, would be perceived over a very small geographic extent within South Clifton. As the new planting would not be fully established at year 1, the changes arising from the Proposed Development are considered to be medium term and partly reversible. Therefore, at year 1, the Proposed Development would result in a Very Low magnitude of change on South Clifton due to the barely perceptible alteration to its character.

A.11.31.14. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Minor adverse effects, which is not significant at year 1 of operation.

Operation year 15 (winter and summer)

A.11.31.15. At year 15, the new trees and hedgerows within the Order Limits would have established and matured. The greater height and density of new planting would reduce the perception of the panels and associated equipment to the east of South Clifton. The reduction in the perception would be most evident during summer months when vegetation and new planting is in leaf.

A.11.31.16. The changes arising from the Proposed Development are considered to be long term and partly reversible. At year 15, the Proposed Development would result in a Very Low magnitude of change on South Clifton due to the limited perception of the Proposed Development.

A.11.31.17. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant, during the operational phase.

Decommissioning (winter)

A.11.31.18. During the decommissioning phase, there would be activity arising beyond South Clifton from the disassembly and removal of all above ground structures within the Order Limits which would be perceived approximately 100m to the east of South Clifton due to being located across more open land to the south of the A1133. The impacts on South Clifton would be similar to that as described for construction, although it is assumed that the landscape mitigation planting would have matured and would be retained, which would reduce the extent over which the changes would be perceived.

A.11.31.19. These changes would be perceived over a very small geographic extent within South Clifton. The decommissioning phase would last up to two years and be temporary which is considered to be short term and reversible. Therefore the decommissioning of the Proposed Development would result in a Very Low magnitude of change on South Clifton.

A.11.31.20. Overall, the Medium sensitivity assessed against the Very Low magnitude of change would result in Negligible adverse effects, which is not significant during the decommissioning phase.

Cumulative effects of construction

A.11.31.21. It is considered that at construction there would be no notable difference between the residual effects of the Proposed Development on South Clifton, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

Cumulative effects of operation

A.11.31.22. It is considered that at operation there would be no notable difference between the residual effects of the Proposed Development on South Clifton, and the cumulative landscape effects of the Proposed Development in addition with any other cumulative scheme.

A.11.32 Local Village Character Area: Spalford

Baseline

A.11.32.1. Spalford is located in the south-east of the study area and within Newark and Sherwood, Nottinghamshire. It is situated south-east of South Clifton and is not within the Order Limits.

Key characteristics

A.11.32.2. The key characteristics of Spalford are as follows:

- *A small, clustered hamlet at the convergence of rural lanes and historic references in the Domesday Book*
- *A tight-knit core defined by detached cottages in relatively small, enclosed plots.*
- *Predominantly two storey properties in red brick and clay pantiles.*
- *Small holdings defined by estate fencing contribute to strong rural character.*
- *Very limited urbanising influences and a relative tranquillity.*
- *Links to Spalford Warren, a rare reserve of sand-blown heath and conifer plantations which support important flora and fauna.*

Landscape sensitivity

Value

A.11.32.3. Spalford has some recreational value in the form of public rights of way that connect with neighbouring villages and the wider Trent valley to the west. The village also has links with Spalford Warren which contains wildlife and habitats of ecological interest, but is not within the character area.

A.11.32.4. Spalford is otherwise characterised by modern development with some urbanising features and, contains no features designated or identified for their landscape value.

A.11.32.5. Overall, the value attached to Spalford is Low.

Susceptibility to change

A.11.32.6. Spalford is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by very limited urbanising influences and a relative tranquillity. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 1km between Spalford and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.32.7. Overall, the susceptibility of change of Spalford is Very Low.

Sensitivity

A.11.32.8. The landscape of Spalford contains few indicators of landscape value and is not covered by any landscape designations. The overall character of Spalford also offer many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Spalford has a Low sensitivity.

Magnitude of change and significance

A.11.32.9. Spalford is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation within neighbouring field boundaries would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning phases of the Proposed Development would result in no change and have no effect on the character of Spalford.

A.11.33 Local Village Character Area: Thorney

Baseline

A.11.33.1. Thorney is located in the east of the study area and within Newark and Sherwood, Nottinghamshire. It is situated south of the A57 and north of Fledborough Viaduct and is beyond the Order Limits.

