Landscape and Visual Impact Assessment (LVIA).

Addendum Note to Landscape and Visual Assessment Technical Appendix 1 – Document Neo Environmental.

In Respect of Longhedge Solar Farm.
Prepared on behalf of Renewable Energy Systems (RES) Limited.

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1. Introduction and Scope of Report

1.1. Neo Environmental undertook a Landscape and Visual Assessment (LVA) which forms technical appendix one as part of the planning application documentation which is dated 30/11/2022. The scope of this technical report was to provide an assessment of the landscape and visual impact resulting from the proposed solar farm with associated infrastructure at Longhedge. See paragraph 1.1 of the LVA.

1.2. The report assessed the scheme that had been submitted to Rushcliffe Borough Council (RBC) for determination under the Town and Country Planning Act. As such the assessment did not assess the elements of the scheme that would be addressed by the Distribution Network Operator (DNO). I note that neither the LPA nor the Rule 6 landscape witnesses assessed the impacts of the grid connection infrastructure.

1.3. This report assesses the Landscape visual implications for the DNO elements of the scheme, namely the infrastructure to connect the substation to the National Grid. This additional assessment has been provided at the request of the Inspector and without prejudice to the question of whether the connection infrastructure forms part of the appeal scheme.

1.4. As part of the preparation for the application, RES liaised with the DNO to establish the nature and general design with regard to the connecting electricity infrastructure. In response, the DNO have identified two DNO substation scenarios, referred to as options 1 (CD1.16) and 2. (CD1.17).

1.5. For each option a set of 4 drawings has been prepared which show the footprint and layout in plan form (sheet 1). Sheet 2 shows the elevation of the proposal as elevation A. Sheet 3 shows elevation B and sheet 4 shows the connection infrastructure to the existing overhead line (OHL). These sets of 4 drawing sheets have been prepared for 2 design connection options; 1 and 2.

1.6. Option 1 proposed a lattice tower structure for the 132kV connection. This lattice tower would sit within a fenced compound of 15m2 for security. The lattice tower would form a terminal tower connecting to the substation. It would have an overall width of 16 metres and extend to 23 metres in height. The lattice tower would be comprised of a steel construction with a matt finish identical to the existing adjacent electric pylon towers (see drawings appendix 1 (CD1.16)).

1.7. Option 2 comprises a 132kV tower structure set within a 15m^2 security fence, this structure would comprise 2 wooden poles which would extend to 9 metres in height (see drawings appendix 2 (CD1.17)).

1.8. The Inspector has requested that each of the parties prepare and Landscape and Visual Impact Assessment (LVIA) for the DNO element of the project with regard to both options 1 and 2, and for each party the appellant, Local Planning Authority (LPA) and the Rule 6 Party to submit this documentation to the Inquiry by Friday 12 July. This document seeks to address this request.

1.9. This assessment assumes that for the construction period, this would be no worse than the fully completed structure in terms of landscape and visual effects and therefore the assessment documented assumes the same level of harm for the construction period as for the operational phase, as construction would range from 1% part completed to 99% part

completed, in terms of the phases of the construction phase. It is noted that the connecting pylon or wooden poles and substation would form part of the DNO infrastructure and would therefore remain and be permanent.

1.10. As set out in the methodology at Appendix 3, major degrees of effect would be deemed significant effects. The LPA and Planning Inspectorate have screened the scheme and determined that it does not constitute EIA development on the basis that it would not give rise to any likely significant effects on the environment. The screening was based on application plans and drawings which included the two grid connection options namely, lattice tower or wooden poles.

1.11. Appendix 12 to this report includes a series of photomontages which have been prepared for Viewpoints 1, 2 and 6 (dated 11/07/2024). It should be noted that the photomontages prepared for Viewpoint 6 (Figures 3a and 3b) in appendix 12 should supersede the previously submitted photomontages for Viewpoint 6 (Figures 3a and 3b - 21/06/2024) which were submitted for the 21/06/2024 deadline.

1.12. It should also be noted that the only changes to Viewpoint 6 (Figures 3a and 3b - 11/07/2024) which are appended to this report, and those previously submitted (21/06/2024), relate to the drawing title, and the addition of plan and elevation references added to the bottom of the page; there is no change to the actual photomontage visuals.

2. Description of the Proposals

2.1. The proposed substation is located centrally within field eight of the solar farm layout. The proposed DNO connecting elements would be located on the eastern side of the substation as indicated on the application plans. The DNO connection would be framed by solar panels immediately to the north which themselves would extend to the northern hedgy boundary of field 8. Immediately to the east of the DNO infrastructure lies the overhead 132kV line and towers, immediately beyond which and to the east of the line would be solar rays framed by an existing tree belt. Immediately to the south of the DNO connection would be solar panels framed by existing and proposed woodland to the south, whilst to the immediate west of the DNO element would be the Appellant's substation, beyond which further west would lie further solar panels, which would extend to the western boundary of field 8.

2.2. The lattice tower is proposed to be 23 metres and the wooden pole structure would be 9 metres, to put this in perspective a mature tree belt or woodland comprising climax tree species would be 20 – 23 metres in height. In the LPA's Wind Landscape Sensitivity Study (2014) Table 4.3 provides some useful examples of features in the landscape as size comparators regarding the heights of structures. Table 4.3 notes a range of structures and their heights as follows:

- Very small turbines 15 – 25 metres
- Mature deciduous trees dependent on species 10 – 25 metres
- Common pylon lattice tower 45 – 49 metres
- Ratcliffe on Soar Power Station chimney 199 metres

2.3. Given the proposed heights of the towers are 9 metres or 23 metres high these would be no higher than the mature trees and woodland in the locality.

3. Effect on Landscape Elements

3.1. This section assesses the effects on those landscape elements (features) that currently characterise the site itself. It particularly considers how the introduction of the DNO elements would physically affect the existing features present on the site.

Topography

Option 1

3.2. Only limited earthworks would be necessary to accommodate the proposed scheme. The structure would be constructed so that it would be at grade with the adjacent land. The susceptibility of the topography to the type of development proposed is considered to be medium which combined with a medium value would result in a medium sensitivity. Changes to the topographic profile would be very localised and would relate to the construction of the tower. Consequently, there would be no requirement for large-scale remodelling of the existing landform for the footprint of the tower. The overall magnitude of change to the ground profile of the site would be negligible. With a medium sensitivity and a negligible magnitude of change, the overall effect on the topography would be negligible adverse in terms of effect.

3.3. The cross sections (appendix 11) illustrate the topography across the site from on-site bridleway BW6 to Thoroton Road, adjacent to the southern boundary of the site (cross section A-C); and from bridleway BW6 to St Helena's Church (cross section B-C).

3.4. With option 1 in place there would be no change to the effects on topography to that identified in my proof of evidence in place, in combination with the overall solar farm (see my Proof of Evidence).

Option 2

3.5. Only limited earthworks would be necessary to accommodate the proposed scheme. The structure would be constructed so that it would be at grade with the adjacent land. The susceptibility of the topography to the type of development proposed is considered to be medium which combined with a medium value would result in a medium sensitivity. Changes to the topographic profile would be very localised and would relate to the construction of the tower. Consequently, there would be no requirement for large-scale remodelling of the existing landform for the footprint of the tower. The overall magnitude of change to the ground profile of the site would be negligible. With a medium sensitivity and a negligible magnitude of change, the overall effect on the topography would be negligible adverse in terms of effect. There would be no difference in terms of degree of effect with option 2 in place when compared to my findings in my proof of evidence in place, in combination with the overall solar farm (see my Proof of Evidence).

Trees and tree cover

Option 1

3.6. The location of the DNO tower would be positioned within the centre of an arable field. As a result, no trees or tree cover would be physically affected by the proposal. The existing tree

resource of the area is of a high-value susceptibility and sensitivity. There would be no magnitude of change combined with a high sensitivity would result in no effect on the tree resource of the site with the tower in place. With regard to tree resource the degree of effect on tree resource would not change to that identified in my proof with option 1 in place, in combination with the overall solar farm (see my Proof of Evidence).

Option 2

3.7. The location of the DNO tower would be positioned within the centre of an arable field. As a result, no trees or tree cover would be physically affected by the proposal. The existing tree resource of the area is of a high-value susceptibility and sensitivity. There would be no magnitude of change combined with a high sensitivity would result in no effect on the tree resource of the site with the tower in place. With regard to tree resource the degree of effect on tree resource would not change to that identified in my proof with option 2 in place, in combination with the overall solar farm (see my Proof of Evidence).

Hedgerows

Option 1

3.8. The location of the DNO tower would be positioned within the centre of an arable field. As a result, no hedgerows would be physically affected by the proposal. The existing hedgerow resource of the area is of a high-value susceptibility and sensitivity. There would be no magnitude of change combined with a high sensitivity would result in no effect on the tree resource of the site with the tower in place. With regard to hedgerows the degree of effect on hedgerows would not change to that identified in my proof with option 1 in place, in combination with the overall solar farm (see my Proof of Evidence).

Option 2

3.9. The location of the DNO tower would be positioned within the centre of an arable field. As a result, no hedgerows would be physically affected by the proposal. The existing hedgerow resource of the area is of a high-value susceptibility and sensitivity. There would be no magnitude of change combined with a high sensitivity would result in no effect on the tree resource of the site with the tower in place. With regard to hedgerows the degree of effect on hedgerows would not change to that identified in my proof with option 2 in place, in combination with the overall solar farm (see my Proof of Evidence).

Land Use/Land Cover/Openness

Option 1

3.10. The existing land cover is currently managed for arable farming and would be converted to grassland within the fenced enclosure for the tower. The fence would comprise of 1.2 metre-high stock-proof fence constructed of round timber posts and wide metal gauge fencing. Within this area, the land would be managed as grass and mechanically flailed annually to maintain it as grassland. The loss of agriculture arable would be limited to the enclosure for the tower demarcated by the fence which would remain through the option years and remain post decommission stage of the solar farm, in other words, it would be permanent infrastructure. With regard to land use/land cover/openness the degree of effect on land

use/land cover/openness would not change to that identified in my proof with option 1 in place, in combination with the overall solar farm (see my Proof of Evidence).

3.11. In terms of perceptual elements, the structure would introduce an element of built form where there is currently none and therefore have a bearing upon the sense of openness as it relates to this part of the site, however, this tower would be seen in conjunction with and adjacent to an existing tower and overhead 132kV line.

3.12. With a medium susceptibility and medium value resulting in a medium sensitivity combined with a negligible magnitude of change would result negligible adverse degree of effect with regard to land use and land cover associated with the site, the site being the fence enclosure for the tower.

Option 2

3.13. The existing land cover is currently managed for arable farming and would be converted to grassland within the fenced enclosure for the tower. The fence would comprise of 1.2 metre-high stock-proof fence constructed of round timber posts and wide metal gauge fencing. Within this area, the land would be managed as grass and mechanically flailed annually to maintain it as grassland. The loss of agriculture arable would be limited to the enclosure for the tower demarcated by the fence which would remain through the option years and remain post decommission stage of the solar farm, in other words, it would be permanent infrastructure. With regard to land use/land cover/openness the degree of effect on land use/land cover/openness would not change to that identified in my proof with option 2 in place, in combination with the overall solar farm (see my Proof of Evidence).

3.14. In terms of perceptual elements, the structure would introduce an element of built form where there is currently none and therefore have a bearing upon the sense of openness as it relates to this part of the site, however, this tower would be seen in conjunction with and adjacent to an existing tower and overhead 132kV line.

3.15. With a medium susceptibility and medium value resulting in a medium sensitivity combined with a negligible magnitude of change would result negligible adverse degree of effect with regard to land use and land cover associated with the site, the site being the fence enclosure for the tower.

Public Rights of Way

Option 1

3.16. There are a number of Public Rights of Way (PRoW) in the locality but none of these would be physically affected as functional access routes to the countryside with the proposed scheme in place. The nearest PRoW is located several hundred meters to the south beyond the site, reference FP2. With regards to PRoWs in the locality, no diversions of any routes would be required to facilitate the proposed tower. The PRoWs are considered to be of high susceptibility value and sensitivity which when combined with no magnitude of change would result in no physical degree of effect on the PRoW as a resource and facility. The visual effects upon users of PRoW are considered elsewhere in the LVIA. With regard to Public Rights of Way the degree of effect on Public Rights of Way would not change to that identified in my proof with option 1 in place, in combination with the overall solar farm (see my Proof of Evidence).

Option 2

3.17. There are a number of Public Rights of Way (PRoW) in the locality but none of these would be physically affected as functional access routes to the countryside with the proposed scheme in place. The nearest PRoW is located several hundred meters to the south beyond the site, reference FP2. With regards to PRoWs in the locality, no diversions of any routes would be required to facilitate the proposed tower. The PRoWs are considered to be of high susceptibility value and sensitivity which when combined with no magnitude of change would result in no physical degree of effect on the PRoW as a resource and facility. The visual effects upon users of PRoW are considered elsewhere in the LVIA. With regard to Public Rights of Way the degree of effect on Public Rights of Way would not change to that identified in my proof with option 2 in place, in combination with the overall solar farm (see my Proof of Evidence).

Water Features

Option 1

3.18. There are a number of small watercourses within the site itself, which are typical of features in the surrounding area. They are considered to have a medium susceptibility value and sensitivity to the type of development proposed. The tower is designed to be located away from the watercourse, such that none would be physically affected. With no magnitude of change, there would be no degree of effect upon water features within the site. With regard to water features the degree of effect on water features would not change to that identified in my proof with option 1 in place, in combination with the overall solar farm (see my Proof of Evidence).

Option 2

3.19. There are a number of small watercourses within the site itself, which are typical of features within the surrounding area, they are considered to have a medium susceptibility value and sensitivity to the type of development proposed. The tower is designed to be located away from a watercourse, such that none would be physically affected. With no magnitude of change, there would be no degree of change upon water features within the site. With regard to water features the degree of effect on water features would not change to that identified in my proof with option 2 in place in combination with the overall solar farm (see my Proof of Evidence).

Summary of Effects upon Landscape Elements

Table 1: Summary of Effects on Landscape Elements

Summary of Effects on Landscape Elements	Option 1 (lattice)	Option 2 (wooden poles)
Topography	Negligible (adverse)	Negligible (adverse)
Trees	No effect/ none	No effect/ none

Hedges	No effect/ none	No effect/ none
Land Use/Land Cover/Openness	Negligible (adverse)	Negligible (adverse)
Public Rights of Way	No effect/ none	No effect/ none
Water Features	No effect/ none	No effect/ none

4. Effect on Landscape Character

Introduction

4.1. This section of the report explains how the two options would have a bearing on the landscape character of the site and surrounding area. As defined in the GLVIA3 glossary landscape character is defined as ***"A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different to another…"***.

4.2. To further clarify a distinction in the use of terms, Landscape Character Areas (LCAs) are discrete geographical areas of a particular landscape, as opposed to Landscape Character Types (LCTs), which are defined in GLVIA3, page 157 as follows:

> ***"These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes."***

4.3. A number of landscape character assessments have been undertaken in recent years to identify landscape character types and areas and published to assist professionals in understanding how development can affect landscape character.

Effect on the Character of the Site

4.4. The proceeding section provided some narrative to explain how the proposed scheme would have a bearing upon the landscape elements of the site. With regard to the site itself, it is considered that the site is quite unremarkable in landscape character terms and in this regard, the site is considered to be of medium value and of medium susceptibility and sensitivity with regard to this proposal. This combined with a low magnitude of change with regard to the whole appeal site would result in an overall minor adverse effect upon the character of the site itself. The appeal site is currently characterised by one overhead 132kV overhead line which is suspended by a number of steel lattice towers. One of these towers is located immediately to the north of the site beyond Longhead Lane. The site itself accommodates three towers; one in field 5; one in field 6 and one in field 8 very close to the proposed DNO connecting tower. A further tower lies immediately to the south of field 8, north of Thoroton Road. A further tower lies to the south of Thoroton Road itself, close to the village of Thoroton. The proposed DNO connection tower would be located close to an existing tower to facilitate ease of connection into the overhead line.

National Level – National Character Area 48: Trent and Belvoir Vales

4.5. The site and the surrounding area are located within the National Character Area (NCA) 48: Trent and Belvoir Vales. This NCA forms part of an assessment of the character of England's landscape, first undertaken by the Countryside Agency but now the responsibility of Natural England. The key characteristics of this NCA are described on internal page 7 of the document as follows:

"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 floodplain 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 floodplain 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."

4.6. All of these key characteristics identified above would remain and prevail both within and beyond the site itself with the proposed tower in place. Any landscape character effects as a result of the tower options would be negligible beyond the boundaries of the site itself. There are a number of existing steel lattice towers across the site and as such the introduction of a further lattice tower would not introduce any new built infrastructure element that is not already present across the appeal site. Similarly, with regard to option 2

which envisages a double timber pole structure, there is an existing 33kV line extending across the site on wooden poles of a similar height therefore with the option 2 scenario the introduction of a double poke structure would not introduce any additional new feature to the site, as this type of built infrastructure already characterises the site itself as well as the wider surrounding area.

4.7. The last key characteristic of the Trent and Belvoir Vales notes that there are pylons and powerlines in the landscape. The proposal would not introduce any new built-form elements that are not already present in the locality but rather would reinforce the presence of these structures in the local landscape.

East Midlands Regional Landscape Character Assessment (2010)

4.8. The East Midlands Regional Landscape Character Assessment was published in April 2010 and was commissioned by the East Midlands Landscape Partnership and prepared by LDA Design Consulting LLP. The introduction recognises that this is a new tier in the landscape character assessment hierarchy in England and the first regional assessment to not only provide a comprehensive and detailed examination of the region's landscape but also to address seascape characterisation. It goes on to note that the character assessment identifies 31 Regional Landscape Character Types (RLCTs) which are split into 11 groups, the purpose of which is to provide a strategic regionwide evidence base to help decision-making on issues that will have implications for the landscape and wider environment.

