

IMPERIAL PARK 132kV GIS SUBSTATION

LANDSCAPE AND VISUAL APPRAISAL PART 1 of 6



Prepared for SSE Energy Solutions
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I.0 INTRODUCTION

- I.1 RHLA Ltd were instructed by DWD, on behalf of SSE Energy Solutions, to review the proposals for a 132kV Gas Insulated Switchgear ('GIS') substation and associated infrastructure ('the Proposed Development') on land adjacent to the existing National Grid Imperial Park 400kV Substation ('the Site').
- I.2 The planning application for the Proposed Development was validated on 8th July 2025 (ref: 25/0520)¹. Consultee comments from Newport's Landscape Officer² (**Appendix I**) recommended that the Proposed Development was reviewed by a landscape architect.
- I.3 With reference to **Figure I**, the Site is adjacent to the Imperial Park Substation and consists of previously developed land, several transformers and switchgear structures, bordered by hardstanding and enclosed within a palisade fence.
- I.4 The Site is within the Wentlooge Levels Special Landscape Area (SLA). With reference to the Local Development Plan³, Policy SP8: Special Landscape Areas, development is not precluded within a SLA, but requires it to contribute positively to the SLA. The Site is also within a Green Wedge. Local Development Plan Policy SP7 sets out the Green Wedges are identified in order to prevent the coalescence of settlements and that development which prejudices the open nature of land will not be permitted.
- I.5 The review consists of a Landscape and Visual Appraisal (LVA), to ascertain the landscape and visual baseline and the likely effects of the planning application Proposed Development. This is followed by a review of potential new planting within the Site, as secondary mitigation, and the likely changes to the predicted landscape and visual effects.
- I.6 The LVA has been undertaken by Chartered Landscape Architects with extensive experience in assessments of electrical infrastructure schemes, landscape design and LVA's in Wales.

¹ Newport City Council, <https://publicaccess.newport.gov.uk/online-applications/caseDetails.do?keyVal=SYPL3HLCFZ800&caseType=Application>

² Newport City Council, https://documents.newport.gov.uk/PublicAccess_Live/Document/ViewDocument?id=5F4FA5F825CA4AE6B5C553A22E08B464

³ Newport City Council, <https://www.newport.gov.uk/documents/Planning-Documents/LDP-2011-2026/LDP-Adopted-Plan-January-2015.pdf>

2.0 LVA METHODOLOGY SUMMARY

Landscape and Visual Appraisal

- 2.1 With reference to **Appendix I**, the LVA methodology follows the best practice principles for assessing landscape and visual effects as recommended by the Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013 (GLVIA 3). The LVA methodology is set out in full in **Appendix I** and is summarised below.
- 2.2 Landscape and visual matters are assessed separately, such that:
- Landscape – assesses the effects of the Proposed Development on the landscape as a resource (i.e. change to the physical features of the landscape and/or the aesthetic, perceptual and experiential characteristics that make different landscapes distinctive); and
 - Visual – assess effects of the Proposed Development on people's views from the change to existing features or the introduction of new elements within the composition of the view.

Landscape Effects

- 2.3 The landscape effects are assessed by determining the sensitivity of the landscape receptors (i.e. the Site and published landscape character areas). In accordance with GLVIA 3, the sensitivity of landscape receptors is determined via an assessment of their landscape value and landscape susceptibility. With reference to **Appendix I**, the landscape sensitivity is defined as either very high, high, medium, low or very low.
- 2.4 The potential landscape magnitude of impact (change) is informed by judgements about the size and extent of the Proposed Development and the duration and reversibility of the Proposed Development. With reference to **Appendix I**, the magnitude of impact is assessed as either high, medium, low, very low or none.
- 2.5 The relationship between the landscape sensitivity and the landscape magnitude of impact determines a landscape effect. Landscape effects may be beneficial or adverse and are assessed as either major, moderate, minor, negligible or neutral as set out below.

Visual Effects

- 2.6 The visual effects are determined by identifying a representative range of people ('visual receptors') with the potential for views of the Proposed Development.
- 2.7 The sensitivity of the visual receptors is assessed by determining their value and susceptibility. With reference to **Appendix I**, visual sensitivity is defined as either very high, high, medium, low or very low.

- 2.8 The visual magnitude of impact (change) is described with reference to the scale of change in the composition of the view and the distance between the visual receptor and the Proposed Development. The magnitude of visual impact is assessed as either high, medium, low, very low or none.
- 2.9 Like the landscape assessment, the relationship between the visual sensitivity and visual magnitude of impact establishes a visual effect. Visual effects may be beneficial or adverse and are determined as either major, moderate, minor, minor negligible or neutral, as set out below.

Landscape and Visual Effects

- 2.10 As set out in **Appendix I**, Table 2-1 is used to guide the assessment of landscape and visual effects, based upon the relationship between the sensitivity of receptors and the magnitude of impact. Where the assessment differs from this guide, a reasoned explanation is provided in the assessment narrative.

Table 2-1: Guide to the Significance of Landscape and Visual Effects

Sensitivity of Receptor	Magnitude of Impact				
	High	Medium	Low	Very Low	None
Very High	Major	Major	Major or Moderate	Moderate or Minor	Neutral
High	Major or Moderate	Major Moderate or	Moderate or Minor	Minor or Negligible	Neutral
Medium	Major or Moderate	Moderate Minor or	Minor or Negligible	Negligible	Neutral
Low	Moderate or Minor	Minor	Minor or Negligible	Negligible Neutral or	Neutral
Very Low	Minor Negligible or	Negligible	Negligible Neutral or	Neutral	Neutral

- 2.11 Major or moderate effects are considered important in landscape and visual terms, with minor, negligible and neutral effects considered less important. Where the guide allows for a choice in the effect (i.e. moderate or minor), the decision is based on professional judgement with a reasoned explanation in the assessment narrative for the single predicted effect (i.e. minor).
- 2.12 The LVA assessment is undertaken at year 1 of operation, for winter and summer seasons.

Assessment Assumptions

The LVA assumptions and limitations are:

- The assessment is based on the drawings for determination and technical studies submitted with the planning application;
- The main focus of this LVIA is the GIS Substation;
- Viewpoints are located on publicly accessible land with impacts to residential receptors assessed via fieldwork and professional judgement;

- The assessment is based on a single point in time; and
- The construction phase is not assessed, as this is temporary in duration. The pertinent matter is the permanent introduction of the GIS building.

Residential Amenity

- 2.13 Due to the 550 metres (m) between the GIS Site and residential land uses at Bronllys Grove, to the north-east of the GIS Site, the LVA does not include an assessment of residential amenity.

Character of the Night Sky

- 2.14 As the Proposed Development would not be lit during operation, there would be no impacts to the character of the night sky during the operational phases. Due to this, the LVA does not include a subjective assessment of the impact to the night sky.

Verifiable Views

- 2.15 Verifiable views illustrating the outline of the proposed GIS building overlaid onto an existing photograph have been undertaken in accordance with the Landscape Institutes Technical Guidance Note 06/19 Type 4 Image. The methodology is set out with the verifiable views.

Consultation

- 2.16 As set out in the introduction, comments from Newport City Council's Landscape Officer have been received in July 2025. These comments are included in **Appendix I** and summarised below, along with how the LVA has responded to them.

Table 2-2: Landscape Response to Officer Comments

Landscape Officer Comments July 2025	LVA Response
The site lies within the Wentlooge Special Landscape Area and Green Wedge however there is no mention of how these policies have been applied	The Special Landscape Area and Green Wedge policies are included in the LVA, along with the Proposed Development's response to the policies.
There is no review of the amenity impact on users of the Percoed Reen cycleway which lies 50m to the south.	The visual assessment identifies several views from along the Percoed Reen cycleway and the potential impacts and effects of the Proposed Development. This is supported by several photowires from along the Percoed Reen to aid in understanding the likely visibility of the GIS Building.
The building height at 19m will have a reasonably large view-shed in the flat landscape and will require mitigation.	A Zone of Theoretical Visibility has been generated to illustrate the theoretical visibility of the building, along with fieldwork from the surrounding landscape.
New planting may be required outside the red line but within the landownership boundary.	The mitigation sections sets out the design approach, along with the review of the potential requirements for new planting.
There is no replacement planting to mitigate for tree/scrub losses outlined in the Arboricultural Impact Assessment.	At the time of undertaking the LVA, the opportunity to relocate the underground cables to avoid the loss of tree/scrub is being explored.
There is no enhancement planting to meet LDP GP5: vi the proposal includes an appropriate landscape	The opportunities and constraints for new landscaping are set out in the LVA.

Landscape Officer Comments July 2025	LVA Response
scheme which enhances the site and the wider context including green infrastructure and biodiversity networks.	
Panoramic photos from both directions from the cycleway with the building mass highlighted as a simple line. The impacts should be described and appropriate mitigation shown on a plan	Viewpoint photography is included in the LVA from along the Percoed Reen in both directions. Photowires are included in the LVA which depict the outline of the proposed GIS buildings from several locations in the surrounding landscape, including along the Percoed Reen.
Building on the above, a detailed planting plan (to include maintenance for the first 5 years) is required. If there are constraints to tree planting from service runs these should be clearly shown.	Constraints are set out in the LVA along with a description of the service runs.