Key characteristics

A.11.33.2. The key characteristics of Thorney are as follows:

- *A small, linear village extending along Main Street with historic references in the Domesday Book.*
- *A few traditional farmsteads around the Church of St Helen, together with detached bungalows and semi-detached two storey properties in various modern styles.*
- *Red brick is common and is often found in combination with white render and different roofing tiles.*
- *General sense of remoteness influenced by small to medium scale farmland surrounding the settlement.*
- *The mid-C19 Church of St Helen (Grade II* listed) forms a local landmark and its churchyard features the ruins of the former C13 church which provides a sense of time depth.*

Landscape sensitivity

Value

A.11.33.3. Thorney contains some historic buildings and features concentrated around the Church of St Helen including the ruins of the former church which offers a dimension of time depth.

A.11.33.4. The village exhibits notable woodland cover, some of which is identified as deciduous woodland priority habitat, contributing to the wider landscape structure whilst creating a sense of enclosure. The village is also served by a

few recreational routes from where the surrounding wooded landscape can be experienced.

A.11.33.5. Overall, the value attached to Thorney is Medium.

Susceptibility to change

A.11.33.6. Thorney is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are defined by general sense of remoteness and largely influenced by small to medium scale farmland surrounding the settlement. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 400m between Thorney and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.33.7. Overall, the susceptibility of change of Thorney is Very Low.

Sensitivity

A.11.33.8. The landscape of Thorney contains some indicators of landscape value and is not covered by any landscape designations. The overall character of Thorney also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Thorney has a Low sensitivity.

Magnitude of change and significance

A.11.33.9. Thorney is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation including woodland blocks would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning phases of the Proposed Development would result in no change and have no effect the character of Thorney.

A.11.34 Local Village Character Area: Wigsley

Baseline

A.11.34.1. Wigsley is located in the south-east of the study area and within Newark and Sherwood, Nottinghamshire. It is situated to the east of South Clifton and south of Thorney and beyond the Order Limits.

Key characteristics

A.11.34.2. The key characteristics of Wigsley are as follows:

- *A small linear village with a relatively fine urban grain defined by closely-spaced buildings and narrow lanes.*
- *A mix of two storey traditional farmsteads and cottages with some modern bungalows in the north.*
- *Predominately red brick and clay pantiles, with some instances of white-painted brick and render.*
- *Consistently sized building plots defined by mature hedgerows and arranged in a loose grid pattern.*
- *Views across large arable fields adjoining the settlement edge.*
- *Cultural associations with Wigsley I Airfield, which is a former Home Defence landing ground during the World Wars.*

Landscape sensitivity

Value

A.11.34.3. Wigsley has some recreational value in the form of public rights of way that connect with neighbouring villages and the wider Trent valley to the west. The village also has links to historic events with the nearby former airfield.

A.11.34.4. Wigsley is otherwise characterised by modern development with some urbanising features and, contains no features designated or identified for their landscape value.

A.11.34.5. Overall, the value attached to Wigsley is Low.

Susceptibility to change

A.11.34.6. Wigsley is situated outside of the Order Limits and therefore the features that are particularly susceptible to the Proposed Development are the perceptual qualities. These are largely influenced by modern development and views across large arable fields. However, the likelihood of undue changes to these perceptual qualities is reduced by the approximately 1.5km between Wigsley and the Order Limits and the potential for intervening features to reduce any perception of changes within the Order Limits.

A.11.34.7. Overall, the susceptibility of change of Wigsley is Very Low.

Sensitivity

A.11.34.8. The landscape of Wigsley contains few indicators of landscape value and is not covered by any landscape designations. The overall character of Wigsley also offers many opportunities to accommodate the Proposed Development without being fundamentally altered. Therefore, Wigsley has a Low sensitivity.

Magnitude of change and significance

A.11.34.9. Wigsley is located outside the Order Limits, so there would be no physical changes to the landscape features resulting from any stage of the Proposed Development. The intervening vegetation including woodland blocks would also prevent any changes to its perceptual qualities. Therefore, the construction, operation, and decommissioning phases of the Proposed Development would result in no change and have no effect on the character of Wigsley.