4.9. The site and the immediate surrounding area (which includes the villages of Hawksworth and Thoroton) fall within Group 4, Lowland Vales and RLCT 4A, Unwooded Vales Key characteristics of RLCT 4A (CD3.29, appendices 4 and 12) relevant to the site and the locality include:

- ***"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."***

4.10. All of these key characteristics identified above would remain and prevail both within the site and beyond the site itself with the proposed tower (either option 1 or 2) in place. Any landscape character effects would be negligible beyond the immediate boundaries of the site, defined by the adjacent roads.

4.11. The proposed tower (either option 1 or 2) would not change these defining characteristics either within the site or beyond the site itself. The site would still be characterised by mixed agriculture and set within an enclosed and well-maintained hedgerow.

4.12. Under the heading 'Aesthetic and Perceptual Qualities' on page 140, the text notes that the RLCT is a simple and unified landscape type, consisting of a limited palette of features and elements, it is also described as a productive mixed farmland. With regards to landform, the text notes that the RLCT is typically low-lying and that the rising landform towards its fringes creates a sense of containment. Whilst wide panoramic views are noted as being possible from low hills and ridges, a more intimate character is stated as prevailing in the lower-lying areas particularly where intact hedgerow networks or belts of riverside trees truncate views. The RLCT is noted as relatively sparsely settled, with belts of trees around settlements integrating them into the landscape. Skylines are noted as often only being punctuated by church spires, noting that large-scale pylons exist on the site. The final paragraph covering aesthetic and perceptual qualities states that the RLTC has a strong agricultural character and a sense of rural tranquillity. The landscape beyond the site would retain its strong agricultural character as well as its sense of rural tranquillity.

Greater Nottingham Landscape Character Assessment (2009)

4.13. The Greater Nottingham Landscape Character Assessment forms one of the background documents that supported the preparation of the Rushcliffe Local Plan. The assessment identifies a series of Regional Character Areas (RLA), which are then further broken down into a series of Draft Policy Zones (DPZs).

4.14. The assessment locates the site and its locality within the South Nottinghamshire Farmlands RLA. Key characteristics of the RLA include:

- ***"This is a large tract of land between the southern edge of Greater Nottingham and the urban fringes of Newark;***
- ***It is closely associated with a belt of Triassic rocks to the south of the River Trent and is the largest single geological formation within Nottinghamshire;***
- ***The geology is mostly Mercia Mudstone which comprises reddish mudstones with occasional hard sandstone (Skerries). This is less developed than elsewhere in Nottinghamshire and creates a fairly uniform gently rolling lowland landform;***
- ***A low escarpment is present on the south eastern boundary where the uppermost beds of Mercia Mudstone pass onto Rhaetic beds;***

- *Alluvium is present in hollows and depressions laid down as a result of gypsum solution in the upper layers of the land surface. This formed lowlying alluvium separated by narrow mudstone ridges which are 5-10 metres above the alluvium;*

- *The highest land is along the edge of the Trent Valley where a line of hills falls sharply to the low-land of the Trent Washlands region;*

- *The land is dissected by streams in the north creating two prominent hills at Wilford and Clifton;*

- *Small nucleated settlements tend to be concentrated on traditionally high mudstone ridges; there is a lack of built form on lower alluvium basins;*

- *Closer to Nottingham, villages have expanded considerably which exerts an urbanising influence on the landscape;*

- *Arable farmland is predominant although pasture is present along some stream margins, escarpment slopes and village fringes;*

- *Uniform sometimes monotonous character created by large tracts of arable farmland with few other notable features;*

- *Strong pattern of medium to large-scale hedged fields with smaller village side pasture;*

- *Low-lying alluvium 'basins' such as Ruddington Moor, Bennington Fen and along the Rivers Smite and Devon are characterised by intensive arable farming with frequent ditches and drainage dykes. There is little woodland or hedgerows present in these areas;*

- Hedgerows are of variable condition, they tend to be intact along lanes and in pasture fields and less intact, smaller and often fragmented around arable fields;

- *Hedgerow trees are mostly ash with some oak and willow. Frequent young lime and horse chestnut trees have been planted along roads and are a notable feature;*

- *General lack of woodland within the area with few hedgerow trees enables open extensive views across the area;*

- *Where present woodland tends to be small geometric plantations, the general lack of woodland means these are prominent features;*

- *Pockets of isolated mature parkland are prominent wooded features; remnant parkland exists where land has been ploughed for arable farming;*

- *Trees and woodland along fringes of villages creates an impression of higher tree cover than actually exists; and*

- ***Frequent overhead lines and pylons are prominent vertical features, their scale emphasised by the lack of other vertical structures such as woodland"***

4.15. It is noted that one of the key characteristics of the farmland in this are the frequent overhead lines and pylons and the latter are prominent vertical features. Option 1 would introduce a further pylon within the appeal site where there are currently three already. With option 2 this would introduce two wooden poles, again a feature which is currently evident within the appeal site. All of these key characteristics identified would remain and prevail both within the site and beyond the boundaries of the site itself with the scheme in place. Any landscape character effects would be negligible beyond the environs of the site.

4.16. At the finest level of the study, the site is located within Draft Policy Zone (DPZ) SN06 Aslockton Village Farmlands. Characteristic features of DPZ SN06 include:

- ***Series of Mercia Mudstone outcrops and thin bands of lower-lying alluvial levels following rivers. The outcrops vary between 5 and 10m above adjacent levels; the most prominent being along Sutton Lane and Barnstone Lane in the south east of the area***

- ***A number of watercourses such as the River Smite and Devon flow through the landscape; they are lower than the surrounding ground with arable fields extending to their banks and little riparian vegetation. Therefore they are not easily discernible in the landscape***

- ***Rural remote and tranquil character comprising arable farmlands and a regular dispersal of small rural settlements***

- ***Land use is mostly arable although pasture is common around village fringes. Larger tracts are present where villages are situated close to each other and pasture extends between; these tend to have a slightly more enclosed and intimate character***

- ***Field pattern ranges from small-scale fields around village fringes to expansive large scale fields in open countryside***

- ***Field boundaries are almost all hedgerows which are of variable condition; they tend to be more intact around pasture fields where left to grow taller whereas in adjacent arable fields are often low and in places quite fragmented***

- ***There is a relatively low level of woodland cover with a regular pattern of small geometric and irregular shaped woodlands throughout; other woodland is often linear in character following the line of a former railway, around village fringes and where individual hedgerows are left to mature***

- ***Hedgerow trees are infrequent although clustered around pasture fields on village margins and within villages. Where hedgerows are often taller around arable fields trees tend to be less frequent. There are lots of young hedgerow trees planted as avenues along small lanes which will increase tree cover as they mature. These are mostly ash and horse chestnut***

- *The combination of taller hedgerows, hedgerow trees and scattered woodlands creates a dispersed wooded character and woodland is often a key component within skyline views*

- *Small parklands at Flintham, Langar, Whatton and Wiverton Hall are local wooded features*

- *Dispersed small rural settlements include both linear and nucleated patterns; they are often situated on the slightly higher Mercia Mudstone outcrops. Bingham is the only large commuter settlement within the DPZ and its northern and eastern edges are locally prominent in the landscape*

- *Villages of Elton on the Hill, Granby, Sutton and Barnstone are prominent on higher ground; they are seen mostly as a single line of dispersed housing set within trees*

- *Rooflines of villages are generally obscured by mature trees; where visible they appear dispersed and as individual or small groups of properties. Church towers and spires are prominent above the villages and are distinctive features within the landscape*

- *Villages are particularly distinctive often containing very little modern development; they are along narrow roads often bordered by red brick walls. All villages are well wooded with many mature trees along roads within small fields and open spaces within the villages and around their fringes*

- *Buildings within villages include small cottages and terraces and larger individual properties both set behind small and larger front gardens. Almost all are constructed of red brick with red pantile roofs although there is the occasional rendered or painted house. Villages often contain a few former farm buildings which are now converted to private residences.*

- *Churches within villages are almost all constructed from local stone and are either towers or spires and always set within mature grounds*

- *Narrow winding lanes are common throughout the landscape although a few straighter roads across lower lying land are present around Orston and Granby. Roads are characterised by often large verges or pockets of grassland. In these places, traditional gypsy caravans and horses grazing are sometimes present*

- *Scattered farmsteads, often constructed of red brick with small out buildings and barns are throughout the DPZ although not present on the lowest lying ground*

- *Pockets of rough grassland and village greens grazed by cattle are a feature of villages in the northern part of the area such as between Car Colston and Screveton*

- ***Many prominent overhead line routes are present within the landscape and are always visible on the skyline***

- ***Expansive long distance views across the landscape to the Belvoir Ridge to the south in Leicestershire"***

4.17. All of these key characteristics identified would remain and prevail both within the appeal site and beyond the boundaries of the site itself, with either DNO option in place landscape character effects would be negligible beyond the boundaries of the site.

4.18. With regards to the condition of DPZ SN06, the assessment assigns it a valuation of moderate, with the explanatory text noting that the area is characterised by very gently undulating landform and that the land is mostly arable farming with pockets of pasture which are more intimate in character close to village fringes. The landscape is also noted as being described as having a strong rural tranquil character. The Landscape character assessment notes that the local landscape is of moderate value. This combined with a medium susceptibility would result in a medium sensitivity and with a low magnitude of change with regard to the appeal site would result in a minor adverse visual effect upon the character of the appeal site itself, which takes into account either option in combination with the proposed solar farm and associated infrastructure.

Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development (2014) (CD 3.32-3.32.3)

4.19. The Council have not undertaken a landscape sensitivity study with regard to DNO electricity transmission lines, comprising overhead lines and pylon towers, even though these feature heavily in the Rushcliffe landscape centred on the Ratcliffe-on-Soar power station. The most noticeable elements are the lattice towers themselves, though due to their lattice construction, views pass through the structures which appear relatively transparent when seen in local landscapes. The characteristic of these towers is their verticality. The most relevant advice that is applicable here is the Rushcliffe Landscape Sensitivity Study with regard to wind energy as this specifically addresses turbines and the strong vertical form associated with them, accepting that wind turbines have moving blades and are a kinetic element when seen in the landscape whereas pylons are stationary with no moving parts and are relatively transparent, unlike the solid state structure of turbine towers. Therefore, the wind energy document is considered relevant, albeit not wholly applicable, in this regard.

4.20. LUC was commissioned by Melton and Rushcliffe Borough Council's in 2014 to undertake a study examining the sensitivity of the landscape to wind turbine development at a range of scales. In paragraph 1.6 the Council recognised the opportunities and need to maximise renewable energy regeneration whilst ensuring that important characteristics of the landscape are not unacceptably harmed. In order to understand and to accommodate wind turbines, the document recommends the appropriate scale of turbines within each of the borough's landscape character areas. In paragraph 1.10 the study is designed to enable positive planning for renewable energy and guide the determination of planning applications.

4.21. Para 1.13 notes that the landscape character assessment does not provide a definition of landscape sensitivity but does define landscape capacity as follows:

> ***"landscape capacity is the degree to which a particular landscape type or area is able to accommodate change without significant effects on its***

character or overall change of landscape character type. Capacity is also likely to vary according to the type and nature of change being proposed."

4.22. The document goes on to note at paragraph 1.14 that judging landscape character sensitivity requires professional judgement about the degree to which the landscape in question is robust, in that it is able to accommodate change without adverse impacts on character, whether or not significant characteristic elements of the landscape will be liable to loss and whether aesthetic aspects of character will be liable to change.

4.23. Paragraph 2.1 notes that to minimise effects on the landscape it is important to understand the characteristics of wind energy development and how this might effect the landscape. Para 2.3 notes the main visible components of a wind turbine are: the tower, the nacelle and rotor blades. Turbines are available in a wide range of sizes and lighting requirements vary on turbines depending on aviation. Paragraph 2.11 notes the turbines can be substantial vertical structures which will inevitably be highly visible within the landscape. The movement of the blades is a unique feature setting them apart from other tall structures in the landscape such a pylons. Wind energy development may affect the landscape in the following ways:

- Direct loss of landscape features
- Tall vertical structure that may alter the perception of the landscape
- Movement of blades may effect stillness and solitude and draw the eye to turbines
- Increased the perceived human influence on the landscape.

4.24. Section 2 of the report categorises turbines into 5 categories depending on their height, with the first category extending up to 25 metres in height. (Option 1 tower is 23 metres and option 2 tower is 9 metres high). The range of towers set out in the document extend up to 150 metres in height.

4.25. Section 3 of the report establishes the baseline landscape and refers NCA 48 Trent and Belvoir Vales. It notes there are a number of character studies that have been undertaken by the Council and refers to the Greater Nottingham Landscape Character Assessment 2009 which is divided into a number of zones (see Appellant's Landscape Proof of Evidence para. 5.38). Table 3.1 of the wind document identifies the site falling within the Aslockton Village Farmland (SN06) within South Nottingham Farmland which is reference number 25 within Rushcliffe Borough. The documentation regarding landscape character relies entirely on the Greater Nottingham Landscape Character Assessment 2009 and adds no further intelligence with regard to landscape character and appearance.

4.26. Table 4.4 identifies the criteria and guidance for assessing landscape sensitivity to wind energy and considers a number of parameters which are applied to each character area assessed. A plan identifies the Aslockton Village Farmland noting landmark features (church spires and towers) and conservation areas and is information taken into account. Aslockton Village Farmland is referenced as Landscape Character Unit 25 and the key characteristics which are referenced are those taken from the Greater Nottingham Character Assessment 2009. It has a section that addresses important landmarks and views and notes at paragraph 7.194 that there are no primary landmarks within this unit and refers to 1 key view for the Langar conservation area. It also notes church spires form local landmarks throughout the LCU.

4.27. On page 140 it notes that the sensitivity of the landscape to turbines up to a height of 25 metres is categorised as low (on a scale of low to high). Table 4.5 defines low sensitivity stating that:

> ***" Key characteristics and qualities of the landscape are robust and are less likely to adversely affected by the type and scale of the renewable development being assessed."***

4.28. It is noted that this assessment of sensitivity is for wind turbines with moving kinetic parts up to 25 metres in height.

4.29. This is concluded by noting a low to medium sensitivity for landform and scale (see table 7.25 within the study), medium sensitivity regarding land cover pattern and presence of human scale features; medium sensitivity for skylines; medium sensitivity for perceptual qualities; medium to high sensitivity for scenic quality and medium sensitivity for inter-visibility.

4.30. This sensitivity study is useful in that it has concluded the landscape is of low sensitivity for structures of up to 25 metres in height as far as the Council is concerned, noting both towers for options 1 and 2 are proposed are lower than 25 metres.

Solar Farm Landscape Sensitivity and Capacity Study

4.31. Separate to this document a note has been prepared to respond to the recently published document, referred to as Solar Farm Landscape Sensitivity and Capacity Study, published by Rushcliffe Borough Council on 4th July 2024.

4.32. I note that this document is dated 10th May 2024, which was well in advance of the Longhedge Inquiry sitting days. The document has been prepared on behalf of Rushcliffe Borough Council by ARUP Consultancy. The status of this document and the degree to which it can be relied upon is qualified on its cover page noting that only the Council and ARUP can rely upon the document, but otherwise the document should not be relied upon by any other third party. I am unaware of any consultation which has been undertaken on the document.

4.33. I note that there are no paragraph numbers in the Study, so any cross reference is by pagination. Section 1 notes that the benefits of renewable energy are well known and widely accepted. The purpose of the study commissioned in October 2023 sought to determine the sensitivity of the landscape to solar farm development across the entire borough to ensure that planning applications adhere to the principles of sustainable development and provide an indicator of suitability mindful of the type of development and the host landscape.

4.34. The document provides guidance for the siting of solar farm development. I would refer the Inspector to a separate note that has been prepared by the appellant which reviews and comments upon this particular capacity study.

4.35. The study identifies 14 Landscape Character Areas and of those, with regard to large scale solar development only 3 areas (landscape types) in the district, are identified as having a high capacity to accommodate large scale solar development. The site and its immediate locality falls within 1 of only 3 such areas.

Analysis Concerning Effect on Landscape Character

4.36. At the National Character Areas (NCAs) and the regional and local landscape level, the proposed DNO tower would not change existing topography or drainage patterns. It would not change the local distinctive nature of these features and would be imperceptible at this scale.

4.37. The proposed tower (either option) would introduce vertical built form in a space where this is none currently but would be located close to an existing electricity tower. The proposed development would be contained within the existing landscape pattern and scale. Existing hedgerows would be retained with opportunities for hedge and tree planting to maintain and reinforce the key characteristics of the landscape.

4.38. The local landscape is assessed as being of medium susceptibility to change and has a medium value. I assess that the landscape has a medium value. This is in part due to it exhibiting some scenic value with medium recreational value.

4.39. Following a review of published local character assessments and review of the landscape sensitivity assessment, as well as considering the medium susceptibility to this change, and the medium value of the landscape, it is considered, at a local level, that the site has a medium sensitivity to the proposed development.

4.40. The proposed development would bring about a low magnitude of change with regard to the landscape character of the appeal site itself as the proposed tower (either option) would introduce some built form. There would be a negligible degree of effect upon the wider landscape beyond the site.

4.41. With a medium sensitivity to change and an overall low magnitude of change with either tower, there would be a minor (adverse) effect on the site itself and a negligible effect upon the wider landscape character beyond the site and its boundaries, in combination with the solar farm and associated infrastructure.