3.0 THE SITE

- 3.1 With reference to the following extract of on-line mapping, the Site ('the red line'), of the proposed GIS substation ('the GIS Site'), borders the Imperial Park Substation and consists of hardstanding, a control room and two transformers. Dyffryn Lane, an access road between Celtic Lakes and the GIS Site is also in the red line.



Image 3-1: Extract of aerial mapping with the Site boundary ('red line'), focused on the GIS Site.

The GIS Site

- 3.2 With reference to **Figure I**, the GIS Site is a broadly rectangular area of predominantly pre-developed hardstanding and existing buildings (brownfield land), covering 0.28 hectares. The GIS Site is bound by:
- Dyffryn Lane and woodland to the north;
 - The National Grid 400kV Substation ('the existing Substation') to the east;
 - Ruderal vegetation, overhead pylons and their associated wires and the Percoed Reen (a long distance walk and cycleway) to the south; and
 - Ruderal vegetation with intermittent trees to the west.

- 3.3 The GIS Site is in a low lying position within the landscape, situated around 6m Above Ordnance Datum (AOD), reflecting the topographic position of the existing Substation and surrounding agricultural land across the Wentlooge Levels SLA. As an area of pre-developed land, there is no notable vegetation within the GIS Site. The Ecology Report states that the habit comprises a limited range of common ruderal species associated with disturbed ground. However, the GIS Site is covered by the Gwent Levels Site of Special Scientific Interest (SSSI) which covers a wide geographic area.
- 3.4 With reference to on-line mapping⁴, the GIS Site is not crossed by any PRow and is not publicly accessible.
- 3.5 The existing structures within the GIS Site consist of a range of materials, including red brick. There is no scenic quality to the GIS Site due to the hardstanding and existing structures, nor is there any sense of remoteness, nor tranquillity, due to the proximity to the Substation. There are no rare or distinctive landscape features within the GIS Site.
- 3.6 With reference to **Figure I**, the GIS Site is not covered by any statutory landscape designations (e.g. National Park), nor is the GIS within, or adjacent to, a Conservation Area.

Dyffryn Lane

- 3.7 With reference to **Figure I**, Dyffryn Lane is a relatively narrow metalled road extending northwards from the GIS Site, for approximately 450m, to a roundabout on Celtic Way. Dyffryn Lane is bordered by vegetation, (outside of the red line) which in proximity to the GIS Site (and with reference to the Arboricultural Impact Assessment (AIA)), is:
- G23, a group of willow and alder trees up to 18m in height, and BS Category B; and
 - G22, a group of willow and alder trees up to 14m in height, and BS Category C.

The Green Wedge

- 3.8 With reference to **Figure I**, the GIS Site and the southern part of Dyffryn Lane are within a Green Wedge, which covers 1,655 hectares, extending north to south from the M4 to the Bristol Channel and east to west between Marshfield and Newport Docks. The Green Wedge is similar in extent to the Wentlooge Levels SLA, and therefore contains a similar range of land uses as set out in the following chapter. The Site represents less than 0.01% of the geographic area of the Green Wedge.

⁴ Newport City Council,
https://my.newport.gov.uk/mynewport.aspx?StartEasting=329700&StartNorthing=187418&StartZoom=50000&Layers=PROW_CAMS

- 3.9 With reference to the following policy chapter, Local Development Plan Policy SP7 sets out the Green Wedges are identified in order to prevent the coalescence of settlements and that development which prejudices the open nature of land will not be permitted.

The Special Landscape Area (SLA)

- 3.10 With reference to **Figure I**, the GIS Site and the southern part of Dyffryn Lane are within the Wentlooge Levels SLA.

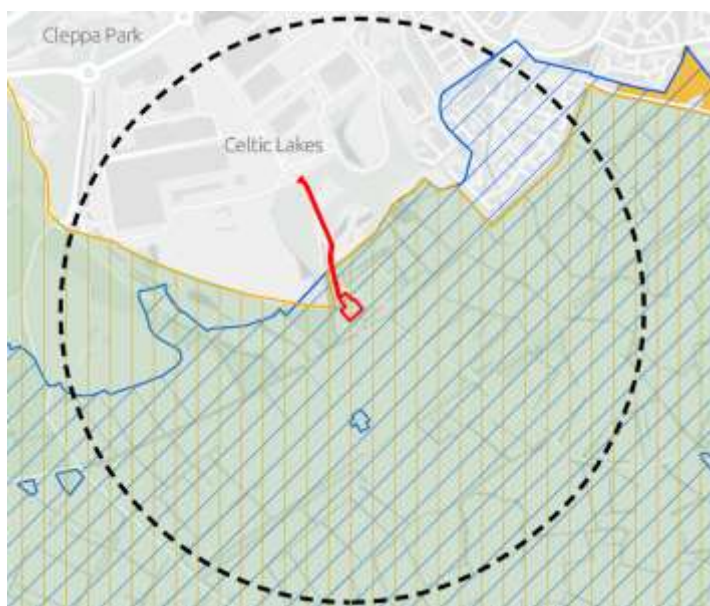


Image 3-2: Extract of Figure I, illustrating the SLA via the orange vertical hatch and Green Wedge via the green hatch.

- 3.11 The Wentlooge Levels SLA covers 2,968 hectares and extends north to south from the A48 to the Bristol Channel and west to east from Broadstree Common to The River Usk, which is also a SLA. The GIS Site therefore represents less than 0.009% of the geographic area of the Wentlooge Levels SLA.
- 3.12 With reference to the following policy chapter and the Local Development Plan⁵, Policy SP8: Special Landscape Areas does not preclude development within a SLA, but requires it to contribute positively to the SLA. The supporting text to the policy sets out that the SLA have been designated via the LANDMAP process, which is set out in the following chapters. The Wentlooge Levels SLA is noted for being reclaimed marshland landscape, with a series of drainage ditches ('reens') which are likely to be of Roman origin. The stated primary landscape qualities are the extensive tract of low lying reclaimed marsh, wetlands, pastoral land and the drainage ditches, none of which are relevant to the Site.

⁵ Newport City Council, <https://www.newport.gov.uk/documents/Planning-Documents/LDP-2011-2026/LDP-Adopted-Plan-January-2015.pdf>

4.0 SITE CONTEXT

STUDY AREA

- 4.1 With reference to GLVIA 3, the purpose of the LVA study area is to identify the geographic area in which landscape and visual effects may occur due to the Proposed Development. The study area is required to be proportionate to the Proposed Development and has been determined through desk-based studies, reviews of aerial mapping, published landscape character assessments and fieldwork.
- 4.2 With reference to **Figure I**, the extent of the study area is a 3km radius of the GIS Site. This is assessed as being proportionate to the Proposed Development, and covers the low lying land across the Wentlooge Levels, the Green Wedge and elevated land to the north of the M4. Any perception of the Proposed Development from beyond the study area would not result in landscape and visual effects due to the combination of distance and intervening features, along with the Proposed Development being perceived in the context of the existing Substation.
- 4.3 The following section summarises the key landscape features across the study area in relation to the GIS Site.

Landform and Hydrology

- 4.4 With reference to **Figure I**, the landform rises very gradually to the north of the GIS Site, from around 6m AOD to 10m AOD at Celtic Way roundabout. The landform remains generally flat across Celtic Lakes, before rising to the north of A48, to form a tract of undulating elevated land across the north part of the study area, up to around 125m AOD at Pen-y-lan, 2.8km to the north-west of the GIS Site. The Nant-y-moor Brook flows across lower lying parts of this undulating land in the northern part of the study area, and beneath the M4 and A48, to form a series of waterbodies which flow into the Percoed Reen. The Blackwell Reen flows to the north-east of the Site, between residential areas adjacent to Dyffryn Way.
- 4.5 To the east of the Site, the landform remains low lying across fields and residential land uses to the north-east of the Site and the Wentlooge Levels. There is localised level change via the railway embankment, 770m to the east of the Site, with Lighthouse Road crossing the railway and providing access to several farms and properties situated around 7m AOD, 1.5km to the east of the Site. The landform continues to fall very gradually across the remainder of the eastern part of the study area, towards the Ebbe River and River Usk. A flood defence earth embankment adjacent to the coast and marshes is a localised elevated area of engineered landform.
- 4.6 To the south of the ESS Site, the landform remains around 6m AOD, except for along the alignment of the Percoed Reen, which is several metres lower due to being an engineered drainage ditch. The landform remains around 6m AOD across the majority of the southern part of the study area, including around St Brides, 1.4km to the south-east of the GIS Site. The railway line results in a localised area

of raised landform, with Hawse Lane and Green Lane rising to cross over the railway line. To the south of St Brides, the landform falls very gradually towards the coast, with the same earth embankment as across the eastern part of the study area extending adjacent to the coastline.

- 4.7 To the west of the Site, the landform rises very gradually across the Wentlooge Levels and ruderal vegetation within Great Pen-carn, with Hawes Lane situated around 8m AOD, 1km to the west of the Site. The landform continues to rise very gradually across the remainder of the western part of the study area, to around 10m AOD at the edge of Marhsfield and to around 20m AOD at the A48 and transition to more elevated land across the north-west part of the study area.
- 4.8 The Site is therefore in a low lying position within the study area in relation to more elevated land across Celtic Lakes and to the north of the M4. The Site's topographic position reflects most of the Wentlooge Levels, which extend to the east, south and west of the Site, consisting of generally flat landform, crossed by numerous drainage ditches. There is localised alteration to this pattern of flat landform via the railway line embankment and the coastal defences, but otherwise there is a consistent pattern of flat and low lying landform to the south of Celtic Lakes, extending to the coast.