Table 1 Landscape effects schedule

Receptor	Value	Susceptibility	Sensitivity	Construction		Operation year 1		Operation year 15		Decommissioning	
				Magnitude of change	Significance of effect	Magnitude of change	Significance of effect	Magnitude of change	Significance of effect	Magnitude of change	Significance of effect
Regional LCT 3a: Floodplain Valleys	High	Low	Medium	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
Regional LCT 4a: Unwooded Vales	High	Medium	Medium	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
Regional Character Area: East Nottinghamshire Sandlands	Medium	Medium	Medium	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
Regional Character Area: Mid-Nottinghamshire Farmlands	Medium	Medium	Medium	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
Regional Character Area: Trent Washlands	Medium	Low	Medium	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
East Nottinghamshire Sandlands PZ 01: North Clifton Village Farmlands	Medium	High	High	Medium	Moderate	Medium	Moderate	Low	Minor	Medium	Moderate
East Nottinghamshire Sandlands PZ 02: Wigsley Village Farmlands with Plantations	Medium	Medium	Medium	Low	Minor	Low	Minor	Low	Minor	Low	Minor
Trent Washlands PZ 17: Besthorpe River Meadowlands	Medium	Low	Medium	Low	Minor	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
Trent Washlands PZ 18: Low Marnham, Carlton and Sutton on Trent River Meadowlands	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A

Receptor	Value	Susceptibility	Sensitivity	Construction		Operation year 1		Operation year 15		Decommissioning	
				Magnitude of change	Significance of effect	Magnitude of change	Significance of effect	Magnitude of change	Significance of effect	Magnitude of change	Significance of effect
Trent Washlands PZ 20: Dunham on Trent Village Farmlands	Low	Medium	Medium	High	Major	Medium	Major	Medium	Moderate	High	Moderate
Trent Washlands PZ 43: Grassthorpe River Meadowlands	Medium	Low	Medium	Very Low	Negligible	No effect	N/A	No effect	N/A	Very Low	Negligible
Trent Washlands PZ 44: Fledborough Holme River Meadowlands	Medium	High	High	Low	Moderate	Very Low	Negligible	Very Low	Negligible	Very Low	Negligible
Trent Washlands PZ 45: Dunham Laneham River Meadowlands	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
Mid-Nottinghamshire Farmlands PZ 08: Upton, Laneham	Medium	Low	Medium	Very Low	Minor	Very Low	Minor	Very Low	Negligible	Very Low	Negligible
Mid-Nottinghamshire Farmlands PZ 09: East Drayton	Medium	Medium	Medium	Medium	Moderate	Medium	Moderate	Medium	Moderate	Medium	Moderate
Mid-Nottinghamshire Farmlands PZ 12: Normanton-on-Trent	Medium	Medium	Medium	High	Major	Medium	Moderate	Low	Minor	Medium	Moderate
LCA 2: Trent Valley	Medium	Medium	Medium	Very Low	Minor	Very Low	Minor	Very Low	Negligible	Very Low	Minor
LVCA: Darlton	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Dunham on Trent	Medium	Very Low	Low	Very Low	Negligible	Very Low	Minor	Very Low	Negligible	Very Low	Negligible
LVCA: East Drayton	High	Very Low	Medium	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Fledborough	Medium	High	High	High	Major	High	Major	High	Major	Medium	Moderate

Receptor	Value	Susceptibility	Sensitivity	Construction		Operation year 1		Operation year 15		Decommissioning	
				Magnitude of change	Significance of effect	Magnitude of change	Significance of effect	Magnitude of change	Significance of effect	Magnitude of change	Significance of effect
LVCA: High Marnham	Low	Very Low	Low	Low	Minor	No effect	N/A	No effect	N/A	Very Low	Negligible
LVCA: Kettlethorpe	High	Very Low	Medium	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Laughterton	Low	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Low Marnham	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Newton on Trent	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Normanton on Trent	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: North Clifton	Medium	High	High	Medium	Moderate	Very Low	Negligible	Low	Minor	Very Low	Negligible
LVCA: Ragnall	Medium	Medium	Medium	Medium	Moderate	Medium	Moderate	Medium	Moderate	Low	Minor
LVCA: Skegby	Medium	Low	Medium	Low	Moderate	Very Low	Minor	Very Low	Minor	Very Low	Minor
LVCA: South Clifton	High	Low	Medium	Very Low	Minor	Very Low	Minor	Very Low	Negligible	Very Low	Negligible
LVCA: Spalford	Low	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Thorney	Medium	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A
LVCA: Wigsley	Low	Very Low	Low	No effect	N/A	No effect	N/A	No effect	N/A	No effect	N/A

one earth

solar farm