4.42. With either a lattice tower or wooden poles in place in combination with the wider built infrastructure of the solar farm would not change the overall degrees of effect that are set out in my proof of evidence with regard effects on landscape character. In other words, with either option in place neither would materially change the overall degree of effect that identified for the solar farm in my proof.

Effects Upon Thoroton Village

4.43. To the south-east of the site lies the village of Thoroton. This village has a rural context, characterised and defined by the agricultural fields that lie adjacent to the settlement and its residential curtilages. The existing field pattern around the perimeter of the village would remain unchanged with the proposed tower (either option) in place. The nearest field which lies to the north-west of the Thoroton Road and Shelton Road junction would remain free of bult form. The proposed tower (either option) would be set back from the village by this field which would continue to partly frame the northern part of the village. The closest point of the village to the proposed tower (either option) is the Thoroton Road and Shelton Road junction. From this highway location, the opportunity to observe the proposed tower (either option) would be very limited (see viewpoint 1) and once the perimeter hedgerow and proposed

woodland planting is established, around the south east perimeter of the site there would be a negligible effect upon views from this location on the northernmost point of the village. There is a public right of way FP2 which heads south-westward out of the village and again, the opportunity to observe the proposed tower (either option) from this route close to the village would be very limited. The landscape character that forms the immediate environs of the settlement would not materially change with the proposed tower (either option) in place.

Effects Upon Hawksworth Village

4.44. To the south-east of the site lies the village of Hawksworth. This village has a rural context, characterised and defined by the agricultural fields that lie adjacent to the settlement and its residential curtilages. The existing field pattern around the perimeter of the village would remain unchanged with the proposed tower (either option) in place. This includes a field which lies to the north-west of the Thoroton Road and Shelton Road junction. The proposed tower (either option) would be set back from the village by a field beyond the site which would continue to frame the eastern edge of the village. There is a public right of way FP3 which heads south-eastwards out of the village and again, the opportunity to observe the proposed tower (either option) from this route close to the village would be very limited. The landscape character that forms the immediate environs of the settlement would not materially change with the proposed tower (either option) in place.

Summary

4.45. With the proposed tower in place (either option) there would be a minor adverse effect upon the landscape character of the site itself. Beyond the boundaries of the appeal site the physical character of the surrounding landscape would remain and prevail with the proposed tower (either option) in place resulting in a negligible degree of effect upon the character beyond the site itself.

5. Effect on General Visual Amenity

5.1. Character and appearance are two different aspects.

5.2. This section addresses the effect of the proposed tower (both options) on the general visual amenity of the landscape and the perception of those visual receptors (people) using the landscape.

5.3. This assessment relates to the representative LVA viewpoints (CD1.21.4-7).

5.4. Visual amenity is defined on page 158 in the Glossary of Guidelines for Landscape and Visual Impact Assessment – Third Edition (April 2013) as:

> ***"The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area."***

5.5. This LVA analysis demonstrates that much of the landscape within the locality would be visually unaffected by the proposed tower (either option). In reality, the actual visual envelope from where the proposed scheme would be seen would be very limited and highly localised owing to the layering effect of vegetation, principally the extensive woodlands and hedges in the intervening landscape between the visual receptor (person) and the site boundary. Each of the eight LVA viewpoints are assessed for the purpose of this assessment of the two options for the tower.

5.6. The appreciation of views from the countryside is mainly gained from vantage points accessible to the public. The two main ways in which members of the public can gain an appreciation of views when in the countryside are primarily from public highways and by using the various public rights of way (PRoWs) that pass through the landscape.

5.7. Within the local area, the network of public highways is limited. It includes a number of unclassified roads that connect the various settlements in the landscape. The typical character of these minor roads tends to be narrow, with hedgerows, hedgerow trees and built form situated immediately beyond the metalled surface of the carriageway. Consequently, within the local landscape, the presence of such roadside vegetation and built form means that a road user using these highways often has only a restricted opportunity to gain views of the countryside. The view of the user is most often channelled along the lane itself in the direction of travel. The user's appreciation of the wider countryside is very much limited to the direction of travel and to a narrow landscape corridor associated with the highway in front of the vehicle. Thus, the opportunity to gain a panoramic appreciation of the landscape and of the proposed solar farm within the site would be very restricted.

5.8. Each of the eight LVA viewpoints have been assessed based on the methodology at appendix 3. Analysis of each of the viewpoints is set out in the visual summary schedule in appendices 4.1 and 4.2. These tables identify the degree of susceptibility value and sensitivity for each receptor which is assessed against the magnitude of change to give an overall degree of effect. The visual summary tables assess the proposal for the point of connection options; option 1 and 2 in combination with the solar farm and ancillary infrastructure for both years 1 and 10. It is noted that the nature of effect would be adverse (rather neutral or beneficial) and that the proposed tower (either option) would be permanent rather than time limited.

5.9. It is noted that viewpoint 6 is taken from a particular location on the bridleway to demonstrate views southward towards Thoroton Village. This viewpoint analysis is further supported with photomontages with regard to both options 1 and 2, see appendix 12. With regard to this particular viewing location either option; tower or poles, would be located behind an existing tree in the middle distance. Given that members of the public use this bridleway to travel both eastwards and westwards, the viewing experience is sequential and kinetic, therefore, at other locations on this route in the vicinity of viewpoint 6, they proposed tower would be seen in the far distance close to an existing tower but at a lower height. The alternative scenario to the proposed tower would be a double wooden pole structure would be barely visible in both the existing view as well as year 1 and year 10.

5.10. In summary, with either connection option seen in combination with the proposed solar farm this would not change the overall degrees of effect with regard to general visual amenity with regard to the assessed viewpoints as set out in my proof which solely addressed the solar farm.

5.11. Appendix 10 comprises 3 parts referred to as 10.1, 10.2 and 10.3 and show the visibility based on a bare earth scenario i.e. no vegetation of built form is taken into account. Appendix 10.1 shows the proposed tower assessed in isolation. Appendix 10.2 demonstrates theoretical visibility for option 2, whilst appendix 10.3 shows the theoretical visibility of the existing tower which at 29 metres high, is approximately 6 metres higher than the proposed tower, i.e. broadly equates to two further building storey higher (i.e. 32 metres per floor). Also these ZTV's need to be considered in landscape context of multiple pylon towers and located across this local landscape and as such, is documented in the Council's own capacity study with regard to Landscape Character. In summary, pylons are a frequent feature and considered an urban feature by the capacity study. Either connection option would, in reality be seen in the landscape in same viewing context as other multiple pylon towers and wooden poles structures.

6. Assessment of Options 1 and 2 in Isolation

6.1. Options 1 and 2 have been subject to a separate visual assessment as isolated elements, based on the LVA viewpoints (appendix 9.1 and 9.2).

6.2. Appendices 10.1-3 are three Zone of Theoretical Visibility plans which represent the 'theoretical visibility' of the two options along with an analysis of the theoretical visibility of the existing tower located in close proximity to the proposed substation. To perform the visibility analysis the following heights have been used for the proposed and existing built elements as follows, Option 1 lattice tower as 23.3m in height, Option 2 wooden poles as 9m in height, the existing 132kv tower, which is located close to the proposed substation location, identified on appendix 10.3 by the turquoise square is 29.09m in height.

6.3. Appendices 10.1 and 10.2 show Options 1 and 2 respectively based on a 'bare earth' scenario which does not take into account screening features such as areas of woodland or built form.

6.4. Appendix 10.3 demonstrates the theoretical visibility the existing 132kv tower; and demonstrates that there is very little difference between the theoretical visibility of both the existing (29.09m tower) and proposed (Option 1, 23.3m tower), whereas for Option 2 (9m wooden poles) the theoretical visibility is notably smaller.

6.5. Appendix 9.1 presents the visual analysis of the Option 1 (23.30m) lattice tower based on the LVA viewpoints. In all but two of the viewpoints (Viewpoints 1 and 2), the effects associated with Option 1 are assessed as either Negligible or None (no effect). At Viewpoints 1 and 2, the low magnitude of the effect at both years 1 and 10 on the medium sensitivity road receptors would result in minor adverse effects; the proposed lattice tower would be seen in the context of the existing 132kv tower. There is no scenario where the Option 1 tower would be seen in isolation, it would always be viewed in the context of the existing 132kv towers on the site.

6.6. Appendix 9.2 sets out the visual analysis of Option 2 (9m wooden poles) based on the LVA viewpoints. For all of the eight viewpoints the effects are assessed as either negligible or none (no effect) based on the analysis that either the wooded poles would be entirely screened from view by intervening woodland on the site, or where visible, the effect assessed would be no more than negligible.

7. Effect on Residential Visual Amenity

7.1. It is right to make a distinction between residential and general visual amenity. The latter term from a planning policy perspective usually relates to the public realm and the wider landscape whilst the former is concerned with the private visual amenity of an individual residential property.

7.2. The separation between what is a private interest and what should be considered in the public interest is clear. Private views have no status in terms of being part of statutory documentation, planning policy or guidance. Furthermore, it is noted that no individual has the right to a particular view but there does come a point where, by virtue of the proximity, size and scale of a given development, a residential property or properties would be rendered so unattractive as a place in which to live that planning permission should justifiably be refused. The test relates to the position which would pertain with the proposed schemes in situ, irrespective of the position beforehand. In other words, the test is not whether, in relative terms, a property would become a substantially less attractive place to live, the test is whether viewed objectively and in the public interest, a property would become an unattractive place in which to live. Such a situation if left unchecked would lead clearly to undesirable consequences. It is useful to pose the question:

> ***"Would the proposal affect the outlook of these residences to such an extent, i.e., be so unpleasant, overwhelming and oppressive that this would become an unattractive place to live?"***

7.3. The test of what would be unacceptably unattractive should be an objective test, albeit that professional judgment is required in its application to the circumstances of each particular case. There needs to be a degree of harm over and above an identified substantial adverse effect on a private interest to take a case into the category of refusal in the public interest. Change in the outlook from a property is not sufficient; indeed, even a fundamental change in outlook is not necessarily unacceptable.

7.4. It is worthy of note that the visual component of residential amenity should be addressed "in the round" taking into account factors such as distance, the direction of the view, the size of the solar farm and its layout, the layout of particular dwellings in terms of their floor plans, their garden environment, and the lines of sight towards the scheme.

7.5. It is that noted that there are some residential properties relatively close to the proposed location of the tower (either option).

7.6. Given the position of the tower (either option) and the distances between this proposed structure and the existing residential properties in Hawksworth and Thoroton and mindful that there is existing well-established vegetation including individual trees, tree belts and hedgerows along the boundary between the properties and the proposed tower (either option), and mindful of the proposed additional planting, any effect on the outlook for the elevations of these properties and their garden spaces would not breach the public interest test.

7.7. My Proof of Evidence considers effects upon residential visual amenity with regard to the proposed solar farm, with either of the connection options in place in conjunction with the solar farm this additional piece of apparatus would not change my overall findings in terms of effects on residential visual amenity.

8. Cumulative Effects

Introduction

8.1. The two tower options are considered with regard to cumulative landscapes and visual effects.

Landscape elements

8.2. The proposed tower (either option) would not have a cumulative effect with regard to landscape features other than a negligible effect upon the host field within which the tower enclosure is located.

Landscape Character

8.3. The local landscape character is punctuated with a significant amount of DNO electricity infrastructure ranging from 11 and 33kV overhead lines on wooden poles as per option 2, to 132kV pylon towers as per option 1. These are illustrated on two plans, the first of which shows the site and local energy infrastructure, with the second plan showing energy infra across the wider landscape.

8.4. Tower option 1 would introduce an additional lattice structure tower in a location where there are a number in the locality. Given the landscape has a medium susceptibility value and sensitivity combined with a low magnitude of change would result in a minor degree of effect with the proposed tower in place.

8.5. Tower option 2 would introduce an additional double wooden pole tower in a location where there are a number in the locality. Given the landscape has a medium susceptibility value and sensitivity combined with a low magnitude of change would result in a minor degree of effect with the proposed tower in place.

General Visual Amenity

8.6. With regard to option 1 this would involve a 23 metre high lattice tower which would be located in the middle of field eight close to the overhead line and existing pylon tower in the same field. From the surrounding viewpoints 1 – 8 the opportunity to observe the proposed tower would be very limited. The closest viewpoints would be 1, 2 and 7, which demonstrate the limited visibility of this option 1. See appendix 4.1.

8.7. With regard to option 2 this would involve a 9 metre double wooden pole tower which would be located in the middle of field eight close to the overhead line and existing pylon tower in the same field. From the surrounding viewpoints 1 – 8 the opportunity to observe the proposed tower would be very limited. The closest viewpoints would be 1, 2 and 7, which demonstrate the limited visibility of this option 2. See appendix 4.2.

Residential Visual Amenity

8.8. The nearest residential properties to the proposed tower (either option) are located at the northern end of Thoroton (see appendix 5). To understand the likely visual effect upon these

properties, viewpoint 1 provides a proxy viewpoint. This shows an existing pylon is visible in field eight behind an existing tree belt, but this existing tower will be taller than 23 metres. The proposed lattice tower (option 1) at 23 metres is likely to be just visible behind the tree belt for these properties. With a high susceptibility value and sensitivity for these properties combined with a low magnitude of change would result in a minor adverse visual effect. As the trees continue to mature in height this degrees of visual effect would reduce to negligible in the short term.

8.9. With regard to option 2 this would be on wooden poles at 9 metres in height and would be mainly screened from view for residents with high susceptibility value and sensitivity combined with a negligible magnitude would result in a negligible degree of effect.

Summary

8.10. It is considered that there would be no cumulative landscape or visual effects arising from either tower proposal. Furthermore, with either connection option in combination with the proposed solar farm this additional apparatus would not change my conclusions with regard cumulative effects as set out in my Proof of Evidence.

Appendix 1

DNO Tower Option 1

ELEVATION B

PLEASE NOTE THAT CUSTOMER SWITCHROOM AND METERING ROOM LAYOUTS ARE INDICATIVE ONLY. DETAILED DESIGN IS THE RESPONSIBILITY OF THE DEVELOPER.

SEALED CESSPOOL FOR WPD USE

15m HIGH COMMUNICATIONS TOWER

3000

3000

FLOODLIGHT/ CCTV COLUMN

FLOODLIGHT/ CCTV COLUMN

FLOODLIGHT/ CCTV COLUMN

10700

TX MARSHALLING KIOSK

6675

11800

4500

4025

3300

TRANSFORMER

3200

2000

SPARES CONTAINER

SPARES CONTAINER

HL BUSBAR SUPPORT

ANCHOR BLOCKS

LOW LEVEL DISCONNECTOR

SURGE ARRESTORS

LOW LEVEL DISCONNECTOR

CABLE TRENCH

10000

CIRCUIT BREAKER

VT's

HL BUSBAR SUPPORT

HIGH LEVEL DISCONNECTOR

VT's

132kV TOWER STRUCTURE

7500

7500

8000

CONTROL BUILDING

RESISTOR

HARMONIC FILTER

SWITCHROOM

CRANE HARDSTAND 16m X 50m APPROX.

HL BUSBAR SUPPORT

LOW LEVEL DISCONNECTOR

SURGE ARRESTORS

SINGLE POST INSULATOR SUPPORT

SINGLE POST INSULATOR SUPPORT

SINGLE POST INSULATOR SUPPORT

10000

PRE-INSERTION RESISTOR

CONTROL ROOM

TOILET

ANCHOR BLOCKS

HL BUSBAR SUPPORT

4500

4000

WPD COMPOUND

CAPACITOR CB

REACTOR CB

AUX TRANSFORMER

CAPACITOR SWITCH

CAPACITOR SWITCH

CAPACITOR BANK

CAPACITOR BANK

REACTOR

FLOODLIGHT/ CCTV COLUMN

FLOODLIGHT/ CCTV COLUMN

FLOODLIGHT/ CCTV COLUMN

EQUIPMENT ACCESS GATE

49500

2000

2.4m HIGH GALVANISED SECURITY PALISADE FENCE

41300

27000

2000

15750

1.2m HIGH STOCK FENCE

ELEVATION A

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE.
2. THIS DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE AT THE DETAILED DESIGN STAGE.
3. DRAWING BASED ON 04668-RES-SUB-DR-EE-001.
4. 132kV TOWER STRUCTURE SHOWN FOR ILLUSTRATIVE PURPOSES AND NOT FOR APPROVAL. TO BE CONSENTED BY NATIONAL GRID ELECTRICITY DISTRIBUTION.