Vegetation Patterns

- 4.9 With reference to **Figure 1**, the main tracts of woodland are across elevated land in the northern part of the study area, including adjacent to the Nant-y-moor Brook, with bankside vegetation extending around the western edge of Celtic Lakes to the Percoed Reen. This includes a triangular belt of woodland, 295m to the west of the Site, situated between the Percoed Reen and Celtic Way ring road.
- 4.10 There are also notable tracts of woodland bordering residential land uses to the north-east of the Site, adjacent to Pencarn Lane and Bronllys Grove. These woodlands also extend adjacent to the Blackwell Reen.
- 4.11 The agricultural field pattern across the Wentlooge Levels to the south of the Site is divided by hedgerows and trees, which due to the generally small scale field pattern results in a high degree of vegetation cover. This includes adjacent to Green Lane, 70m to the south of the GIS Site, which is bordered by established vegetation. Reeds are often present in many of the drainage ditches, including parts of the Percoed Reen.
- 4.12 Other areas of notable vegetation are across Parc golf course, 1.1km to the west of the Site, and Tredegar House gardens, 1.5km to the north-east of the Site.
- 4.13 In closer proximity to the GIS Site, there is established vegetation along the northern and southern edges of the existing Substation, with that along the southern edge extending to border the Percoed Reen path/cycleway.

4.14 The AIA notes that the southern edge of the GIS Site is bordered by:

- G18, a group of willow trees, up to 12m in height and BS Category C;
- G20, a group of willow and alder trees up to 17m in height and BS Category C; and
- S14, an areas of scrub, up to 2m in height.

4.15 There is no ancient woodland in proximity to the GIS Site, nor is any of the vegetation covered by Tree Preservation Orders.

4.16 The study area is therefore well vegetated, which with reference to the following visual appraisal results in varying inter-visibility and perceptions of enclosure and openness. Established vegetation adjacent to the existing Substation provides a high degree of enclosure to most of the equipment and a physical buffer from the Percoed Reen.

Settlement Pattern and Land Use

4.17 With reference to **Figure 1**, the main concentration of residential land uses is across the north-east part of the study area, between the A48 and Celtic Lakes. These residential areas consist of mainly two or three storey properties in a dense layout, apart from across Tredegar Park, where the residential layout is notable for its elongated form. In proximity to the Site, there is residential development adjacent to Bronllys Grove, 550m to the north-east of the Site, which consists of contemporary properties up to three storeys in height, with the properties at the western edge of the area orientated towards the Site. St Brides, 1.4km to the south-east of the Site, is concentrated to the north of the B4239. To the south of St Brides is Lighthouse Park, a relatively large scale mobile home park. Marshfields, at the western edge of the study area is a large linear village, mainly concentrated to the west of the Marshfield Road.

4.18 Celtic Lakes is a large employment area 450m to the north of the GIS Site, consisting of large scale 'box-style' buildings, with land uses focused around telecommunications and data centres. The buildings are bordered by extensive hardstanding for car-parking or storage.

4.19 The existing Substation adjacent to the GIS Site consists of a transformers and overhead wires which connect with a tall (c.45m high) pylon between the Substation and Percoed Reen. This is one of a number of pylons located in proximity to the Percoed Way, before extending around the western edge of Celtic Lakes or the Wentlooge Levels. There is also a second row of c.45m tall pylons extending north-east to south-west across the study area, between the GIS Site and the railway line, such that that the GIS Site is consolidated to part of the study area where there are five pylon towers within a 435m radius of the GIS Site, such that vertical infrastructure is a notable feature in proximity to parts of Green Lane and the Percoed Reen adjacent to the GIS Site.

- 4.20 The Wentlooge Levels is predominantly characterised by small to medium scale rectangular fields, divided by hedgerows and trees. The fields are divided by numerous drainage ditches, resulting in a consistent open and undeveloped character to much of the southern part of the study area.
- 4.21 The B4239 is the main road across the southern part of the study area, bordered by small scale residential settlements and intermittent farms. Hawse Lane and the Broadway are narrow roads connecting the B4239 with Celtic Lakes and the A48. Green Lane is a narrow road between the B4239 and the Percoed Reen to the south of the GIS Site, although there is no permitted vehicle access adjacent to the Percoed Reen.

Public Rights of Way (PRoW) and Access

- 4.22 With reference to on-line mapping⁶, PRoW across the study area include:
- The Percoed Reen (390/GL2/1), which extends between Pencarn Lane and Green Lane, to the south of the GIS Site;
 - The Percoed Reen (390/GL2/2), which extends from Green Lane (to the south of the Site) to Hawse Lane;
 - PRoW (footpath) 390/21/2, 544m to the west of the GIS Site, extending between the Percoed Reen and Church Lane;
 - Green Lane (412/GL2/1), 748m to the south of the Site, extending between Green Lane and Hawse Lane;
 - PRoW (footpath) 412/13/7, along the raised coastal defence embankments across the southern part of the study area and forming part of the Wales Coastal Path;
 - PRoW (footpath) 390/14/1, across elevated land in the north-west part of the study area.

Designations

- 4.23 With reference to **Figure I**, the study area is not covered by any statutory landscape designations.
- 4.24 There are no Conservation Areas in proximity to the GIS Site. The closest is Tredegar House and Grounds, 1.5km to the north of the GIS Site, which covers a similar area of land as the Registered Historic Park and Garden (RHPG). The stated 'significant' view from the RHPG is not towards the Site. There are also a number of listed buildings within this Conservation Area and RHPG.
- 4.25 Most of the southern part of the study area is covered by a SSSI, with a Special Protection Area along the coast.

⁶ Newport City Council,
https://my.newport.gov.uk/mynewport.aspx?StartEasting=329700&StartNorthing=187418&StartZoom=50000&Layers=PROW_CAMS

- 4.26 With reference to **Figure I**, the Wentlooge Levels cover the GIS Site and the southern part of Dyffryn Lane, and extend across the majority of the study area. With reference to **Appendix II**, the Site was not within the SLA boundary when considered in the Designation of SLA in 2009, with the SLA boundary extending along the Percoed Reen. The Wentlooge Levels are described as:

“A unique landscape of reclaimed marshland abutting the Severn Estuary. Although covered under its designation as a Site of Special Scientific Interest (SSSI), these are primarily concerned with protection of the drainage ditch system which is the focus of the biodiversity value in the area.”

- 4.27 The published study notes that the SLA is under threat from development and changing land uses, such that the SLA designation is required in addition to the SSSI designation. The stated primary landscape qualities and features include:

- Part of an extensive tract of low lying, reclaimed marsh and wetlands;
- Large open expanse of primary pastoral land; and
- Distinctive pattern of drainage ditches ('reens'), deriving from Roam reclamation work.

- 4.28 From the above, the GIS Site is not representative of any of these primary qualities.

- 4.29 Relevant stated policy and management issues are:

- *“Loss of landscape integrity through gradual change in character from developments including leisure, and features such as “horsiculture”;* and
- *Increased pressure for development at existing settlements and associated with major transport routes eg: M4 Link Road.”*

- 4.30 The Gwent Levels, which cover most of the Wentlooge Levels, except for the GIS Site and land to the north-east, between the GIS Site and residential land uses of stated a Landscape of Outstanding Historic Interest.

Perceptual and Aesthetic Factors

- 4.31 From the fieldwork, the perception of fields situated across a flat landscape is evident when travelling across the Wentlooge Levels. The fields and field boundary vegetation results in a simple pattern to the landscape, with similar colour tones across the fields and vegetation. The perception of remoteness is limited by inter-visibility with land uses at Celtic Lakes and residential land uses across the Wentlooge Levels. The perceptions of tranquillity are higher across the southern parts of the Wentlooge Levels, at distance from the railway line.
- 4.32 The existing Substation is perceived at close range from along the eastern part of the Percoed Reen, and Percoed Reen; whilst the pylons are perceived from across a wider extent of the Wentlooge Levels and the study area due to their height. When adjacent to the existing Substation, the vegetation

adjacent to the Percoed Reen results in a high degree of enclosure in summer months, such that the perception of the wider Wentlooge Levels is largely negated.

- 4.33 When travelling along the Percoed Reen, there is notable difference in character between the eastern part of the route, between residential land uses and the existing Substation, and the western part of the route, between the Substation and Hawse Lane. The eastern part of the Percoed Reen has a developed character via a range of land uses and no sense of remoteness and limited tranquillity. In contrast, the western part of the route, has a higher degree of tranquillity and a reduced perception of the existing Substation due to the density of intervening vegetation, although remoteness remains limited due to intervisibility with other features across the landscape, including the overhead pylons and railway line.

5.0 LANDSCAPE RECEPTORS

- 5.1 The Site and study area are covered by several published landscape character assessments and related studies, with the relevant aspects summarised below and set out in full in **Appendix II**.

NATIONAL LANDSCAPE CHARACTER AREAS (NLCA)

- 5.2 With reference to the following extract of the published study, the Site and the majority of the study area are covered by NLCA 34: Gwent Levels⁷ (NCA 34), which is a large geographic area, extending from the M48 to Newton.



Image 5-1: Extract of NCA 34, with the Site schematically illustrated via the red dot.