SHEET 1
PLAN VIEW

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
3	FG	BY APPD	WB	2024-06-07	Minor amendment (note added)
2	SM	CW	CC	2022-05-04	Project name changed to Longhedge
1	SM	CW	CC	2022-04-29	First Issue

PURPOSE: PERMITTING

COORDINATES

SCALE: 1:150 @ A1

LEVEL DATUM: N/A

LAYOUT DWG: N/A

T-LAYOUT NO.: N/A

PROJECT TITLE
LONGHEDGE SOLAR FARM

DRAWING TITLE
FIGURE 12A
CLIENT/DNO SUBSTATION
PLAN & ELEVATION OPTION 1

RES DRAWING NUMBER: 04668-RES-SUB-DR-PT-001

REV: 3

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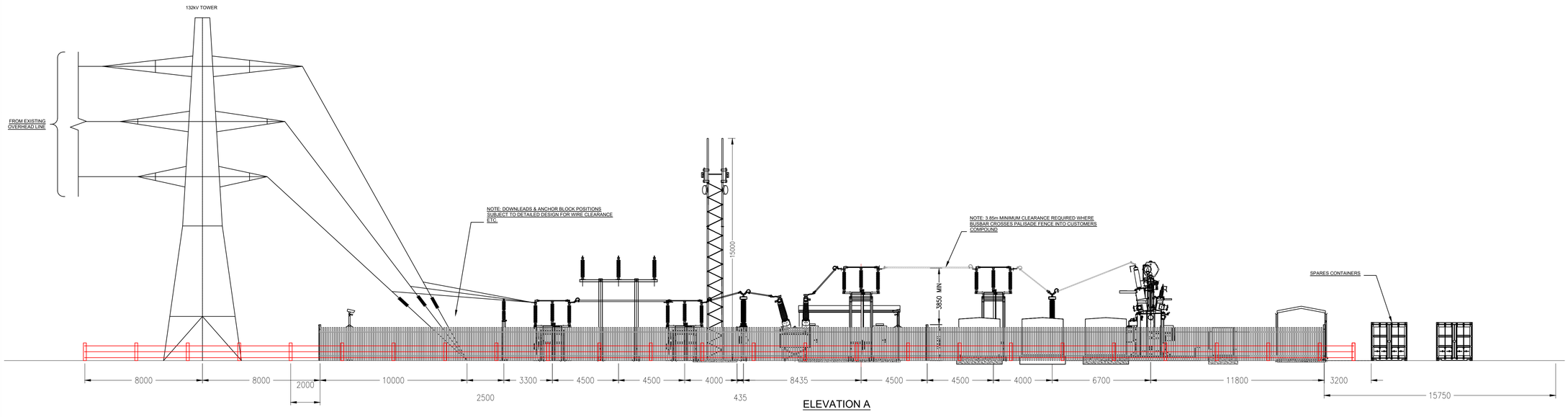
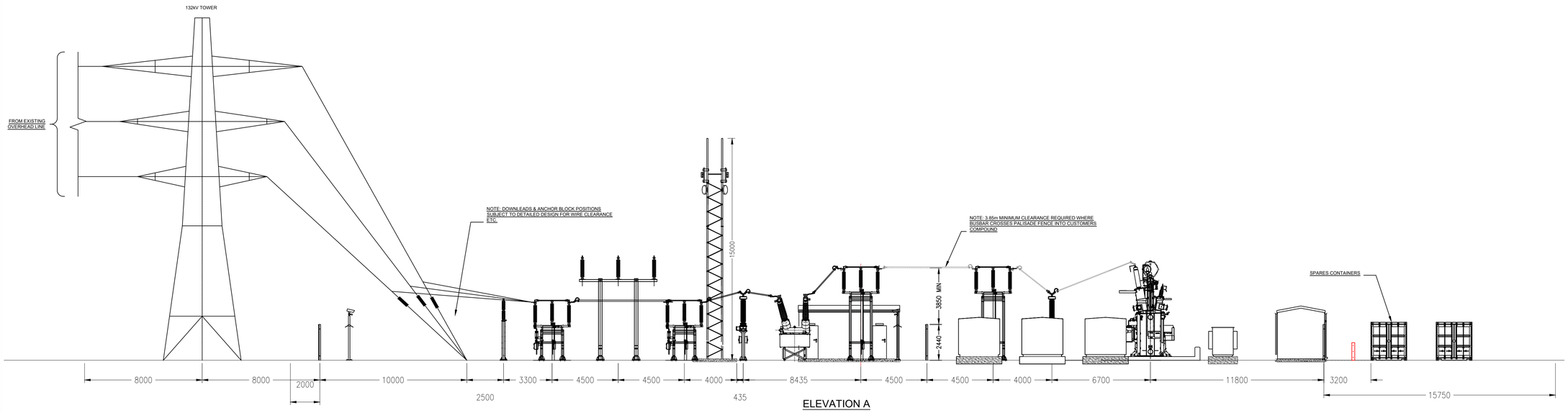


ELEVATION A



ELEVATION A

SHOWN WITHOUT FENCES FOR CLARITY

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE.
2. THIS DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE AT THE DETAILED DESIGN STAGE.
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4. 132kV TOWER STRUCTURE SHOWN FOR ILLUSTRATIVE PURPOSES AND NOT FOR APPROVAL. TO BE CONSENTED BY NATIONAL GRID ELECTRICITY DISTRIBUTION.

SHEET 2
ELEVATION A

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
3	FG	BY APPD	WB	2024-06-07	Minor amendment (note added)
2	SM	CW	CC	2022-05-04	Project name changed to Longhedge
1	SM	CW	CC	2022-04-29	First Issue

PURPOSE: PERMITTING
COORDINATES:
SCALE: 1:150 @ A1
LEVEL DATUM: N/A
LAYOUT DWG: N/A
T-LAYOUT NO.: N/A

PROJECT TITLE
LONGHEDGE SOLAR FARM

DRAWING TITLE
FIGURE 12A
CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1

RES DRAWING NUMBER: 04668-RES-SUB-DR-PT-001
REV: 3

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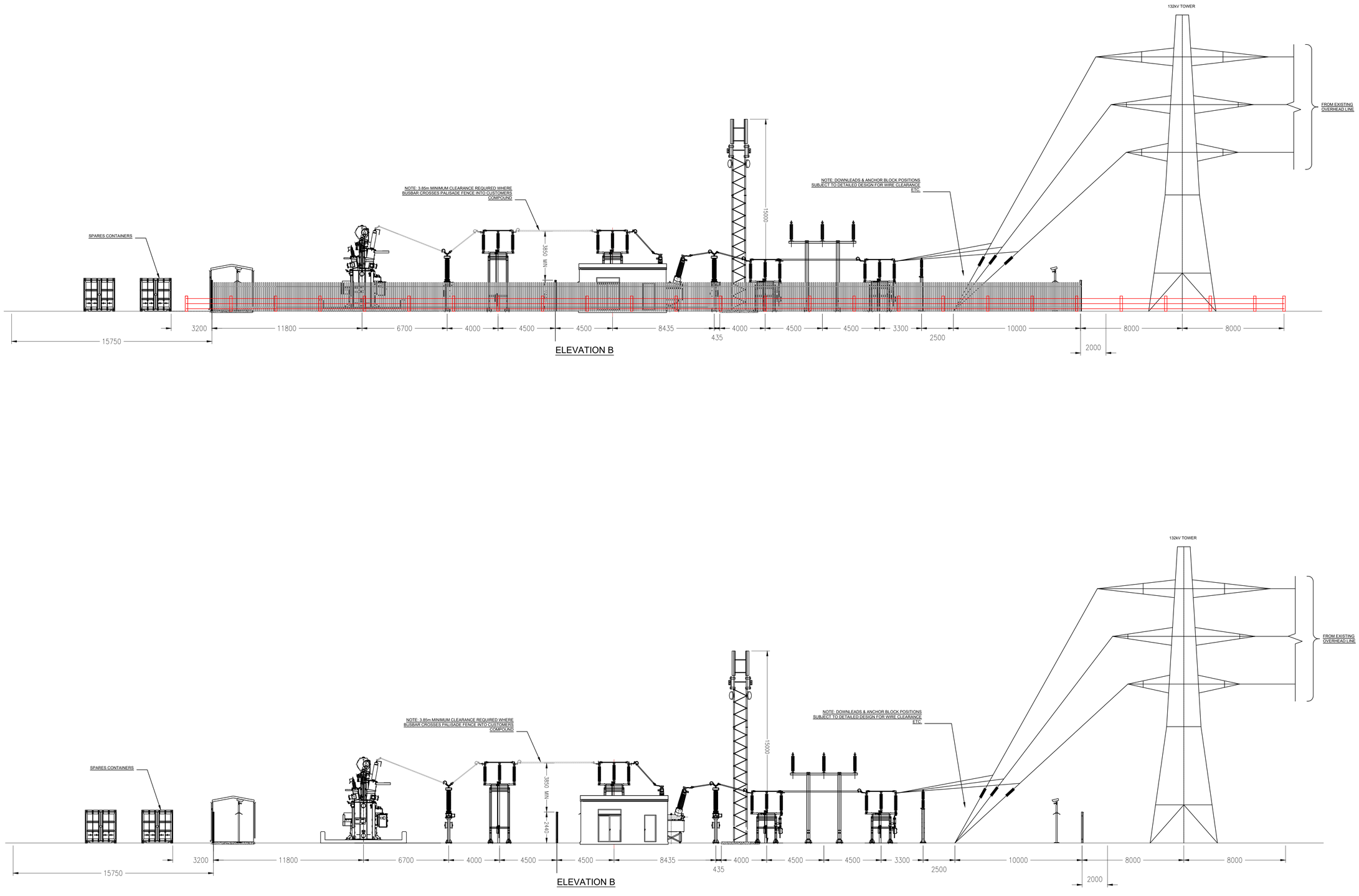

ELEVATION B

ELEVATION B

SHOWN WITHOUT FENCES FOR CLARITY

NOTES

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SHEET 3
ELEVATION B

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
3	FG	BY APPD	WB	2024-06-07	Minor amendment (note added)
2	SM	CW	CC	2022-05-04	Project name changed to Longhedge
1	SM	CW	CC	2022-04-29	First Issue

PURPOSE: PERMITTING
COORDINATES:
SCALE: 1:150 @ A1
LEVEL DATUM: N/A
LAYOUT DWG: N/A
T-LAYOUT NO.: N/A

PROJECT TITLE
LONGHEDGE
SOLAR FARM

DRAWING TITLE
FIGURE 12A
CLIENT/DNO SUBSTATION
PLAN & ELEVATION OPTION 1

RES DRAWING NUMBER: 04668-RES-SUB-DR-PT-001
REV: 3

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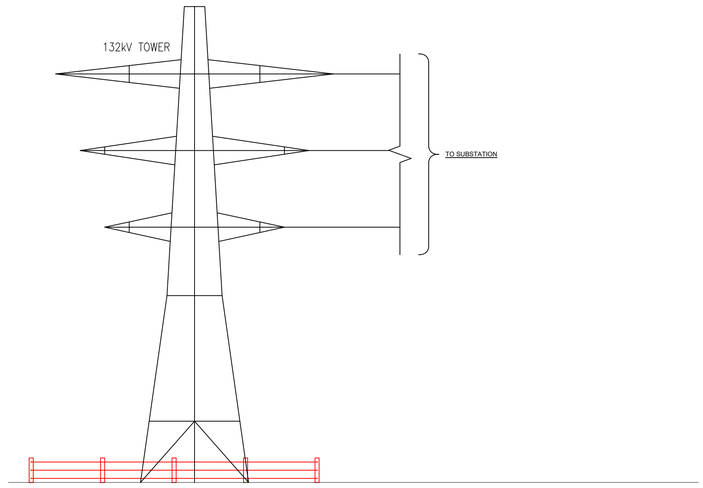

CONNECTION TO EXISTING OHL

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SOLAR FARM

DRAWING TITLE
FIGURE 12A
CLIENT/DNO SUBSTATION
PLAN & ELEVATION OPTION 1

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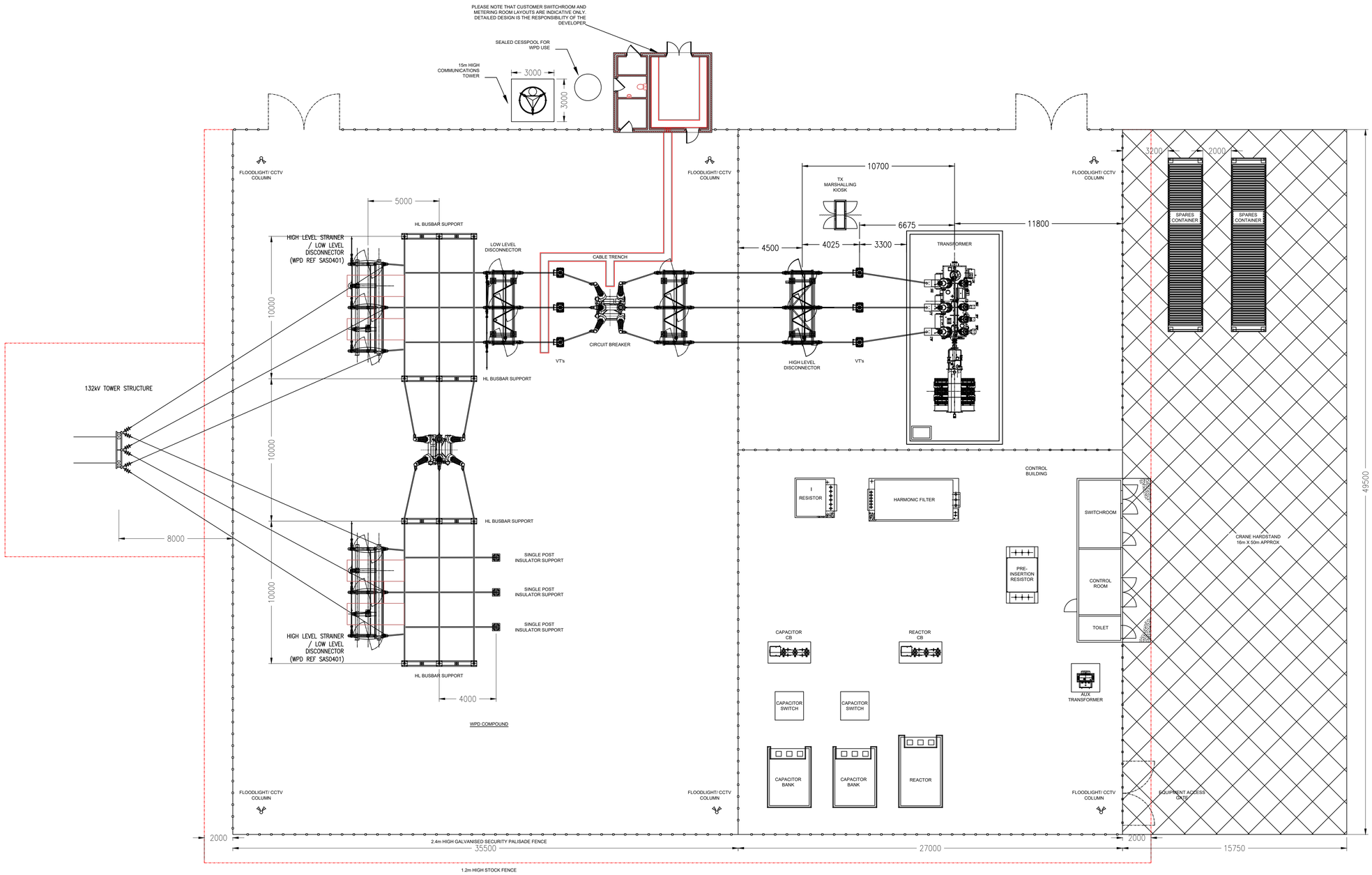
Appendix 2

DNO Tower Option 2

ELEVATION B



ELEVATION A

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SHEET 1
PLAN VIEW

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
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T-LAYOUT NO.: N/A

PROJECT TITLE
LONGHEDGE SOLAR FARM

DRAWING TITLE
FIGURE 12B
CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2

RES DRAWING NUMBER: 04668-RES-SUB-DR-PT-003
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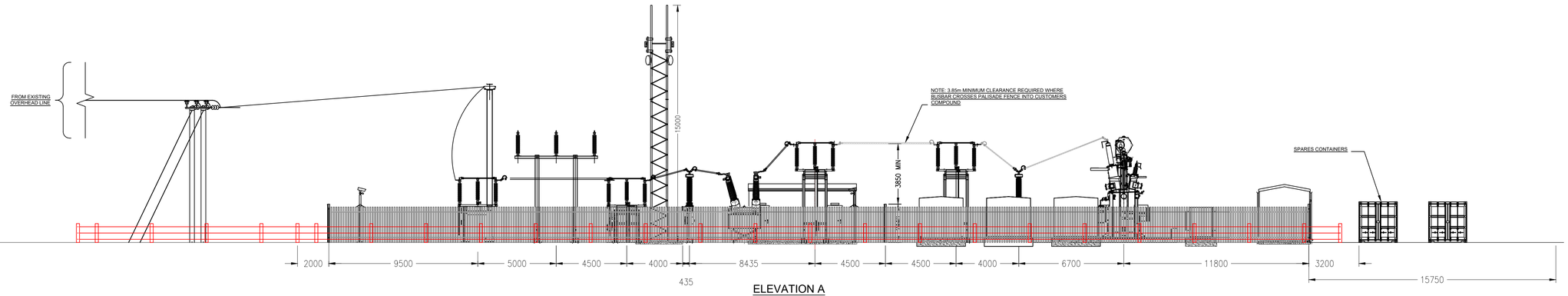
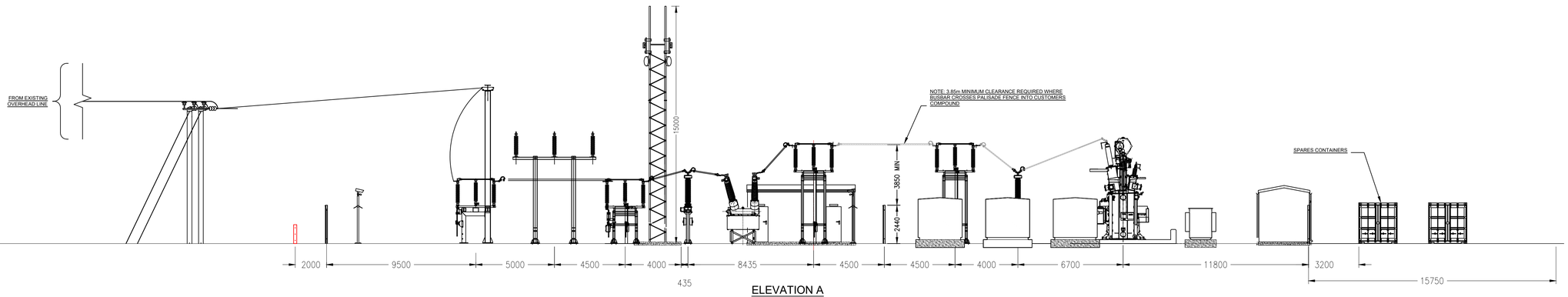