- 5.3 With reference to **Appendix II**, the NLCA is described by the published study as:

“This is a distinctive, flat, lowland landscape with a geometric patchwork of watercourses that run between fertile fields. It is remarkable for having been created by reclaiming marshland and inter-tidal areas during successive periods going back to Roman times. In parts, the older patterns have changed almost beyond recognition over the past 150 years, sections having been built over by a major railway line, two motorways, a large steelworks, and a power station. In addition, there has been a rapid growth of once small settlements into dormitory villages, and urban expansion from both Cardiff and Newport.”

⁷ Natural Resources Wales, <https://cdn.cyfoethnaturiol.cymru/682619/nlca34-gwent-levels-description.pdf?rmode=pad&v=1d35c989562a250>

- 5.4 The key characteristics of the NLCA include major development on fringes, with the study noting that pylons stand out in the flat landscape. The study notes that despite development, the Levels remain a distinct rural area, where solitude and quietness can be found.
- 5.5 The northern part of the study area, covering elevated land to the north of the M4 is covered by NLCA 35: Cardiff, Barry and Newport⁸ and is noted by the published study as a busy infrastructure and urban landscapes.

LANDMAP⁹

- 5.6 LANDMAP provides information on the landscape via defined spatial datasets, which classify the landscape and describe the relevant key characteristics, along with appropriate management guidance where relevant. The datasets covering the Site are set out in the following table and should be read in combination with **Figure 2**.

Table 5-1: LANDMAP in Relation to the Site and Study Area

LANDMAP	The Site	Stated Description and Guidance	Study Area
Cultural	The Site is within a built land – urban classification LG Park; however the overall quality is stated as outstanding.	n/a.	Land across the northern part of the study area is covered within the Michaelston-y-Fedw area and the rolling lowland classification, apart from Celtic Way, which is within the same classification as the Site. Land to the north-east of the Site, covering residential areas is within Dyffryn. Land to the south of the Site is within the Wentlooge Levels, classified as flat lowland/levels.
Visual	The Site is in a built land classification, which extends to the north of the Site, across Celtic Way and to the north-east of the Site, across residential land uses. The study notes the open nature of the area, the discordant balance of features and the disunity of the area with detractive views into the area, such that the perceptual and sensory qualities are unattractive. The stated evaluation is low.	Described as primarily late 20th century commercial and industrial area with some small scale recent housing on the western fringe. The area is served by the A48 and bounded to the north by the M4 which has glimpses of various buildings which are located very close to the motorway. Manage boundary vegetation to maximise screening and for nature conservation and improve A48 corridor with consistent landscape treatment.	To the south of the Site, the land is classified as flat lowland levels. Attractive views are noted both in and out of the area, with a stated high value. Elevated land to the north of the Site is classified as rolling lowland. This has a stated high moderate value.
Historic	The Site is covered by the M4 Communication Corridor Area, which extends northwards across Celtic	n/a	Land to the south-east of the Site is covered by St Brides Wentlooge area and assessed as a high value. The Wentlooge

⁸ Natural Resources Wales, <https://cdn.cyfoethnaturiol.cymru/682621/nlca35-cardiff-and-newport-description.pdf?rmode=pad&v=1d35c98c356b3e0>

⁹ LANDMAP, <https://smnr-nrw.hub.arcgis.com/apps/1b7b831d7aa14b158e40f398d568a8b1/explore>

LANDMAP	The Site	Stated Description and Guidance	Study Area
	Way and along the M4 corridor. The stated evaluation is moderate.		Levels are to the south and south-west of the Site and are assessed as an outstanding historic landscape and outstanding value. Elevated land across the northern part of the study area is covered by Michaelston le Fedw and is assessed as a high value.
Landscape Habitats	The Site is within the terrestrial mosaic habitats classification, which extends southwards across the levels. The value is assessed as outstanding.	n/a	Land to the north of the Site, across Celtic Way is classified as a built up area, with the stated value as low. Land to the south of the Site is within the Gwent Levels and has a mixture of arable and pasture land use. This area is noted for its green lane habitats, also important relict meadow plant species such as the regionally notable grass vetchling. The value is stated as outstanding.

- 5.7 The GIS Site is within a cultural dataset of LG Park and built land and of a stated low value, meaning¹⁰ it is of lower influence and of lower local importance or landscape influence. The GIS Site is therefore considered not to be reflective of the wider outstanding value, meaning of national or international importance.
- 5.8 From the above table, the GIS Site is within part of an area of low visual value, due to the existing land uses, meaning it is of lower influence and of lower local importance or landscape influence. The GIS Site is therefore not representative of the high visual value across the remainder of the study area and the Wentlooge Levels, which is defined as being of regional or county importance.
- 5.9 The GIS Site is in an area of moderate historic value, meaning of local importance, which is lower than the high and outstanding values to the south of the Site, across the Wentlooge Levels, which are defined as regional or national importance.
- 5.10 The GIS Site is in an area of outstanding landscape habitat value, meaning of international or national importance, but the GIS Site does not comprise terrestrial habitats nor the ecological quality of the remainder of the area. The Site is therefore considered not to reflect this tier of value.
- 5.11 In conclusion, the Site is not representative of the higher aspects of landscape value accounted for in the LANDMAP datasets due to the existing land use, land cover and proximity to the Substation.

¹⁰ LANDMAP, <https://cdn.cyfoethnaturiol.cymru/vx3pogql/landmap-overview-en.pdf>

TACP Designation of Special Landscape Areas, 2009

- 5.12 With reference to **Appendix II**, the Site was not included in the Wentlooge Levels Special Landscape Area at the time of the 2009 study, with the boundary of the designation being Percoed Reen. The stated need for the SLA was:

“A unique landscape of reclaimed marshland abutting the Severn Estuary. Although covered under its designation as a Site of Special Scientific Interest (SSSI), these are primarily concerned with protection of the drainage ditch system which is the focus of the biodiversity value in the area. Notwithstanding this and its historic value the area remains under threat from development and changing land uses, in particular an increase in leisure uses, turf cutting and horsiculture. All of these combine to place increasing pressure upon the integrity of the landscape as a whole.”

- 5.13 Key policy and management issues include increased pressure for development.

Local Landscape Character Areas (LLCA) identified by the LVIA

- 5.14 To add an additional level of detail to the published studies and a more proportionate scale of assessment derived from LANDMAP, the LVIA has identified the following LLCA:

- LLCA 1: The existing Substation (covers the GIS Site);
- LLCA 2: Percoed Reen East, covers 390/GL2/1, the adjacent fields and vegetation to the east of the Site;
- LLCA 3: Percoed Reed West, covers 390/GL2/2, the adjacent fields and vegetation to the west of the Site;
- LLCA 4: Bronllys Grove Residential, covers the residential land uses to the east of the GIS Site;
- LLCA 5: Green Lane, covers the lane and verges to the south of the Site;
- LLCA 6: Celtic Lakes Ruderal, covers the ruderal vegetation to the north of the Site and Dyffryn Lane;
- LLCA 7: Celtic Lakes Employment, covers the employment land uses to the north of the Site;
- LLCA 8: Railway Line, covers the alignment of the railway line; and
- LLCA 9: Wentlooge Levels Arable, covers the arable land uses to the south of the railway line.

Landscape Receptor Summary

- 5.15 From the above reviews and with reference to **Appendix IV**, the following table summarises the landscape receptors included in the assessment and their sensitivity to the Proposed Development.

Table 5-2: Landscape Receptor Summary

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The GIS Site	Very low	Very low	Very low
Dyffryn Lane	Low	Very low	Low
Published Landscape Character Areas			
NLCA 34: Gwent Levels (covers the Site)	High	High	High
NLCA 35: Cardiff, Barry and Newport	Medium	Medium	Medium
Wentlooge Levels Special Landscape Area (covers the Site)	High	High	High
Local Landscape Character Areas (LLCA)			
LLCA 1: Existing Substation (covers the GIS Site)	Very low	Very low	Very low
LLCA 2: Percoed Reen East	Medium	High	High
LLCA 3: Percoed Reen West	High	High	High
LLCA 4: Bronllys Grove Residential	Low	Low	Low
LLCA 5: Green Lane	Medium	High	High
LLCA 6: Celtic Lakes Ruderal	Low	High	High
LLCA 7: Celtic Lakes Employment	Low	Low	Low
LLCA 8: Railway Line	Low	Very Low	Very Low
LLCA 9: Wentlooge Levels Arable	High	High	High

- 5.16 From the above table, the sensitivity of the landscape receptors is varied. The higher sensitivity receptors reflect the arable and inherently more rural parts of the study area, specifically those parts of the Wentlooge Levels, where the key features of the landscape are notable. The lower sensitivity areas reflect developed parts of the study area, where the existing land uses result in less attributes of landscape value, or enable a higher degree of change, and therefore a lower susceptibility.
- 5.17 The GIS Site is assessed as an area of very low value due to being hardstanding and with single storey structures associated with electrical land uses. There is no recreational value, no notable vegetation structure, no cultural value due to the land use and the GIS Site does not contribute positively to the landscape. Whilst it is within a Special Landscape Area, the GIS Site is not representative of the key landscape features, such that its value is not elevated due to the designation. The susceptibility of the GIS Site is very low, due to being an area of modified landform and with existing structures, such that it is highly able to accommodate change.