ELEVATION A



ELEVATION A

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SHEET 2
ELEVATION A

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PROJECT TITLE
LONGHEDGE
SOLAR FARM

DRAWING TITLE
FIGURE 12B
CLIENT/DNO SUBSTATION
PLAN & ELEVATION OPTION 2

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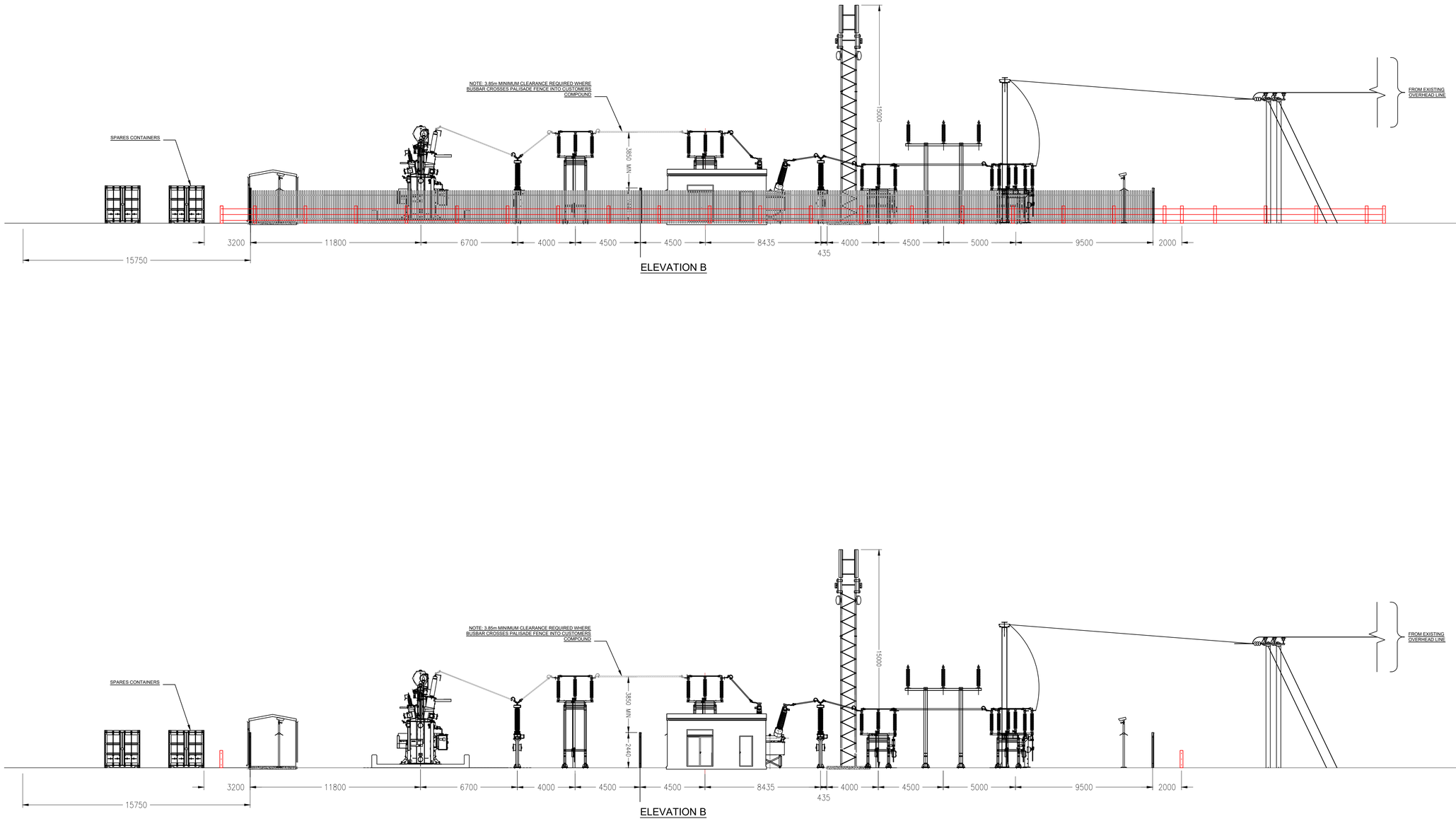

ELEVATION B

ELEVATION B

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FIGURE 12B
CLIENT/DNO SUBSTATION
PLAN & ELEVATION OPTION 2

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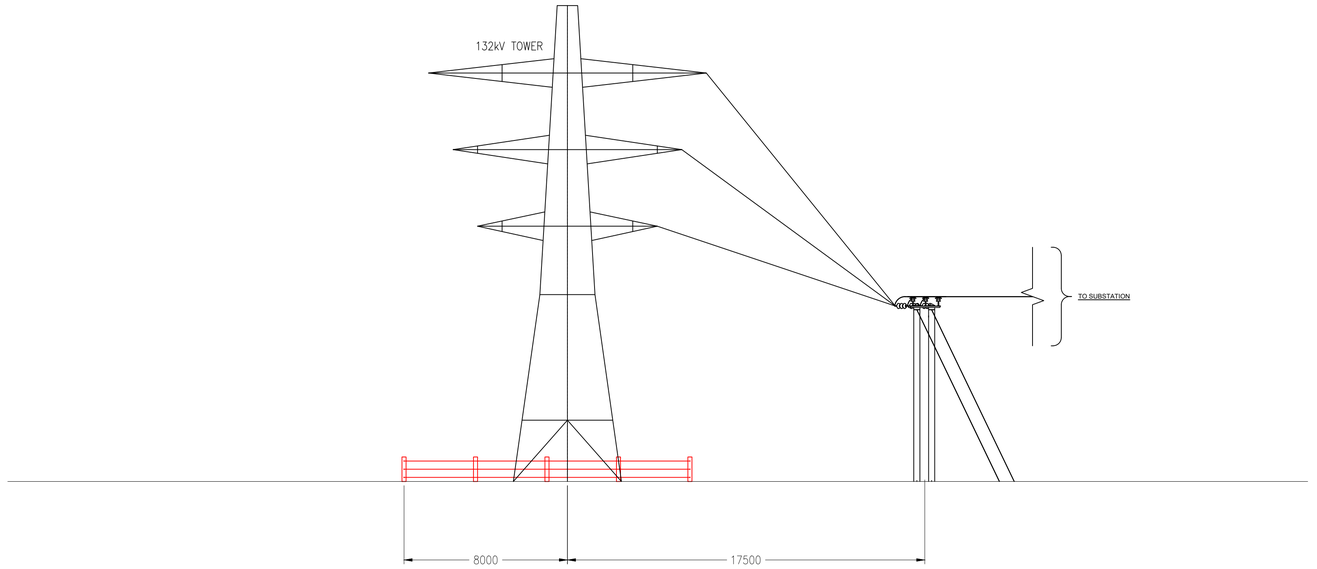

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PROJECT TITLE
LONGHEDGE SOLAR FARM

DRAWING TITLE
FIGURE 12B
CLIENT/DNO SUBSTATION
PLAN & ELEVATION OPTION 2

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Appendix 3

LVIA Methodology

1. LANDSCAPE AND VISUAL IMPACT ASSESSMENT METHODOLOGY

1.1 The Analysis is based on this methodology which has been undertaken with regards to best practice as outlined within the following publications:

- Guidelines for Landscape and Visual Impact Assessment (3rd Edition, 2013) - Landscape Institute / Institute of Environmental Management and Assessment;
- Visual Representation of Development Proposals (2019) - Landscape Institute Technical Guidance Note 06/19;
- An Approach to Landscape Character Assessment (2014) - Natural England;
- An Approach to Landscape Sensitivity Assessment - To Inform Spatial Planning and Land Management (2019) - Natural England.
- Reviewing Landscape Visual Impact Assessments (LVIAs and Landscape and Visual appraisals (LVAs) Technical Guidance Note 1/20 Landscape Institute.

1.2 GLVIA3 states within paragraph 1.1 that "Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity."[1]

1.3 GLVIA3 also states within paragraph 1.17 that when identifying landscape and visual effects there is a "need for an approach that is in proportion to the scale of the project that is being assessed and the nature of the likely effects. Judgement needs to be exercised at all stages in terms of the scale of investigation that is appropriate and proportional."[2]

1.4 GLVIA3 recognises within paragraph 2.23 that "professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters much of the assessment must rely on qualitative judgements"[3] undertaken by a landscape consultant or a Chartered Member of the Landscape Institute (CMLI).

1.5 GLVIA3 notes in paragraph 1.3 that "LVIA may be carried out either formally, as part of an Environmental Impact Assessment (EIA), or informally, as a contribution to the 'appraisal' of development proposals and planning applications."[4] Although the proposed development is not subject to an EIA requiring an assessment of the

[1] Para 1.1, Page 4, GLVIA, 3rd Edition
[2] Para 1.17, Page 9, GLVIA, 3rd Edition
[3] Para 2.23, Page 21, GLVIA, 3rd Edition
[4] Para 1.3, Page 4, GLVIA, 3rd Edition

likely significance of effects, this assessment is also titled as an LVIA rather than an 'appraisal' in the interests of common understanding with other planning consultants.

1.6 The effects on cultural heritage and ecology are not considered within this LVIA.

Study Area

1.7 The study area for this LVIA covers a 3km radius from the site. However, the main focus of the assessment was taken as a radius of 1km from the site as it is considered that even with clear visibility the proposals would not be perceptible in the landscape beyond this distance.

Effects Assessed

1.8 Landscape and visual effects are assessed through professional judgements on the sensitivity of landscape elements, character and visual receptors combined with the predicted magnitude of change arising from the proposals. The landscape and visual effects have been assessed in the following sections:

- Effects on landscape elements;
- Effects on landscape character; and
- Effects on visual amenity.

1.9 Sensitivity is defined in GLVIA3 as "a term applied to specific receptors, combining judgments of susceptibility of the receptor to a specific type of change or development proposed and the value related to that receptor."[5] Various factors in relation to the value and susceptibility of landscape elements, character, visual receptors or representative viewpoints are considered below and cross referenced to determine the overall sensitivity as shown in Table 1:

Table 1, Overall sensitivity of landscape and visual receptors

	VALUE			
SUSCEPTIBILITY		**HIGH**	**MEDIUM**	**LOW**
	HIGH	High	High	Medium
	MEDIUM	High	Medium	Medium
	LOW	Medium	Medium	Low

[5] Glossary, Page 158, GLVIA, 3rd Edition

1.10 Magnitude of change is defined in GLVIA3 as "a term that combines judgements about the size and scale of the effect, the extent over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration."[6] Various factors contribute to the magnitude of change on landscape elements, character, visual receptors and representative viewpoints.

1.11 The sensitivity of the landscape and visual receptor and the magnitude of change arising from the proposals are cross referenced in Table 11 to determine the overall degree of landscape and visual effects.

2. EFFECTS ON LANDSCAPE ELEMENTS

2.1 The effects on landscape elements includes the direct physical change to the fabric of the land, such as the removal of woodland, hedgerows or grassland to allow for the proposals.

Sensitivity of Landscape Elements

2.2 Sensitivity is determined by a combination of the value that is attached to a landscape element and the susceptibility of the landscape element to changes that would arise as a result of the proposals – see pages 88-90 of GLVIA3. Both value and susceptibility are assessed on a scale of high, medium or low.

2.3 The criteria for assessing the value of landscape elements and landscape character is shown in Table 2:

Table 2, Criteria for assessing the value of landscape elements and landscape character	
HIGH	Designated landscape including but not limited to World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty considered to be an important component of the country's character or non-designated landscape of a similar character and quality. Landscape condition is good and components are generally maintained to a high standard. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and absence of major built infrastructure, the landscape has an elevated level of tranquillity. Rare or distinctive landscape elements and features are key components that contribute to the landscape character of the area.

[6] Glossary, Page 158, GLVIA, 3rd Edition

MEDIUM	Undesignated landscape including urban fringe and rural countryside considered to be a distinctive component of the national or local landscape character. Landscape condition is fair and components are generally well maintained. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and some major built infrastructure, the landscape has a moderate level of tranquillity. Rare or distinctive landscape elements and features are notable components that contribute to the character of the area.
LOW	Undesignated landscape including urban fringe and rural countryside considered to be of unremarkable character. Landscape condition may be poor and components poorly maintained or damaged. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and significant major built infrastructure, the landscape has limited levels of tranquillity. Rare or distinctive elements and features are not notable components that contribute to the landscape character of the area.

2.4 The criteria for assessing the susceptibility of landscape elements and landscape character is shown in Table 3:

Table 3, Criteria for assessing landscape susceptibility	
HIGH	Scale of enclosure – landscapes with a low capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc. Nature of land use – landscapes with no or little existing reference or context to the type of development being proposed. Nature of existing elements – landscapes with components that are not easily replaced or substituted (e.g. ancient woodland, mature trees, historic parkland, etc). Nature of existing features – landscapes where detracting features, major infrastructure or industry is not present or where present has a limited influence on landscape character.
MEDIUM	Scale of enclosure – landscapes with a medium capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc. Nature of land use – landscapes with some existing reference or context to the type of development being proposed.

	Nature of existing elements – landscapes with components that are easily replaced or substituted. Nature of existing features – landscapes where detracting features, major infrastructure or industry is present and has a noticeable influence on landscape character.
LOW	Scale of enclosure – landscapes with a high capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc. Nature of land use – landscapes with extensive existing reference or context to the type of development being proposed. Nature of existing features – landscapes where detracting features or major infrastructure is present and has a dominating influence on the landscape.

2.5 Various factors in relation to the value and susceptibility of landscape elements are assessed and cross referenced to determine the overall sensitivity as shown in Table 1.

2.6 Sensitivity is defined in GLVIA3 as "a term applied to specific receptors, combining judgments of susceptibility of the receptor to a specific type of change or development proposed and the value related to that receptor."[7] The definitions for high, medium, low landscape sensitivity are shown in Table 4:

Table 4, Criteria for assessing landscape sensitivity	
HIGH	Landscape element or character area defined as being of high value combined with a high or medium susceptibility to change. Landscape element or character area defined as being of medium value combined with a high susceptibility to change.
MEDIUM	Landscape element or character area defined as being of high value combined with a low susceptibility to change. Landscape element or character area defined as being of medium value combined with a medium or low susceptibility to change. Landscape element or character area defined as being of low value combined with a high or medium susceptibility to change.

[7] Glossary, Page 158, GLVIA, 3rd Edition

LOW	Landscape element or character area defined as being of low value combined with a low susceptibility to change.

Magnitude of Change on Landscape Elements

2.7 Professional judgement has been used to determine the magnitude of change on individual landscape elements within the site as shown in Table 5:

Table 5, Criteria for assessing magnitude of change for landscape elements	
HIGH	Substantial loss/gain of a landscape element.
MEDIUM	Partial loss/gain or alteration to part of a landscape element.
LOW	Minor loss/gain or alteration to part of a landscape element.
NEGLIGIBLE	No loss/gain or very limited alteration to part of a landscape element.

3. EFFECTS ON LANDSCAPE CHARACTER

3.1 Landscape character is defined as the "distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse."[8]

3.2 The assessment of effects on landscape character considers how the introduction of new landscape elements physically alters the landform, landcover, landscape pattern and perceptual attributes of the site or how visibility of the proposals changes the way in which the landscape character is perceived.

Sensitivity of Landscape Character

3.3 Sensitivity is determined by a combination of the value that is attached to a landscape and the susceptibility of the landscape to changes that would arise as a result of the proposals – see pages 88-90 of GLVIA3. Both value and susceptibility are assessed on a scale of high, medium or low.

3.4 The criteria for assessing the value of landscape character is shown in Table 2.

[8] Glossary, Page 157, GLVIA, 3rd Edition

3.5 The criteria for assessing the susceptibility of landscape character is shown in Table 3.

3.6 The overall sensitivity is determined through cross referencing the value and susceptibility of landscape character as shown in Table 1.

Magnitude of Change on Landscape Character

3.7 Professional judgement has been used to determine the magnitude of change on landscape character as shown in Table 6:

Table 6, Criteria for assessing magnitude of change on landscape character	
HIGH	Introduction of major new elements into the landscape or some major change to the scale, landform, landcover or pattern of the landscape.
MEDIUM	Introduction of some notable new elements into the landscape or some notable change to the scale, landform, landcover or pattern of the landscape.
LOW	Introduction of minor new elements into the landscape or some minor change to the scale, landform, landcover or pattern of the landscape.
NEGLIGIBLE	No notable or appreciable introduction of new elements into the landscape or change to the scale, landform, landcover or pattern of the landscape.

4. EFFECTS ON VISUAL AMENITY

4.1 Visual amenity is defined within GLVIA3 as the "overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area."[9]

4.2 The effects on visual amenity considers the changes in views arising from the proposals in relation to visual receptors including settlements, residential properties, transport routes, recreational facilities and attractions; and

[9] Page 158, Glossary, GLVIA3

representative viewpoints or specific locations within the study area as agreed with the Local Planning Authority.