6.0 VISUAL AMENITY

- 6.1 As set out in the methodology, the LVA includes an assessment of the likely changes to people's views ('visual receptors') due to the Proposed Development. The identification of people's views is based covers a representative range of differing groups, e.g. residents, recreational users or road users.
- 6.2 The identification of representative views is a two stage process, which as set out below includes desk-based reviews and fieldwork from publicly accessible locations ('viewpoints').

Stage 1: Desk-based reviews and Zone of Theoretical Visibility (ZTV) Mapping

- 6.3 From the baseline review, the Site is not covered by any designated views.

Zone of Theoretical Visibility (ZTV) Analysis

- 6.4 To aid the fieldwork and with reference to the following extract of **Figure 3**, a ZTV has been generated which illustrates the locations across the study area from which the Proposed Development would be theoretically visibility via the blue hatch. The ZTV includes the existing vegetation and buildings within the study area (derived from on-line data), so as to provide a degree of reality to the theoretical modelling.

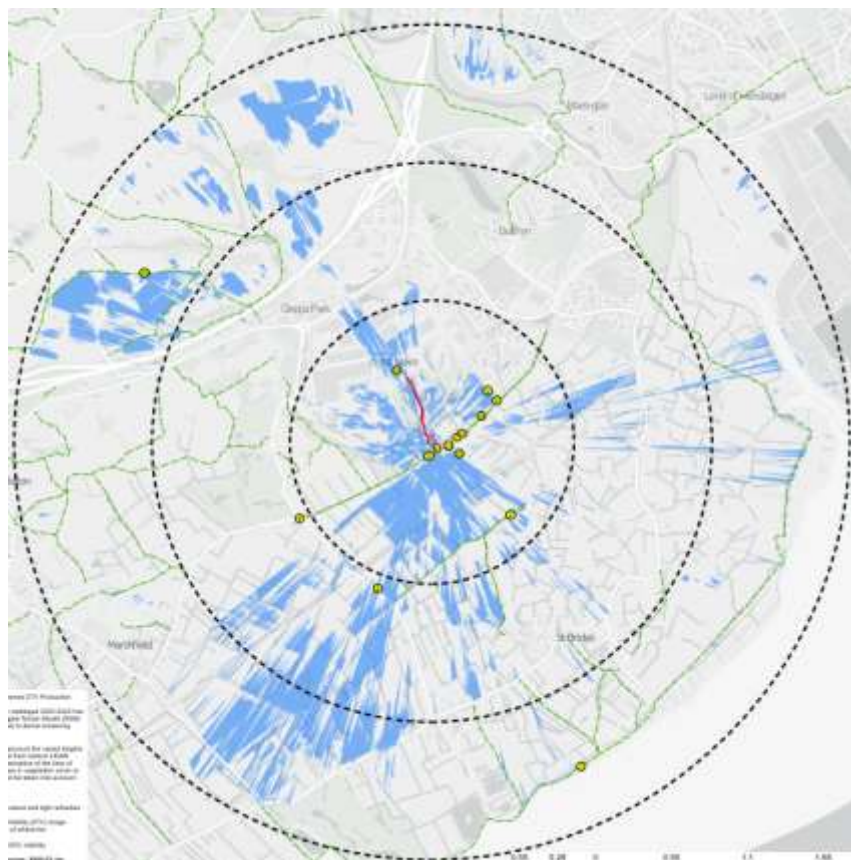


Image 6-1: Extract of Figure 3, illustrating the theoretical visibility of the Proposed Development via the blue hatch.

6.5 **Figure 3** suggests that the theoretical visibility of the Proposed Development would be:

- Intermittent to the north of the GIS Site, due to the extent of intervening vegetation, but would extend across parts of Celtic Lakes and more elevated land to the north and north-west of the M4;
- Limited to the east of the GIS Site due to existing infrastructure and vegetation, but would extend to the edge of residential land uses adjacent to Bronllys Grove, 550m to the east of the GIS Site, before becoming more intermittent across parts of the Wentlooge Levels;
- Concreated within 1km of the south of the GIS Site, before becoming intermittent across south-west part of the study area and Wentlooge Levels; and
- Limited to the west of the GIS Site, due to the extent of vegetation within a 0.5km radius of the GIS Site.

6.6 As set out above, the ZTV is used to inform the fieldwork and does not form part of the visual assessment.

Stage 2: Fieldwork

6.7 Fieldwork has been undertaken in August 2025 to review the ZTV and identify visual receptors and 'viewpoints', i.e. photography from a publicly accessible locations, which represent the existing view.

6.8 The following section sets out the fieldwork, focused on the Proposed Development within the GIS Site. As the fieldwork was undertaken whilst deciduous vegetation was in leaf, consideration is also given to the winter views (i.e. when deciduous vegetation is not in leaf), in order to support the following visual assessment.

6.9 The following section should be read in combination with the viewpoint locations illustrated on **Figure 3** and the photographs on **Figures 4 to 11**.

6.10 **Viewpoint 1** is taken from the southern edge of the study area, along PRoW (footpath) 412/13/4 (part of the Wales Coast Path), 2.6km to the south of the GIS Site. The view is representative of recreational users. The view demonstrates that the elevated position of the PRoW enables long range views across the Wentlooge Levels to elevated land to the north of the M4. The GIS Site is not visible due to the density of intervening vegetation, although in views towards the Site, data centres in Celtic Lakes and residential land uses at St Brides are visible, such that the GIS Site is located in a more developed part of the composition of the view. In winter, with the intervening vegetation not in leaf, the GIS Site is considered to remain not visible due to the density of the vegetation and distance.

6.11 Moving northwards, to within closer proximity of the GIS Site, **Viewpoint 2** is taken from Green Lane 412/GL2/1, 750m to the south-east of the GIS Site and is representative of recreational users. The view demonstrates the generally flat landform across the Wentlooge Levels and the height of the intervening field boundary vegetation, such that views are channelled across the fields, extending to

elevated land to the north of the M4. The ground level of the GIS Site is not visible, due to being situated beyond the field boundary vegetation and railway line, nor are the pylon towers in proximity to the GIS Site. In winter, the extent of the views would increase, due to the intervening vegetation not being in leaf, such that there would be an increased visibility of elevated land to the north of the M4 and the pylons, although largely softened by the branches and density of the intervening vegetation.

- 6.12 **Viewpoint 3** is taken from Hawse Lane, 1km to the south-west of the GIS Site and is representative of road users. The view demonstrates the height of the vegetated railway embankment across the fields, which truncates any longer distance views across the Wentlooge Levels. The alignment of the railway line is also demarcated by the overhead wires and gantries, beyond which tall overhead electricity pylons extend across the composition of the view, parallel to the railway line. The ground level of the GIS Site is not visible due to these intervening features, which form a notable tract of vertical structures across the composition of the view. In winter, the railway embankment would continue to truncate views across the fields, but there would be a slight increase in the extent of the view due to the railway vegetation not being in leaf, resulting in a greater visibility of the pylons and railway infrastructure.
- 6.13 **Viewpoint 4** is taken from the Percoed Reen (390/GL/2), 1km to the west of the GIS Site and is representative of recreational users travelling west, towards the GIS Site, along with Viewpoints 5. The view demonstrates that the Percoed Reen is bordered by hedgerows and a drainage channel, although views extend across the Wentlooge Levels to a well vegetated skyline, above which the upper parts of tall pylon towers are visible, extending towards the existing Substation adjacent to the GIS Site. The ground plane of the GIS Site is not visible due to the intervening vegetation and distance. In winter, the composition of the view is considered to remain similar, with some additional visibility of the pylons.
- 6.14 Moving east along the Percoed Reen (390/GL/2), views towards the GIS Site are negated by the density of the intervening vegetation, until **Viewpoint 5**, 40m to the south of the GIS Site. The view demonstrates that the overall extent of the view is short in range, due to the density of foreground vegetation, which channels views across the GIS Site. The Site is seen in the context of existing buildings, security fencing and the overhead pylon wires, which are above the receptor. There are no longer distance views of elevated land to the north of the M4 or the wider Wentlooge Levels. In winter, the visibility of the GIS Site and the sounding infrastructure would increase, along with softened views of elevated land to the north of the M4.
- 6.15 **Viewpoint 6** is taken 250m to the north-east of the GIS Site, on the Percoed Reen (390/GL/1) and is representative of recreational users. The view demonstrates the proximity of the existing Substation and pylon towers to the Percoed Reen and their dominance within the composition of the view. The combination of the infrastructure and the vegetation channel views westwards, along the Percoed Reen, but the overall extent of the view is short in range. The GIS Site's ground plane is not visible, due to being located beyond the existing infrastructure, although there is the potential for the

Proposed Development to be visible. In winter, the composition of the view would be similar to that in summer, with additional visibility of the existing electrical infrastructure and a reduced scenic quality.