Sensitivity of Visual Receptors

4.3 Sensitivity is determined by a combination of the value that is attached to a view and the susceptibility of the visual receptor to changes in that view that would arise as a result of the proposals – see pages 113-114 of GLVIA3. Both value and susceptibility are assessed on a scale of high, medium or low.

4.4 The criteria for assessing the value of views are shown in Table 7:

Table 7, Criteria for assessing the value of views	
HIGH	Views with high scenic value within designated landscapes including but not limited to World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty, etc. Likely to include key viewpoints on OS maps or reference within guidebooks, provision of facilities, presence of interpretation boards, etc.
MEDIUM	Views with moderate scenic value within undesignated landscape including urban fringe and rural countryside.
LOW	Views with unremarkable scenic value within undesignated landscape with partly degraded visual quality and detractors.

4.5 The criteria for assessing the susceptibility of views are shown in Table 8:

Table 8, Criteria for assessing visual susceptibility	
HIGH	Includes occupiers of residential properties and people engaged in recreational activities in the countryside using public rights of way (PROW).
MEDIUM	Includes people engaged in outdoor sporting activities and people travelling through the landscape on minor roads and trains.
LOW	Includes people at places of work e.g. industrial and commercial premises and people travelling through the landscape on major roads and motorways.

4.6 Sensitivity is defined in GLVIA3 as "a term applied to specific receptors, combining judgments of susceptibility of the receptor to a specific type of change or development proposed and the value related to that receptor."[10] The definitions for high, medium, low visual sensitivity are shown in Table 9:

Table 9, Criteria for assessing visual sensitivity	
HIGH	Visual receptor defined as being of high value combined with a high or medium susceptibility to change. Visual receptor defined as being of medium value combined with a high susceptibility to change.
MEDIUM	Visual receptor defined as being of high value combined with a low susceptibility to change. Visual receptor defined as being of medium value combined with a medium or low susceptibility to change. Visual receptor defined as being of low value combined with a high or medium susceptibility to change.
LOW	Visual receptor defined as being of low value combined with a low susceptibility to change.

Magnitude of Change on Visual Receptors

4.7 Professional judgement has been used to determine the magnitude of change on visual receptors as shown in Table 10:

Table 10, Criteria for assessing magnitude of change for visual receptors	
HIGH	Major change in the view that has a substantial influence on the overall view.
MEDIUM	Some change in the view that is clearly visible and forms an important but not defining element in the view.
LOW	Some change in the view that is appreciable with few visual receptors affected.
NEGLIGIBLE	No notable change in the view.

[10] Glossary, Page 158, GLVIA, 3rd Edition

5. SIGNIFICANCE OF LANDSCAPE AND VISUAL EFFECTS

5.1 The likely significance of effects is dependent on all of the factors considered in the sensitivity and the magnitude of change upon the relevant landscape and visual receptors. These factors are assimilated to assess whether or not the proposed development will have a likely significant or not significant effect. The variables considered in the evaluation of the sensitivity and the magnitude of change is reviewed holistically to inform the professional judgement of significance.

5.2 Within Table 11 below, the major effects highlighted in grey are considered to be significant in terms of the EIA Regulations. It should be noted that whilst an individual effect may be significant, it does not necessarily follow that the proposed development would be unacceptable in the planning balance. The cross referencing of the sensitivity and magnitude of change on the landscape and visual receptor determines the significance of effect as shown in Table 11:

Table 11, Significance of landscape and visual effects

		Sensitivity		
		HIGH	**MEDIUM**	**LOW**
Magnitude of Change	**HIGH**	Major	Major	Moderate
	MEDIUM	Major	Moderate	Minor
	LOW	Moderate	Minor	Minor
	NEGLIGIBLE	Negligible	Negligible	Negligible

6. TYPICAL DESCRIPTORS OF LANDSCAPE EFFECTS

6.1 The typical descriptors of the landscape effects are detailed within Table 12:

Table 12, Typical Descriptors of Landscape Effects

MAJOR BENEFICIAL	Substantially: - enhance the character (including value) of the landscape; - enhance the restoration of characteristic features and elements lost as a result of changes from inappropriate management or development; - enable a sense of place to be enhanced.
MODERATE BENEFICIAL	Moderately: - enhance the character (including value) of the landscape; - enable the restoration of characteristic features and elements partially lost or diminished as a result of changes from inappropriate management or development; - enable a sense of place to be restored.
MINOR BENEFICIAL	Slightly: - complement the character (including value) of the landscape; - maintain or enhance characteristic features or elements; - enable some sense of place to be restored.
NEGLIGIBLE	The proposed changes would (on balance) maintain the character (including value) of the landscape and would: - be in keeping with landscape character and blend in with characteristic features and elements; - Enable a sense of place to be maintained.
NO CHANGE	The proposed changes would not be visible and there would be no change to landscape character.
MINOR ADVERSE	Slightly: - not quite fit the character (including value) of the landscape; - be a variance with characteristic features and elements; - detract from sense of place.
MODERATE ADVERSE	Moderately: - conflict with the character (including value) of the landscape; - have an adverse effect on characteristic features or elements; - diminish a sense of place.
MAJOR ADVERSE	Substantially: - be at variance with the character (including value) of the landscape; - degrade or diminish the integrity of a range of characteristic features and elements or cause them to be lost; - change a sense of place.

7. TYPICAL DESCRIPTORS OF VISUAL EFFECTS

7.1 The typical descriptors of the visual effects are detailed within Table 13:

Table 13, Typical Descriptors of Visual Effects	
MAJOR BENEFICIAL	Proposals would result in a major improvement in the view.
MODERATE BENEFICIAL	Proposals would result in a clear improvement in the view.
MINOR BENEFICIAL	Proposals would result in a slight improvement in the view.
NEGLIGIBLE	The proposed changes would be in keeping with, and would maintain, the existing view or where (on balance) the proposed changes would maintain the general appearance of the view (which may include adverse effects which are offset by beneficial effects for the same receptor) or due to distance from the receptor, the proposed change would be barely perceptible to the naked eye.
NO CHANGE	The proposed changes would not be visible and there would be no change to the view.
MINOR ADVERSE	Proposals would result in a slight deterioration in the view.
MODERATE ADVERSE	Proposals would result in a clear deterioration in the view.
MAJOR ADVERSE	Proposals would result in a major deterioration in the view.

8. NATURE OF EFFECTS

8.1 GLVIA3 includes an entry that states *"effects can be described as positive or negative (or in some cases neutral) in their consequences for views and visual amenity."*[11] GLVIA3 does not, however, state how negative or positive effects should be assessed, and this therefore becomes a matter of professional judgement supported by site specific justification within the LVIA.

[11] Para 6.29, Page 113, GLVIA 3rd Edition

Appendix 4.1

Summary of Visual Effects based on LVA Viewpoints – Scheme B including Point of Connection Option 1 (Lattice tower)

Appendix 4.1: Summary of Visual Effects based on LVA Viewpoints – Scheme B including Point of Connection Option 1 (Lattice tower)

Viewpoint	Assessor Neo Environmental (Scheme A), Pegasus (Scheme B)	Receptor	Value	Susceptibility	Sensitivity	Magnitude – Year 1	Effect – Year 1	Magnitude – Year 10	Effect – Year 10
1	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Low	Minor	Low	Minor
2	**Pegasus**	Highway	Medium	Medium	Medium	Medium	Moderate	Medium	Moderate
3	**Pegasus**	PRoW	Medium	High	High	Negligible	Negligible	Negligible	Negligible
4	**Pegasus**	Highway	Medium	Medium	Medium	Medium	Moderate	Negligible	Negligible
5	**Pegasus**	PRoW	Medium	High	High	Medium	Major	Negligible	Negligible
6	**Pegasus**	PRoW	Medium	High	High	Low	Moderate	Negligible	Negligible
7	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Medium	Moderate	Negligible	Negligible
8	**Pegasus**	Highway	Medium	Medium	Medium	Low	Minor	Negligible	Negligible

Effects are assessed as adverse unless otherwise stated.

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Appendix 4.2

Summary of Visual Effects based on LVA Viewpoints – Scheme B including Point of Connection Option 2 (Wooden poles)

Appendix 4.2: Summary of Visual Effects based on LVA Viewpoints – Scheme B including Point of Connection Option 2 (Wooden poles)

Viewpoint	Assessor Neo Environmental (Scheme A), Pegasus (Scheme B)	Receptor	Value	Susceptibility	Sensitivity	Magnitude – Year 1	Effect – Year 1	Magnitude – Year 10	Effect – Year 10
1	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Low	Minor	Negligible	Negligible
2	**Pegasus**	Highway	Medium	Medium	Medium	Medium	Moderate	Medium	Moderate
3	**Pegasus**	PRoW	Medium	High	High	Negligible	Negligible	Negligible	Negligible
4	**Pegasus**	Highway	Medium	Medium	Medium	Medium	Moderate	Negligible	Negligible
5	**Pegasus**	PRoW	Medium	High	High	Medium	Major	Negligible	Negligible
6	**Pegasus**	PRoW	Medium	High	High	Low	Moderate	Negligible	Negligible
7	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Medium	Moderate	Negligible	Negligible
8	**Pegasus**	Highway	Medium	Medium	Medium	Low	Minor	Negligible	Negligible

Effects are assessed as adverse unless otherwise stated.

Appendix 5

Thoroton Residential Properties

KEY

Site Boundary

Property Location

NOTES:
REVISIONS:

NEARBY PROPERTIES

LONGHEDGE SOLAR FARM

RES LIMITED

N
0 50 m

DATE	SCALE	TEAM	APPROVED
12/06/2024	1:2,500@A3	CS	AC

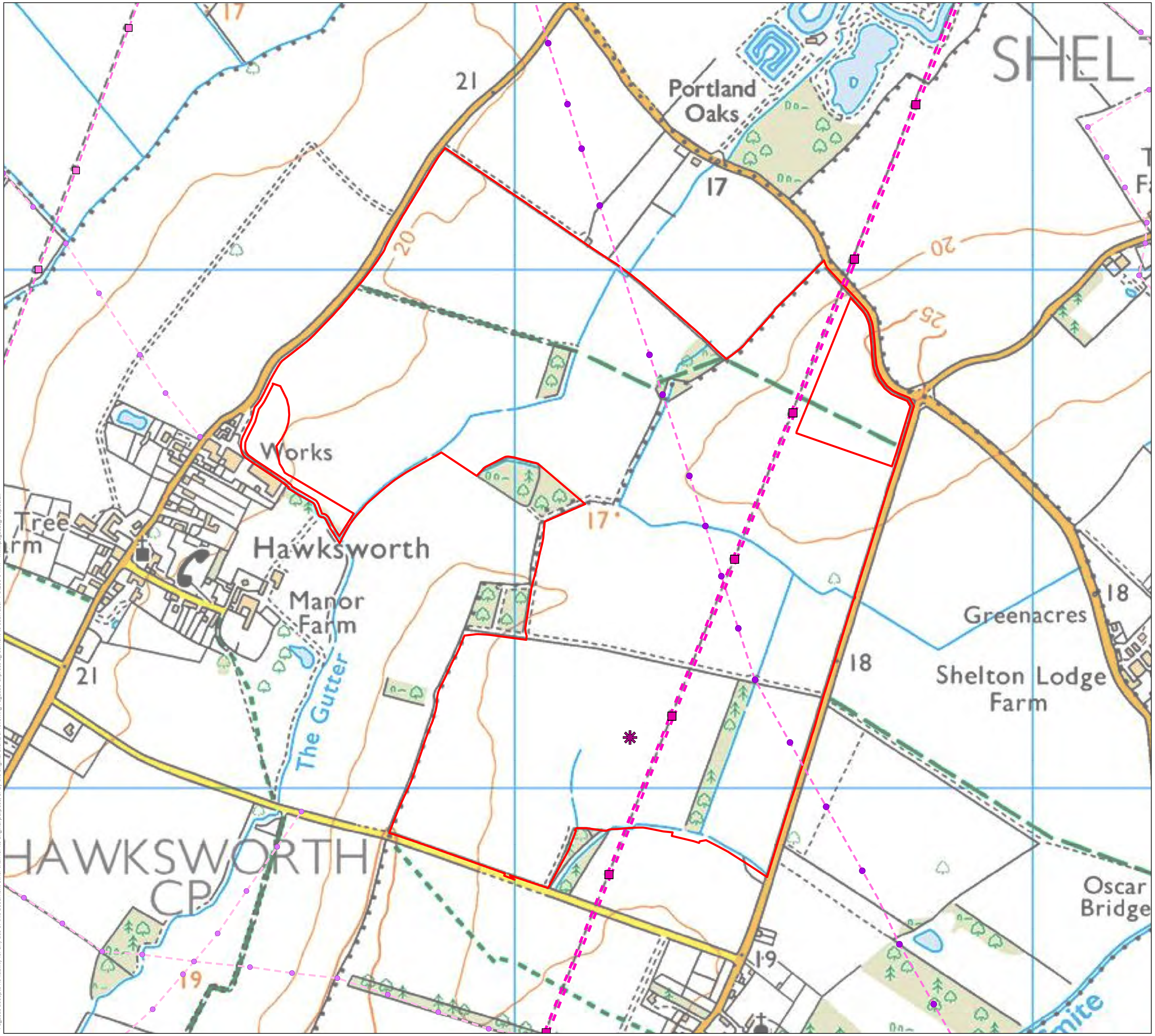
SHEET	REVISION
-	A

DRAWING NUMBER
P24-0105_EN_22

PEGASUS GROUP

Appendix 6

OS Base with DNO Infrastructure



KEY

(red outline)	Site Boundary
(asterisk)	Proposed Tower Location - Option 1/2

Existing DNO Infrastructure

(dashed line)	11kV Overhead Lines
(dashed line)	33kV Overhead Lines
(dashed line)	132kV Overhead Lines
(dot)	11kV Poles
(dot)	33kV Poles
(square)	33kV Towers
(square)	132kV Towers

NOTES:
REVISIONS:

OS BASE WITH DNO INFRASTRUCTURE

LONGHEDGE SOLAR FARM

RES LIMITED

N
0 0.25 km

DATE	SCALE	TEAM	APPROVED
13/06/2024	1:7,500@A3	CS	AC

SHEET	REVISION
-	A

DRAWING NUMBER
P24-0105_EN_21

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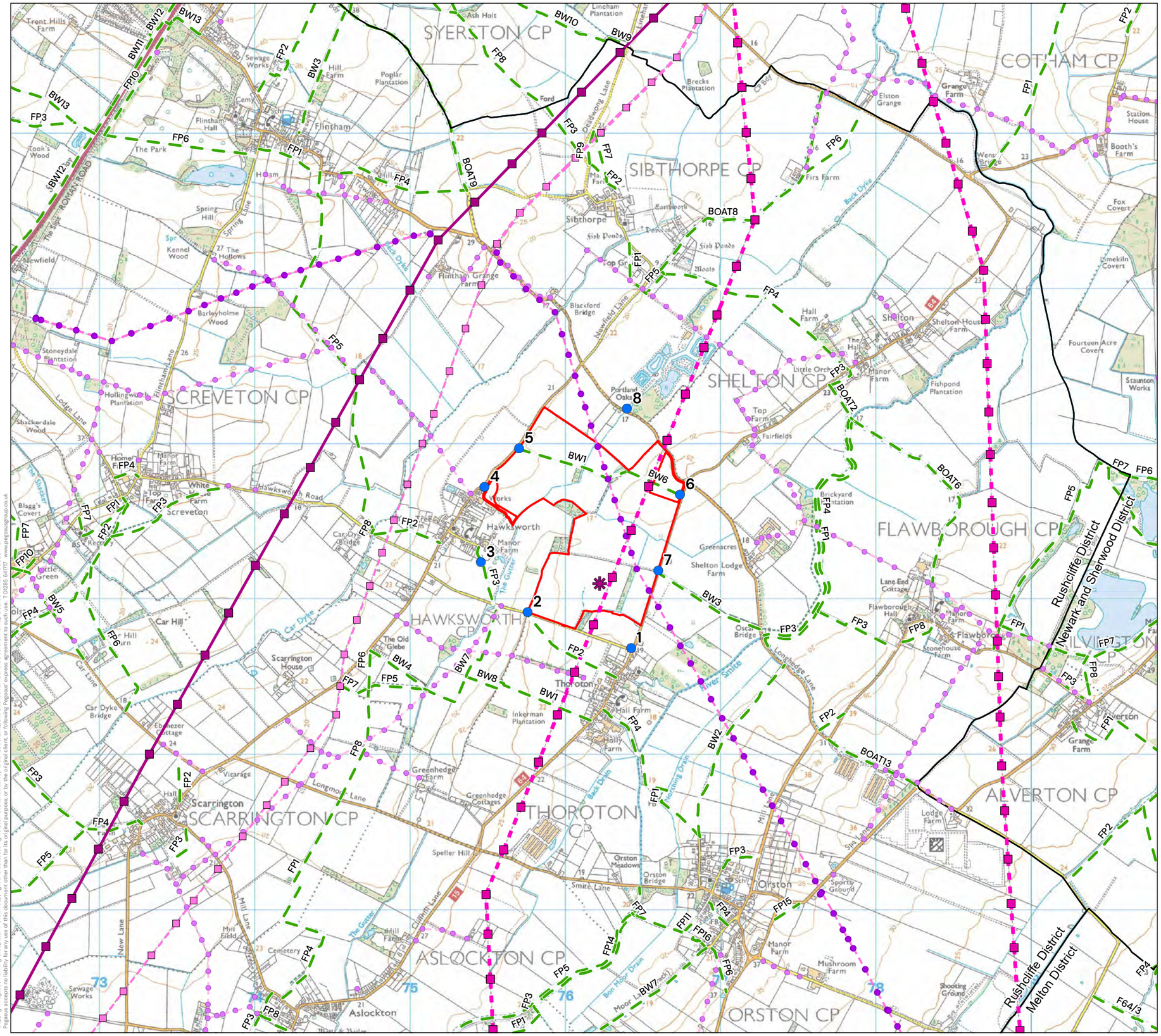
Appendix 7

Site Location and Public Rights of Way Plan (with LVA Viewpoints and DNO Infrastructure)



KEY

- Site Boundary
- PRoWs
- LVA Viewpoints
- Proposed Tower Location - Option 1/2

Existing DNO Infrastructure

- 400kV Towers
- 132kV Towers
- 33kV Towers
- 33kV Poles
- 11kV Poles
- 400kV Overhead Line
- 132kV Overhead Lines
- 33kV Overhead Lines
- 11kV Overhead Lines

SITE LOCATION AND PUBLIC RIGHTS OF WAY PLAN (WITH LVA VIEWPOINTS AND DNO INFRASTRUCTURE)

LONGHEDGE SOLAR FARM

RES LIMITED

N

0 1 km

DATE	SCALE	TEAM	APPROVED
12/06/2024	1:25,000@A3	NC	CR

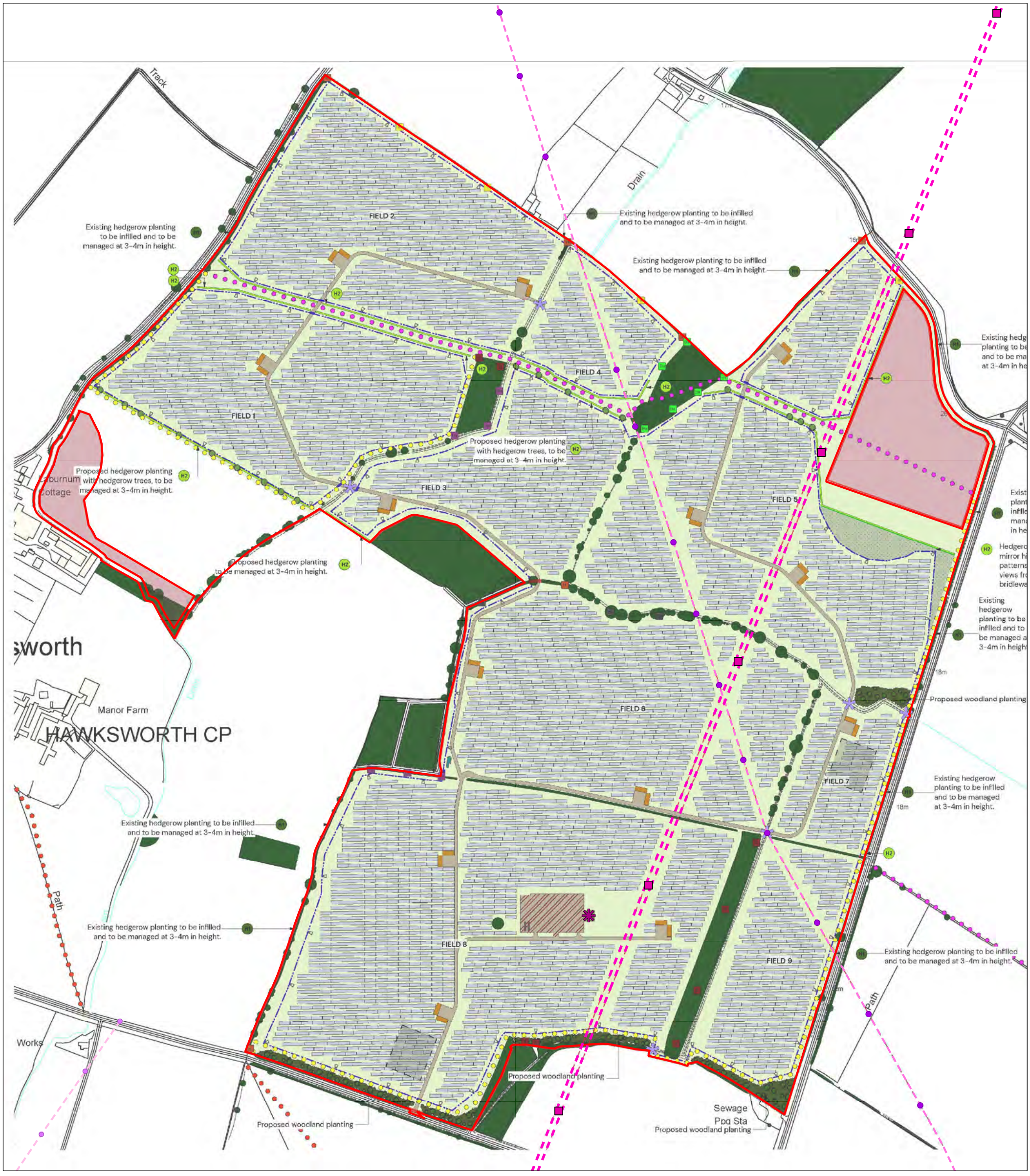
SHEET	REVISION
-	A

DRAWING NUMBER
P24-0105_EN_03

PEGASUS GROUP

Appendix 8

Landscape Masterplan Scheme B with DNO Infrastructure



KEY

- Site Boundary
- Proposed Tower Location - Option 1/2

Existing DNO Infrastructure

- 11kV Overhead Lines
- 33kV Overhead Lines
- 132kV Overhead Lines
- 11kV Poles
- 33kV Poles
- 33kV Towers
- 132kV Towers

SCHEME B LAYOUT WITH DNO INFRASTRUCTURE

LONGHEDGE SOLAR FARM

RES LIMITED

DATE	DRAWN	APPROVED	SCALE
13/06/2024	CS	AC	1:5,000@A3
SHEET	REVISION	DRAWING NUMBER	
-	**A**	P24_0105_EN_23	

N 0 0.2 km

PEGASUS GROUP

Appendix 9.1

Summary of Visual Effects based on LVA Viewpoints – Option 1 (Lattice tower) excluding Solar Farm

Appendix 9.1 : Summary of Visual Effects based on LVA Viewpoints – Option 1 (Lattice tower) excluding Solar Farm

Effects are assessed as adverse unless otherwise stated.

Viewpoint	Assessor Neo Environmental (Scheme A), Pegasus (Scheme B)	Receptor	Value	Susceptibility	Sensitivity	Magnitude – Year 1	Effect – Year 1	Magnitude – Year 10	Effect – Year 10
1	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Low	Minor	Low	Minor
2	**Pegasus**	Highway	Medium	Medium	Medium	Low	Minor	Low	Minor
3	**Pegasus**	PRoW	Medium	High	High	Negligible	Negligible	Negligible	Negligible
4	**Pegasus**	Highway	Medium	Medium	Medium	None	None	None	None
5	**Pegasus**	PRoW	Medium	High	High	Negligible	Negligible	Negligible	Negligible
6	**Pegasus**	PRoW	Medium	High	High	Negligible	Negligible	Negligible	Negligible
7	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Negligible	Negligible	Negligible	Negligible
8	**Pegasus**	Highway	Medium	Medium	Medium	None	None	None	None

Appendix 9.2

Summary of Visual Effects based on LVA Viewpoints – Option 2 (Wooden poles) excluding Solar Farm

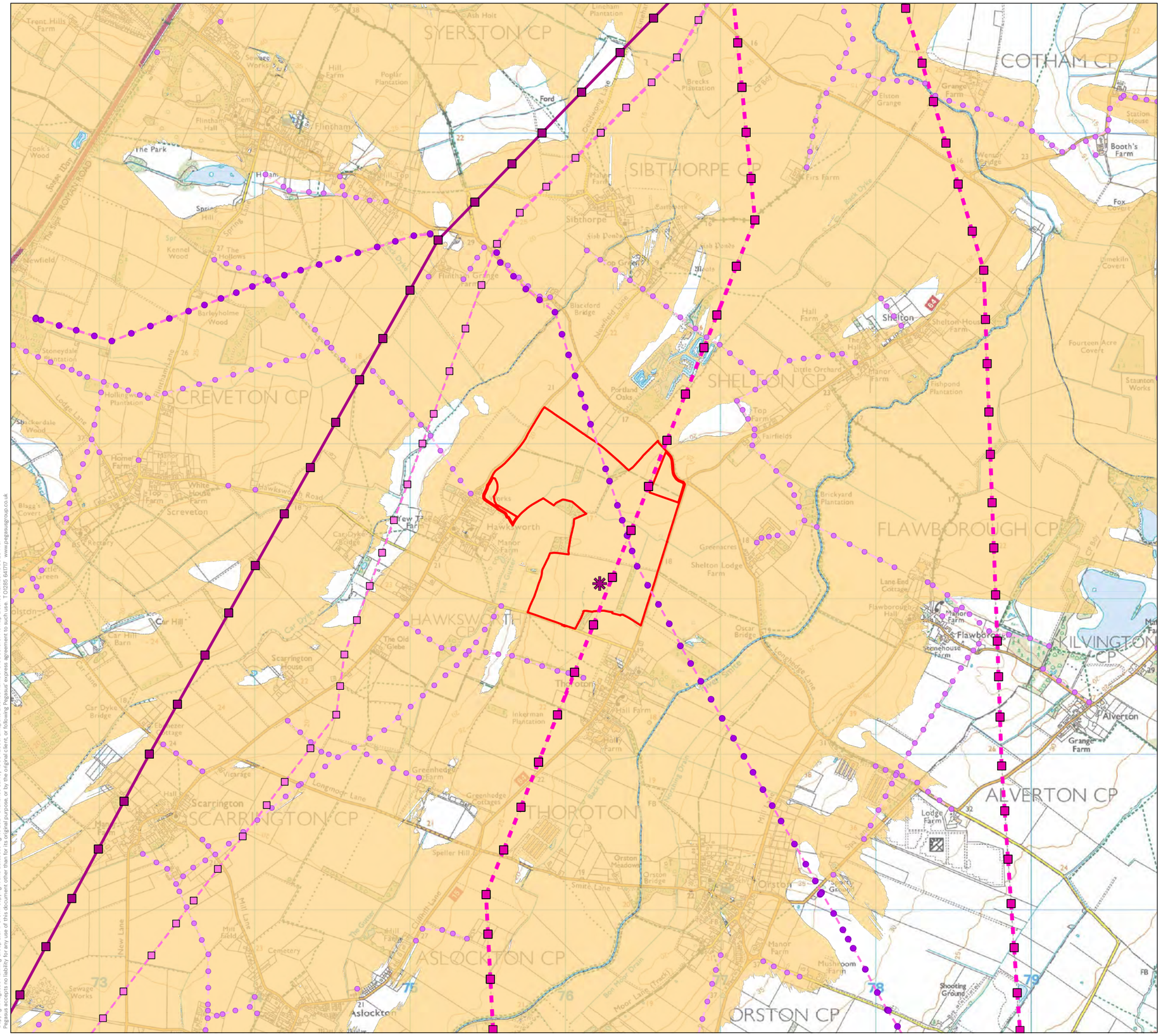
Appendix 9.2: Summary of Visual Effects based on LVA Viewpoints – Option 2 (Wooden poles) excluding Solar Farm

Effects are assessed as adverse unless otherwise stated.

Viewpoint	Assessor Neo Environmental (Scheme A), Pegasus (Scheme B)	Receptor	Value	Susceptibility	Sensitivity	Magnitude – Year 1	Effect – Year 1	Magnitude – Year 10	Effect – Year 10
1	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	Negligible	Negligible	Negligible	Negligible
2	**Pegasus**	Highway	Medium	Medium	Medium	Negligible	Negligible	Negligible	Negligible
3	**Pegasus**	PRoW	Medium	High	High	None	None	None	None
4	**Pegasus**	Highway	Medium	Medium	Medium	None	None	None	None
5	**Pegasus**	PRoW	Medium	High	High	None	None	None	None
6	**Pegasus**	PRoW	Medium	High	High	None	None	None	None
7	**Pegasus**	Highway, including Sustrans route (National Cycle Network Route 64)	Medium	Medium	Medium	None	None	None	None
8	**Pegasus**	Highway	Medium	Medium	Medium	None	None	None	None

Appendix 10.1

Zone of Theoretical Visibility – Option 1 (23.30m Proposed Tower)



KEY

- Site Boundary
- Proposed Tower Location - Option 1/2

Existing DNO Infrastructure

- 11kV Overhead Lines
- 33kV Overhead Lines
- 132kV Overhead Lines
- 400kV Overhead Line
- 11kV Poles
- 33kV Poles
- 33kV Towers
- 132kV Towers
- 400kV Towers
- Bare Earth Zone of Theoretical Visibility - 23.3m Proposed Tower

ZTV Production Information -
- data used in calculations is EA LiDAR 1m DTM (Environment Agency Open Data Release
- Calculations based on a bare earth survey
- Viewer height set at 1.7m (in accordance with para 6.11 of GLVIA Third edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility. It is generated using terrain data only and does not account for any screening that vegetation or the built environment may provide. It is, as such, 'a worst case' ZTV and the actual extents of visibility are likely to be less extensive.

ZONE OF THEORETICAL VISIBILITY - OPTION 1 (PROPOSED TOWER 23.3M)

LONGHEDGE SOLAR FARM

RES LIMITED

N

0 750 m

DATE	SCALE	TEAM	APPROVED
20/06/2024	1:25,000@A3	NC/CS	AC

SHEET	REVISION
-	**B**

DRAWING NUMBER
P24-0105_EN_24

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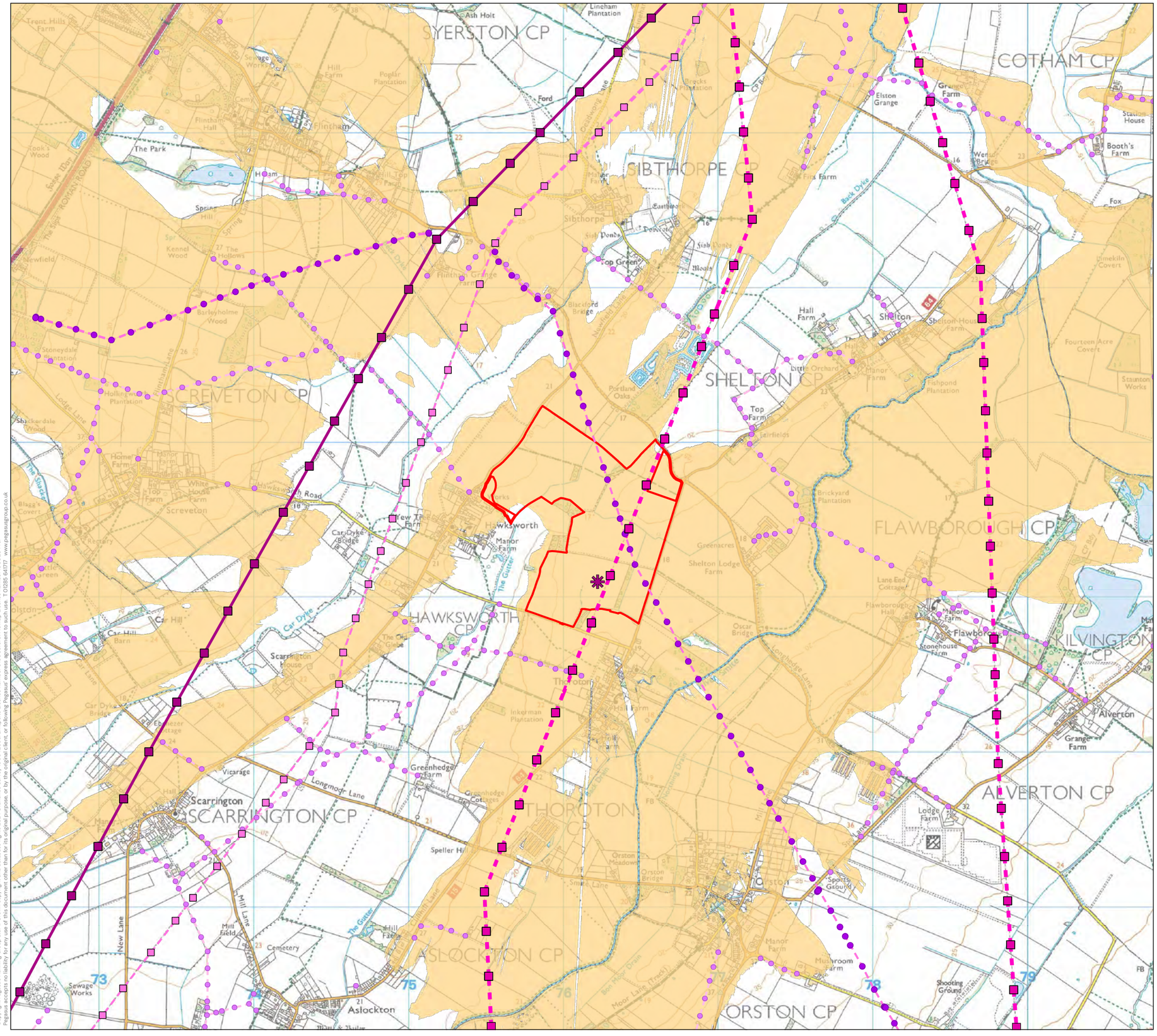
Appendix 10.2

Zone of Theoretical Visibility – Option 2 (9m Wooden Poles)



KEY

- Site Boundary
- Proposed Pole Location - Option 2/2

Existing DNO Infrastructure

- 11kV Overhead Lines
- 33kV Overhead Lines
- 132kV Overhead Lines
- 400kV Overhead Line
- 11kV Poles
- 33kV Poles
- 33kV Towers
- 132kV Towers
- 400kV Towers
- Bare Earth Zone of Theoretical Visibility - 9m Proposed Poles

ZTV Production Information -
- data used in calculations is EA LiDAR 1m DTM (Environment Agency Open Data Release
- Calculations based on a bare earth survey
- Viewer height set at 1.7m (in accordance with para 6.11 of GLVIA Third edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility. It is generated using terrain data only and does not account for any screening that vegetation or the built environment may provide. It is, as such, 'a worst case' ZTV and the actual extents of visibility are likely to be less extensive.