- 6.16 Continuing along the Percoed Reen (390/GL/1), **Viewpoint 7**, is taken 330m from the Site, and demonstrates that the existing Substation is completely screened by the proximity of the vegetation bordering the route. Similarly the GIS Site's ground plane is not visible. In winter, the composition of the view is considered to remain similar, being channelled along the Percoed Reen with some visibility of the existing Substation, although softened by the density of intervening vegetation.
- 6.17 **Viewpoints 8** is taken 400m from the GIS Site and is representative of recreational users on the Percoed Reen (390/GL/1). The view demonstrates that from this part of the Percoed Reen, the height and density of intervening vegetation larger screens the existing Substation, with only the pylon towers and their overhead wires visible. The GIS Site's ground plane is not visible, due to being located beyond the intervening vegetation, with the overall extent of the view short in range and channelled due to the vegetation bordering the Percoed Reen. In winter, there would be an increased visibility of the existing Substation, with views extending beyond the vegetation towards the GIS Site, although softened by the density of branches.
- 6.18 Moving to the north-east of the Site, **Viewpoint 9** taken from the Percoed Reen (390/GL/1), 590m to the north-east of the GIS Site, **Viewpoint 10** taken adjacent to residential land uses at Bronllys Grove, 575m from the GIS Site, with. The views are representative of residents and views from upper storey windows, as well as recreational users of the Percoed Reen and the field across the foreground of the view, who were using the field during the fieldwork. The views demonstrate that in summer the existing Substation is generally well screened by the intervening vegetation, whilst the overhead pylon towers and their wires are visible, set within a well vegetated and generally flat and low lying landscape. The height and density of vegetation negate any longer distance views and the GIS Site's ground plane is not visible due to being situated beyond the existing Substation. In winter, the visibility of the existing Substation would increase, although the overall composition of the view would remain like in summer.
- 6.19 **Viewpoint 11** is taken from Green Lane, 185m to the south-east of the GIS Site and is representative of road users. The view demonstrates that the density of the roadside vegetation channels views along Green Lane, and negates views of the wider landscape. The overall extent of the view is therefore short in range and the GIS Site's ground plane is not visible due to being beyond the roadside vegetation. In winter, there would be softened views of the electrical pylons, although the overall extent of the view would remain similar to that in summer.
- 6.20 Remaining on Green Lane and moving towards the Site, **Viewpoint 12** is taken from the path linking Green Lane to the Percoed Reen and is representative of recreational users, 110m to the south-east of the GIS Site. The view demonstrates that views are channelled to the east and west of the receptor,

along the alignment of the Percoed Reen, with views northwards being short in range, due to the height of vegetation adjacent to the Percoed Reen. The existing Substation is visible, beyond a tall pylon, along with pylons along the alignment of the Percoed Reen to the west and east, such infrastructure and vertical structures are pronounced within the composition of the view. The GIS Site's ground plane is not visible due to the intervening vegetation, although there is the potential for the Proposed Development to be visible. In winter, the visibility of the existing Substation would increase, with views towards the GIS Site increasing due to the vegetation not being in leaf.

- 6.21 In very close proximity to Viewpoint 5, but from the Green Lane to the south of Percoed Reen (390/GL.2), **Viewpoint 13** demonstrates views extend across the GIS Site due a gap in the intervening vegetation. The Site is seen in the context of several utilitarian style buildings, pylons and their associated overhead wires and electrical equipment within the Substation. There are no longer distance views beyond the GIS Site due to the height of vegetation and the generally flat landform. The GIS Site is therefore seen as part of the existing infrastructure, with the pylons forming a notable feature in close range views from this part of the Percoed Reen. In winter, the visibility of the existing Substation would increase, along with views towards the GIS Site, thereby further reducing the scenic quality of the view.
- 6.22 Moving to the north of the study area, **Viewpoint 14** is taken from Celtic Way, 600m to the north of the GIS Site and is representative of employment users and road users. The view demonstrates the due to the density and height of vegetation, views do not extend across the Wentlooge Levels for road users, whilst for office users in a more elevated position, their views would extend above the intervening vegetation. The skyline is predominantly undeveloped, although the overhead pylons adjacent to the Percoed Reen are visible in the background of the view. The GIS Site is not visible, due to the intervening distance and vegetation. In winter, the composition of the view is considered to be similar to that in summer, with some additional visibility of the sky beyond the intervening vegetation.
- 6.23 **Viewpoint 15** is taken from elevated land in the north-west part of the study area, along PRow (footpath) 390/8/1 and is representative of recreational users 2.4km from the Site. The elevated position of the receptors enables long and panoramic views across the Wentlooge Levels and the Bristol Channel. The existing Substation is visible, along with the Site, although forming a very small part of the wider view and seen in the context of data centre at Celtic Lakes and the overhead pylons along the alignment of the railway line. Therefore, the Site is consolidated to a more developed part of the composition of the view. In winter, the view would remain similar to that in summer, due to the elevated position of the receptor, with some additional visibility of the existing Substation and built form across the composition of the view.

Visual Summary

- 6.24 From the above fieldwork, the visibility of the GIS Site and Proposed Development is considered to be less than suggested by the ZTV. This is due to a greater density of vegetation ‘in reality’, than is accounted for in the on-line data sources for the ZTV.
- 6.25 There is public access along part of the Percoed Reen and Green Lane to the immediate south of the GIS Site, from which there are views towards the GIS Site, due to the lower height of the intervening vegetation. Although the GIS Site is seen beyond a pylon tower and overhead wires, with the existing transformers within the GIS Site also visible.
- 6.26 Once to the west or east of the GIS Site, along the Percoed Reen, the visibility of the Site is substantially reduced, becoming screened in summer due to the density and height of vegetation bordering the Percoed Reen. In winter months, the density of this vegetation is considered to retain a very high degree of softening to views; with the visibility of the existing Substation increasing due to the deciduous vegetation not being in leaf.
- 6.27 From the wider landscape, the GIS Site is not visible due to its low lying position and the density of intervening vegetation. In views towards the GIS Site from the Wentlooge Levels, the rows of overhead pylons are noticeable, such that the composition of views is already demarcated by tall structures to the north of the railway line, as well as tall and large scale buildings within Celtic Lakes.
- 6.28 From elevated land across the northern part of the study area, the existing Substation is visible, such that the GIS Site can be located. The GIS Site forms a very small part of the wider panoramic views, seen beyond the large scale buildings in Celtic Lakes and within the setting of overhead pylons, such that it is part of a more developed part of the composition of the view, in comparison to the wider visible extent of predominantly undeveloped land across the Wentlooge Levels.
- 6.29 From the above baseline and fieldwork, the following table sets out the visual receptors (‘people’) taken forwards for the visual assessment and their sensitivity, which is set out in full in **Appendix V**.

Table 6-1: Viewpoint (VP) and Visual Receptor Summary

VP	Visual Receptor	Visual Value	Visual Susceptibility	Visual Sensitivity
1	1. Recreational users on PRoW (footpath) 412/13/4, part of the Wales Coast Path	High	High	High
2	2. Recreational users on Green Lane (412/GL2/1)	Medium	High	High
3	3. Road users on Hawse Lane	Low	Medium	Medium
4	4. Recreational users on Percoed Reen (390/GL/2)	High	High	High
5	5. Recreational users on Percoed Reen (390/GL/2)	Very Low	High	Medium
6	6. Recreational users on Percoed Reed (390/GL/1)	Very Low	High	Medium

VP	Visual Receptor	Visual Value	Visual Susceptibility	Visual Sensitivity
7	7. Recreational users on Percoed Reed (390/GL/I)	Very Low	High	Medium
8	8. Recreational users on Percoed Reed (390/GL/I)	Very Low	High	Medium
9	9. Recreational users on Percoed Reed (390/GL/I)	Medium	High	High
10	10. Residents at Bronllys Grove	Medium	High	High
11	11. Road users on Green Lane	Medium	Medium	Medium
12	12. Recreational users on Green Lane	Very Low	High	Medium
13	13. Recreational users on Green Lane	Very Low	High	Medium
14	14A. Road users on Celtic Way	Medium	Low	Low
	14B. Employment users at Celtic Lakes	Medium	Very Low	Low
15	15. Recreational users on PRow (footpath) 390/8/I	High	High	High

- 6.30 From the above table, the sensitivity of the visual receptors is generally higher due to most of the receptors either being recreational users of the local routes, or where present residents with fixed views. For recreational users of the Percoed Reen, their sensitivity varies between medium and high, because when in proximity to the GIS Site, the visibility of the existing pylons and Substation are such discordant features, that the value of their views is notably reduced, thereby reducing their overall sensitivity. The low sensitivity receptors relate to employment and road users at Celtic Lakes, for whom their attention is considered not to be on the surrounding landscape.

7.0 RELEVANT PLANNING POLICY

7.1 The following section summarises the policies relevant to landscape and visual matters, with the policies set out in full in **Appendix III**.

Future Wales: The National Plan 2040¹¹

7.2 Future Wales is the national development framework for Wales. Relevant visions and objectives are:

- 9. Places that sustainably manage their natural resources and reduce pollution;
- 10. Places with biodiverse, resilient and connected ecosystems; and
- 11. Places which are decarbonised and climate-resilient.

7.3 With reference to **Appendix III**, Policy 17: Renewable and Low Carbon Energy and Associated Infrastructure sets out that the Welsh Government supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. The Plan sets out that 70% of electricity consumption is to be generated from renewable energy by 2030.

Planning Policy Wales (PPW) Edition 12, 2024¹²

7.4 PPW Edition 12 sets out the land use planning policies of the Welsh Government and notes that a ‘prosperous Wales’ can be achieved through a variety of opportunities, including investment in renewable and low carbon energy sources. Stated ‘productive and enterprising linkages’ include:

“encouraging policies and proposals which promote low carbon developments and sites for renewable energy, manufacturing, research and development close to areas of deployment of renewable energy.”

7.5 PPW paragraph 5.77 states that the planning system should:

- *“integrate development with the provision of additional electricity grid network infrastructure;*
- *optimise energy storage;*
- *facilitate the integration of sustainable building design principles in new development;*
- *optimise the location of new developments to allow for efficient use of resources; and*
- *maximise renewable and low carbon energy generation...”*

¹¹ Welsh Government, <https://www.gov.wales/sites/default/files/publications/2021-02/future-wales-the-national-plan-2040.pdf>

¹² Planning Policy Wales, Edition 12, <https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf>

- 7.6 PPW Edition 12 paragraph 5.7.8 to 5.7.12 set out that an effective electricity grid network is required to fulfil the renewable and low carbon ambitions and that planning authorities should support appropriate grid developments.
- 7.7 PPW paragraph 5.9.20 states that Planning Authorities should also identify and require suitable ways to avoid, mitigate or compensate adverse impacts of renewable and low carbon energy and that the proposals should take into account a range of factors, with those relevant to the LVA being:
- *“the impact on the natural and historic environment;*
 - *cumulative impact; and*
 - *the impacts of climate change on the location, design, build and operation of renewable and low carbon energy development. In doing so, consider whether measures to adapt to climate change impacts give rise to additional impacts.”*

Newport Local Development Plan, 2011-2026, adopted 2015¹³

- 7.8 With reference to the on-lic proposals map, the Site is beyond the Newport City Boundary, within the countryside, a green wedge and the Wentlooge Levels SLA.
- 7.9 With reference to **Appendix III**, relevant policies are:
- SP1: Sustainability, which includes for development conserving, enhancing and linking green infrastructure, protection and enhancing the built and natural environment;
 - SP5: Countryside, which sets out that development will only be permitted where the use is appropriate and respects the landscape character;
 - SP7: Green Wedges, which sets out that development which prejudices the open nature of the land will not be permitted;
 - SP8: Special Landscape Areas, which states development will be required to contribute positively to the area through high quality design, materials and management that demonstrate a clear appreciation of the area’s special features;
 - GP5: Natural Environment, which sets out a range of factors for new development, including no unacceptable impact on landscape quality; and
 - GP6: General Development Principles, which seeks good quality design in all forms of development.

¹³ Newport City Council, <https://www.newport.gov.uk/documents/Planning-Documents/LDP-2011-2026/LDP-Adopted-Plan-January-2015.pdf>

Newport Local Development Plan, Revised Deposit Plan, Special Landscape Areas, 2013¹⁴

- 7.10 This provides the supporting information for the Special Landscape Areas referred to in the previous chapters.

Supplementary Planning Guidance (SPG)

- 7.11 The Trees, Woodland, Hedgerows and Development Sites SPG¹⁵ (2017), sets out the Council's requirements for vegetation affecting new development sites, in order to create a high quality urban and rural landscape.

¹⁴ Newport City Council, <https://www.newport.gov.uk/documents/Planning-Documents/LDP-2011-2026/Special-Landscape-Area-June-2013.pdf>

¹⁵ Newport City Council, <https://www.newport.gov.uk/documents/Planning-Documents/Supplementary-Planning-Guidance/Tree-SPG-Post-Consultation-Adopted-Version-January-2017.pdf>

8.0 PLANNING APPLICATION DESIGN

8.1 With reference to the following extract of the planning application Site Layout Plan, the design measures embedded within the layout to reduce the potential landscape and visual effects were:

- Orientating the GIS building north-west to south-east, so that less of the façade is presented to the Percoed Reen to the south of the Site; and
- Enclosing the GIS equipment within a red brick building and enclosing the external fire-escape stairs so as to reduce the perception of their utilitarian form.

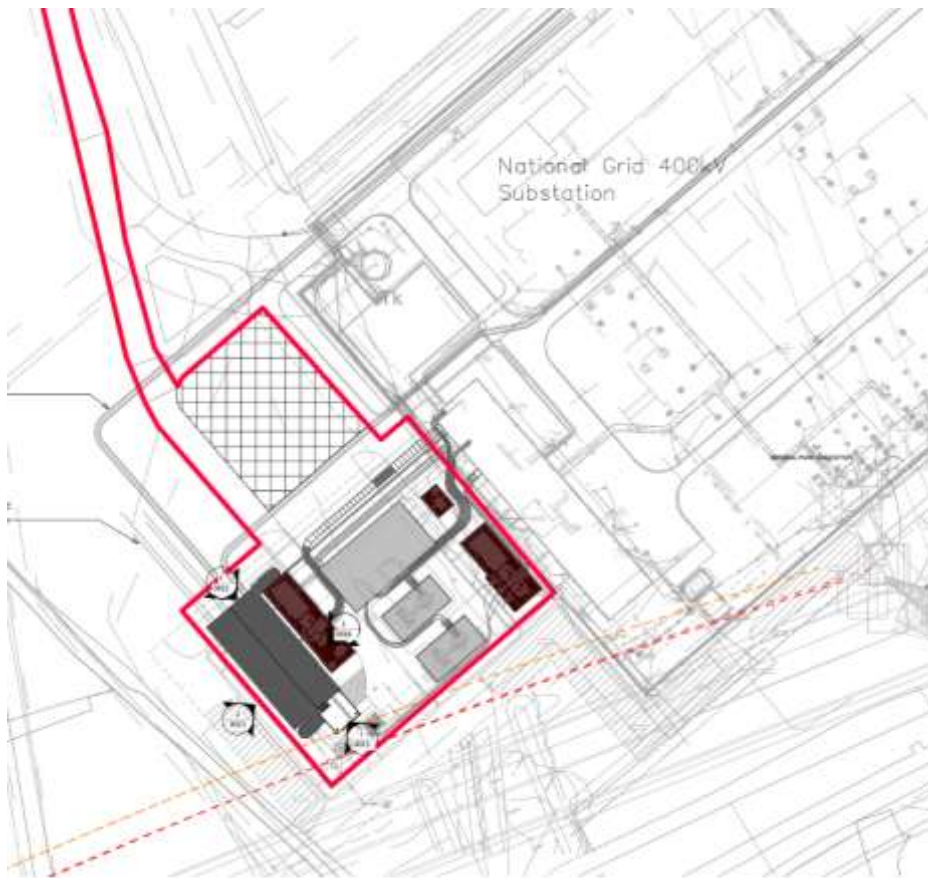


Image 8-1: Extract of the Site Layout Plan.

8.2 The above layout is used for the following landscape and visual assessment.

9.0 LIKELY LANDSCAPE AND VISUAL EFFECTS

- 9.1 As set out in the introduction, the likely landscape and visual effects of the Proposed Development are predicted for the year 1 operational phase (winter and summer) based upon the planning application drawings, as well as technical studies, including the AIA.
- 9.2 The following section summarises these effects and should be read in combination with **Appendices IV and V**, which set out the effects in full.

LANDSCAPE EFFECTS

GIS Site Landscape Character

- 9.3 With reference to **Appendix IV**, the Proposed Development would introduce a new GIS substation, approximately 27m in length and 19m in height, which would consist of a red brick façade and profiled metal roof. There would be 2 external fire escapes, enclosed in a metal mesh on the eastern and southern facades of the building respectively. There would also be loading platform on the southern façade of the building, aligned with the first storey of the building. The western and eastern façades of the building would have a rectangular area of perforated brick, as demonstrated by the following extract of the Architectural 3d model.



Image 9-1: Extract of the Architectural 3d model, looking towards the eastern and southern facades of the GIS building.

- 9.4 Surrounding the GIS building would be an unloading hardstanding area and switchgear to the east and car-parking to the north. the existing below ground pumping station and DG Set would be to the south of the GIS building. A new electrical fence would be located around the perimeter of the GIS Site.

- 9.5 The Proposed Development would result in localised excavation of landform for the foundations of the GIS building and below ground cabling; however this would be to modified landform. The new electric boundary fencing and access gates around the perimeter of the Site would reflect the existing features of palisade fencing around the GIS Site.
- 9.6 The Proposed Development would increase the number of electrical related buildings and structures within the GIS Site, with the GIS building taller than the existing buildings. Its red brick façade would be a passive facade, with some articulation via the perforated brick. The metal enclosure to the external fire escapes would provide a neater and higher architectural quality by reducing the perception of the stairs. The increased extent of buildings and height of structures within the Site would result in a partial alteration in comparison to the lower height and generally open character of the Site.
- 9.7 The impact at year 1 (winter and summer) is assessed as medium, which in relation to the very low sensitivity of the GIS Site would result in a negligible adverse effect.

Dyffryn Lane

- 9.8 For Dyffryn Lane, which includes for the vegetation adjacent to the road, the Proposed Development would retain the alignment of the lane. The perception of the new buildings and equipment within the GIS Site would be in the context of the Substation and pylons, such as not to alter the developed setting to the lane. With reference to the AIA, G22 would be removed (outside of the red line), due to underground cables; however the removal of this vegetation would not alter the vegetated character of the lane, such that whilst the impact is very low, with the effect predicted to be negligible adverse.

Published Landscape Character Areas

NLCA South Wales Valley

- 9.9 With reference to **Appendix IV**, the Proposed Development would introduce additional electrical infrastructure and related land uses within the NLCA, including a building at c.19m in height. The Proposed Development would be located adjacent to an existing Substation, such that it would be consolidated to a part of the NLCA where similar land uses are present and are noted by the published study as standing out in the landscape.
- 9.10 The perceived height of the proposed GIS building would be lessened by its proximity to taller overhead pylons, such that the perception of the difference in scale between the flat and lower lying fields and the GIS building would be reduced, as this difference in scale between horizontal and vertical features of the landscape is already present due to the pylons.
- 9.11 The Proposed Development would be located across previously developed land, such that there would be no change to the watercourses or fields. There would be no change to the key characteristics of

alluvium, reclaimed landscape, the Usk estuary, reens, willows, hedgerow and wet pasture. The Proposed Development would not alter the perceptions of tranquillity and remoteness due to being located adjacent to the Substation. Therefore, there would be no change to the character of the NLCA during the operational years and the effects are predicted to be neutral.