ZONE OF THEORETICAL VISIBILITY - OPTION 2 (PROPOSED POLES 9M)

LONGHEDGE SOLAR FARM

RES LIMITED

N 0 750 m

DATE	SCALE	TEAM	APPROVED
20/06/2024	1:25,000@A3	NC	AC

SHEET	REVISION
-	B

DRAWING NUMBER
P24-0105_EN_25

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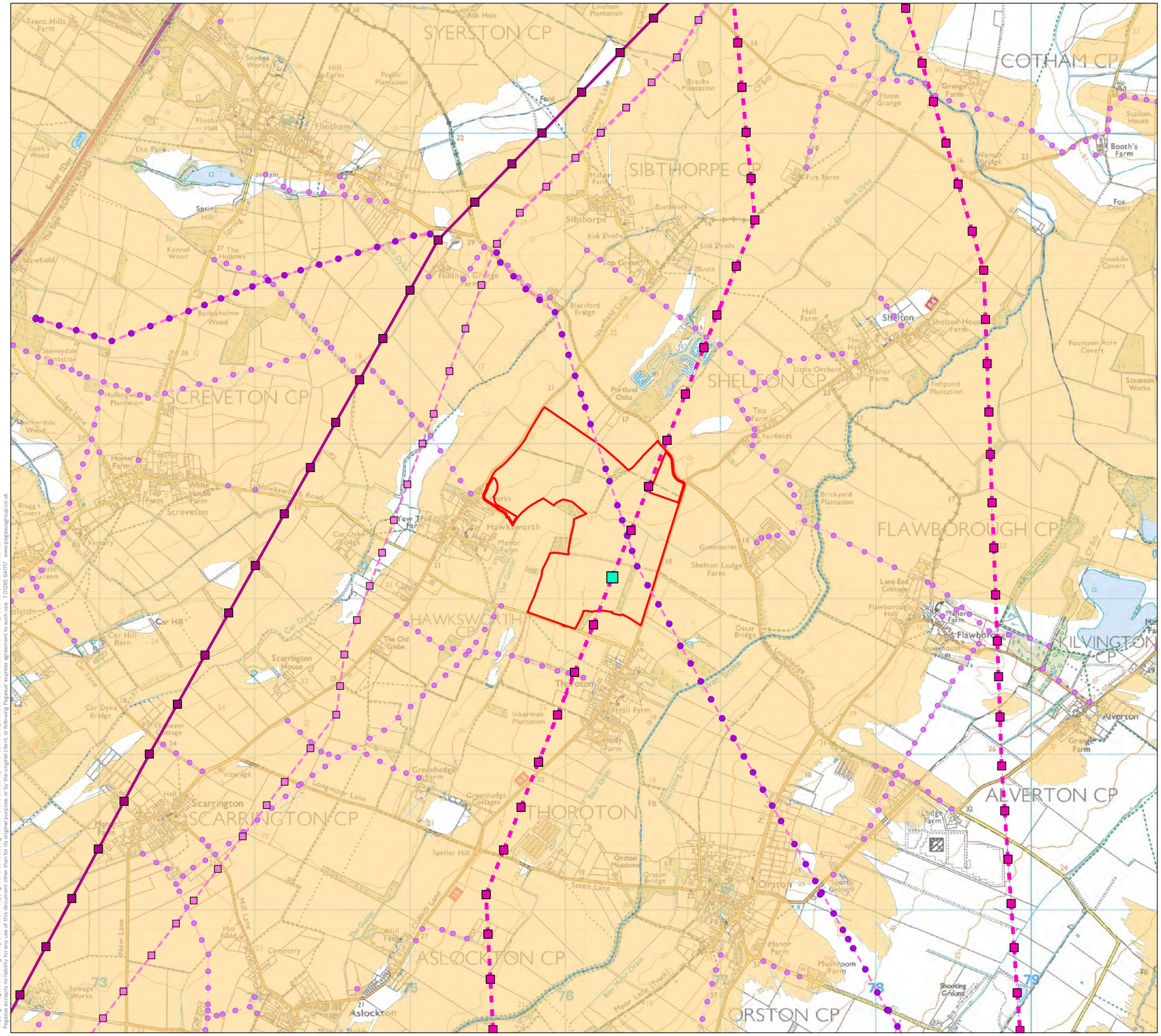
Appendix 10.3

Zone of Theoretical Visibility – Existing Tower (29.09m tower)



KEY

- Site Boundary

Existing DNO Infrastructure

- 132kV Tower Modelled in ZTV
- 11kV Overhead Lines
- 33kV Overhead Lines
- 132kV Overhead Lines
- 400kV Overhead Line
- 11kV Poles
- 33kV Poles
- 33kV Towers
- 132kV Towers
- 400kV Towers
- Bare Earth Zone of Theoretical Visibility - 29.09m Exsting Tower

ZTV Production Information -
- data used in calculations is EA LiDAR 1m DTM (Environment Agency Open Data Release
- Calculations based on a bare earth survey
- Viewer height set at 1.7m (in accordance with para 6.11 of GLVIA Third edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility. It is generated using terrain data only and does not account for any screening that vegetation or the built environment may provide. It is, as such, 'a worst case' ZTV and the actual extents of visibility are likely to be less extensive.

ZONE OF THEORETICAL VISIBILITY - EXISTING TOWER (29.09M)

LONGHEDGE SOLAR FARM

RES LIMITED

N

0 750 m

DATE	SCALE	TEAM	APPROVED
21/06/2024	1:25,000@A3	CS	AC

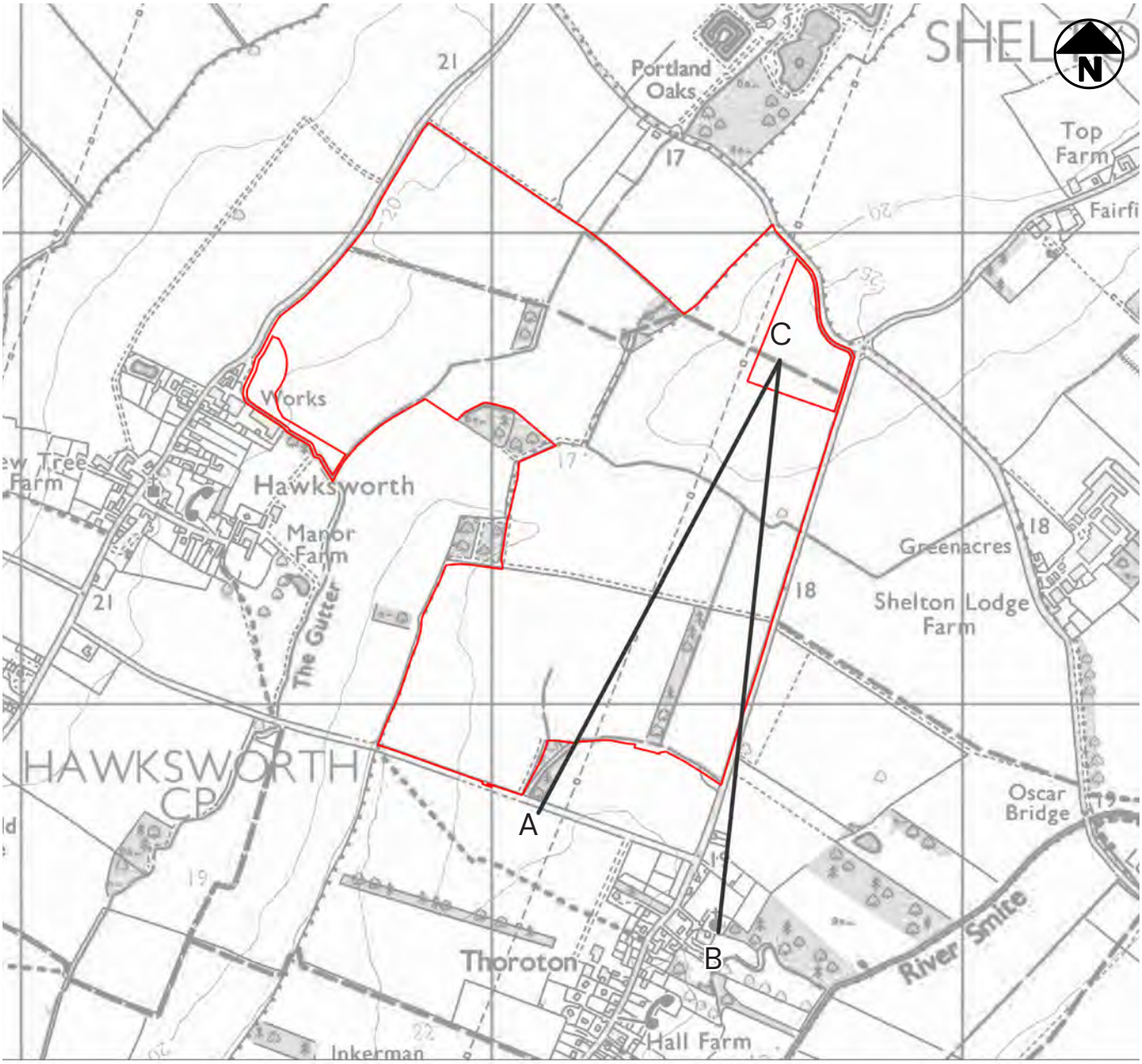
SHEET	REVISION
-	A

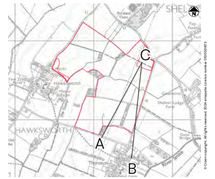
DRAWING NUMBER
P24-0105_EN_29

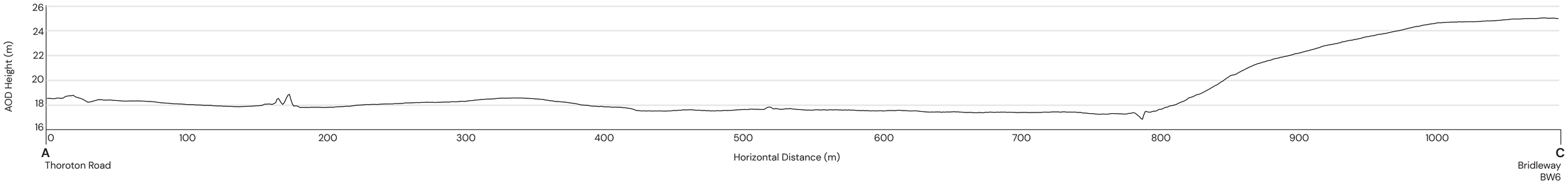
PEGASUS GROUP

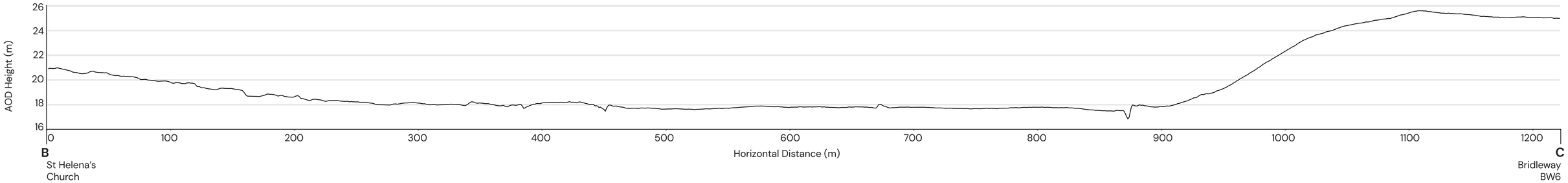
Appendix 11

Cross sections (A–C, B–C)









PEGASUS GROUP

Note: 1m EA LiDAR Composite DTM 2022 (Environment Agency Open Data Release) used to produce cross sections.

CROSS SECTIONS

Appendix 12

Photomontages (3 sets of 4 plans, for Viewpoints 1, 2 and 6)

Figure 1a (Option 1) Excluding Substation
Viewpoint 1: Minor Rd, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12A CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1 (drawing reference: 04668-RES-SUB-DR-PT-001)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476425E 342684N	Horizontal field of view:	90° (planar projection)
Eye Level:	24.5m AOD	Principal Distance:	812.5mm
Direction of view:	330°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.160km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 1b (Option 2) Excluding Substation
Viewpoint 1: Minor Rd, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12B CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2 (drawing reference: 04668-RES-SUB-DR-PT-003)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476425E 342684N	Horizontal field of view:	90° (planar projection)
Eye Level:	24.5m AOD	Principal Distance:	812.5mm
Direction of view:	330°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.160km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 1c (Option 1) Including Substation
Viewpoint 1: Minor Rd, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12A CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1 (drawing reference: 04668-RES-SUB-DR-PT-001)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476425E 342684N	Horizontal field of view:	90° (planar projection)
Eye Level:	24.5m AOD	Principal Distance:	812.5mm
Direction of view:	330°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.160km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 1d (Option 2) Including Substation
Viewpoint 1: Minor Rd, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12B CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2 (drawing reference: 04668-RES-SUB-DR-PT-003)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476425E 342684N	Horizontal field of view:	90° (planar projection)
Eye Level:	24.5m AOD	Principal Distance:	812.5mm
Direction of view:	330°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.160km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 2a (Option 1) Excluding Substation
Viewpoint 2: Hawksworth, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12A CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1 (drawing reference: 04668-RES-SUB-DR-PT-001)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	475759E 342916N	Horizontal field of view:	90° (planar projection)
Eye Level:	26.5m AOD	Principal Distance:	812.5mm
Direction of view:	060°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.001km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 2b (Option 2) Excluding Substation
Viewpoint 2: Hawksworth, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12B CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2 (drawing reference: 04668-RES-SUB-DR-PT-003)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	475759E 342916N	Horizontal field of view:	90° (planar projection)
Eye Level:	26.5m AOD	Principal Distance:	812.5mm
Direction of view:	060°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.001km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 2c (Option 1) Including Substation
Viewpoint 2: Hawksworth, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12A CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1 (drawing reference: 04668-RES-SUB-DR-PT-001)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	475759E 342916N	Horizontal field of view:	90° (planar projection)
Eye Level:	26.5m AOD	Principal Distance:	812.5mm
Direction of view:	060°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.001km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 2d (Option 2) Including Substation
Viewpoint 2: Hawksworth, Thoroton

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12B CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2 (drawing reference: 04668-RES-SUB-DR-PT-003)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	475759E 342916N	Horizontal field of view:	90° (planar projection)
Eye Level:	26.5m AOD	Principal Distance:	812.5mm
Direction of view:	060°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.001km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 3a (Option 1) Excluding Substation
Viewpoint 6: PRoW, northeast site boundary

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12A CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1 (drawing reference: 04668-RES-SUB-DR-PT-001)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476740E 343673N	Horizontal field of view:	90° (planar projection)
Eye Level:	27.5m AOD	Principal Distance:	812.5mm
Direction of view:	220°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.010km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 3b (Option 2) Excluding Substation
Viewpoint 6: PRoW, northeast site boundary

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 12B CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2 (drawing reference: 04668-RES-SUB-DR-PT-003)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476740E 343673N	Horizontal field of view:	90º (planar projection)
Eye Level:	27.5m AOD	Principal Distance:	812.5mm
Direction of view:	220º	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.010km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 3c (Option 1) Including Substation
Viewpoint 6: PRoW, northeast site boundary

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 11 TYPICAL INVERTER SUBSTATION (04668-RES-SUB-DR-PT-002)
- FIGURE 12A CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 1 (drawing reference: 04668-RES-SUB-DR-PT-001)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476740E 343673N	Horizontal field of view:	90° (planar projection)
Eye Level:	27.5m AOD	Principal Distance:	812.5mm
Direction of view:	220°	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.010km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Figure 3d (Option 2) Including Substation
Viewpoint 6: PRoW, northeast site boundary

Based on the following plans and elevations:

- LONGHEDGE SOLAR FARM - LANDSCAPE MASTERPLAN - APPEAL (drawing reference: P24-0105_EN_02_E)
- FIGURE 8 TYPICAL PV MODULE AND RACK DETAIL (drawing reference: 04668-RES-SOL-DR-PT-001)
- FIGURE 10 TYPICAL SECURITY CCTV DETAIL (drawing reference: 04668-RES-SEC-DR-PT-002)
- FIGURE 11 TYPICAL INVERTER SUBSTATION (04668-RES-SUB-DR-PT-002)
- FIGURE 12B CLIENT/DNO SUBSTATION PLAN & ELEVATION OPTION 2 (drawing reference: 04668-RES-SUB-DR-PT-003)
- FIGURE 13 TYPICAL DEER FENCE (04668-RES-SEC-DR-PT-003)

OS reference:	476740E 343673N	Horizontal field of view:	90º (planar projection)
Eye Level:	27.5m AOD	Principal Distance:	812.5mm
Direction of view:	220º	Paper Size	841 x 297mm (half A1)
Distance to Site:	0.010km	Corrected printed image size	820 x 260mm

Camera:	Canon 6D
Lens:	50mm
Camera Height:	1.5m
Date and Time:	11/07/2024

Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

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