Wentlooge Levels Special Landscape Area

- 9.12 The Proposed Development would be located along part of the northern edge of the designation and adjacent to the existing Substation, which is also within the area.
- 9.13 The physical extent of the Proposed Development would be very small in relation to the wider geographic area of the SLA, at less than 0.009%. The Proposed Development would not alter the small to medium scale field patterns, nor field boundary vegetation. There would be no change to the pattern of drainage ditches, nor the SSSI designation.
- 9.14 The Proposed Development would not represent one of the stated 'threats' of leisure, turf cutting or horsiculture, although would result in additional built form and electrical infrastructure and an increase in development within the SLA.
- 9.15 The GIS building would be perceived from within the SLA, although in the context of pylons and existing electrical features. As a red brick building, it would have a passive exterior, unlike the angular forms of the pylons or the electrical equipment across the Substation. Similarly, the enclosure to the external fire escapes would reduce the perception of their utilitarian form.
- 9.16 The removal of the vegetation (G22) would not alter the vegetated character of the area. The impact would therefore be very low during the operational phase. In winter conditions, the effect is predicted to be minor adverse and in summer conditions the effect is predicted to be negligible adverse. The reduction in the effects at summer is due to the reduced perception of the Proposed Development due to the density of the intervening vegetation.

Local Landscape Character Areas (LLCA)

- 9.17 With reference to **Appendix IV**, the Proposed Development would be located in LLCA 1 and given the dominance of the existing electrical infrastructure, the impact from the Proposed Development would be very low, with resulting negligible adverse effects during the operational phases.
- 9.18 For the character of the Percoed Reen, there would be no change to the physical features within the local character area, due to the Proposed Development not being located within its geographic area. From LLCA 2: Percoed Reen East, the GIS building would be perceived, but beyond the existing substation, such that whilst a more developed setting to the LLCA, there would be no change to the character, due to the existing influence of electrical and residential land uses.

- 9.19 For LLCA 3: Percoed Reen West, in which the influence of the existing Substation is less than across LLCA 2, the Proposed Development would be perceived when in close proximity to the GIS Site. The perception would include the external activity and movement of vehicles and use of the lifting bay on the southern façade of the GIS building. This would result in the perception of increased activity in the GIS Site, but beyond overhead pylons and in the context of the Substation. Therefore, there would be an increase in the developed setting of the LLCA, but one which results in a very limited change to the character of the LLCA, given the influence from the existing Substation when in proximity to the GIS Site. The impact is predicted to be very low in winter with a resulting negligible adverse effect, reducing to neutral in summer, due to the reduced perception of the Proposed Development.
- 9.20 For the remaining LLCA's the effects are predominantly neutral, due to either no or very limited perception of the Proposed Development and no change to their landscape features. This includes LLCA 9: Wentlooge Levels Arable, which covers most of the southern part of the study area, to the south of the railway line, from which any perception of the Proposed Development would be very limited and in the context of taller pylons and infrastructure along the railway.

Landscape Effects Summary

- 9.21 From the above and with reference to **Appendix IV**, the following table summarises the predicted effects to the landscape receptors during the year 1 operational phases of the Proposed Development.

Table 9-1: Landscape Effect Summary

Landscape Receptor	Year 1 (winter)	Year 1 (summer)
The GIS Site	Negligible adverse	Negligible adverse
Dyffryn Lane	Negligible adverse	Negligible adverse
Published Landscape Character Areas		
NLCA 34: Gwent Levels (covers the Site)	Neutral	Neutral
NLCA 35: Cardiff, Barry and Newport	Neutral	Neutral
Wentlooge Levels Special Landscape Area (covers the Site)	Minor adverse	Negligible adverse
Local Landscape Character Areas (LLCA)		
LLCA 1: Existing Substation (covers the GIS Site)	Negligible adverse	Negligible adverse
LLCA 2: Percoed Reen East	Neutral	Neutral
LLCA 3: Percoed Reen West	Negligible adverse	Neutral
LLCA 4: Bronllys Grove Residential	Neutral	Neutral
LLCA 5: Green Lane	Negligible adverse	Neutral
LLCA 6: Celtic Lakes Ruderal	Neutral	Neutral
LLCA 7: Celtic Lakes Employment	Neutral	Neutral
LLCA 8: Railway Line	Neutral	Neutral

Landscape Receptor	Year 1 (winter)	Year 1 (summer)
LLCA 9: Wentlooge Levels Arable	Neutral	Neutral

- 9.22 From the above table, the effects of the Proposed Development predominantly range between negligible adverse and neutral in winter conditions. This is due to the Proposed Development being situated in an area of existing electrical infrastructure, including taller pylons, which already demarcate an electrical infrastructure character and perception of taller vertical features on the skyline. There would be no loss of key landscape physical features across the NLCA or local landscape character areas. A minor adverse effect is predicted for the Wentlooge Levels Special Landscape Area due to the increase in built development and perception of the GIS building; however, this would reduce to negligible adverse in summer conditions, due to the reduced perception of the Proposed Development. All these tiers of landscape effects are of lesser importance.

VISUAL ASSESSMENT

- 9.23 The following section summarises the likely visual effects in relation to the identified viewpoints and should be read in combination with **Appendix V**, which sets out the effects in full.
- 9.24 From the southern edge of the study area, from **Viewpoint 1**, along PRow (footpath) 412/13/4 (part of the Wales Coast Path), the GIS building would not be visible due to the intervening vegetation across the 2.6km distance between the Proposed Development and the GIS Site in both winter and summer conditions, such that that the effects are predicted to be neutral.
- 9.25 For recreational users on Green Lane 412/GL2/1, (**Viewpoint 2**), and road users on Hawse Lane (**Viewpoint 3**), the upper part of the southern and western facades of the GIS building, including the roof profile, would be visible, but largely softened by the density of intervening vegetation and seen in the context of taller overhead pylons and infrastructure along the railway line. The change to the composition of the view would be very small, with a negligible adverse effect in winter. In summer conditions, the effect would reduce to neutral, due to the Proposed Development being screened by the intervening vegetation.
- 9.26 From the western approach to the Site, along the Percoed Reen (390/GL/2), (**Viewpoint 4**), the Proposed Development would not be visible in winter or summer conditions due to the density of intervening vegetation and the distance from the receptor, as demonstrated by the following photowire, which illustrates the outline of the GIS building via a dashed red line.



Image 9-2: Extract of the photowire from Viewpoint 4, illustrating the outline of the GIS Building via a dashed red outline.

- 9.27 As demonstrated by Image 9-2, the density and height of the intervening vegetation would screen the GIS building from along Percoed Reen (390/GL/2), until adjacent to the GIS Site, at **Viewpoint 5**. The upper part of the southern facade, including the external fire escape stair, and the fire escape stair on the western façade would be largely softened by the intervening vegetation in winter. The GIS Building would result in additional and taller built form on the skyline and in the foreground of the view, but viewed obliquely from the east to west direction of travel along the Percoed Reen. The red brick of the building would reflect the red brick within the GIS, with views of the new fencing reflecting views of the existing palisade fencing, such that in winter the effect is predicted to be minor adverse. In summer, with intervening vegetation in leaf, the visibility of the GIS building would substantially reduce, lowering the predicted effect to negligible adverse, as demonstrated by the following extract of the photowire.



Image 9-3: View from Viewpoint 5, on the Percoed Reen (390/GL/2).

- 9.28 From the eastern approach along the Percoed Reen, at **Viewpoint 6**, the upper parts of the western façade of the GIS building would be visible, although seen beyond the Substation and pylon. There would be no loss of longer distance views, with only a short reduction in the visible extent of sky. The overall change to the composition of the view would be small, with the effects predicted to be minor adverse in winter, reducing to negligible adverse in summer.
- 9.29 From other parts of the Percoed Reen to the east of the Site, the Proposed Development would not be visible, in either winter or summer conditions, due to the density of intervening vegetation, as demonstrated by the following photowire from, **Viewpoint 7**, such that the effects are predicted to be neutral.



Image 9-4: Photowire from Viewpoint 7, with the Proposed Development screened by the intervening vegetation.

- 9.30 The upper parts of the western façade of the GIS building would be visible from **Viewpoints 8 and 9**, on the Percoed Reen, but softened by intervening vegetation and seen beyond the Substation and pylon. There would be no loss of longer distance views, with only a short reduction in the visible extent of sky. The overall change to the composition of the view would be small, with the effects predicted to be minor and negligible adverse at year 1, reducing to negligible adverse in summer.
- 9.31 For residents in Bronllys Grove, the external fire stair on the southern façade and the upper parts of the western façade would be visible from second and third storey windows. The GIS building would be seen beyond the Substation and in the context of overhead pylons, resulting in a very small addition to the developed skyline, and remaining below the height of the pylons in winter months, with a resulting minor adverse effect. In summer, with the intervening vegetation in leaf, the upper parts of the proposed GIS building would be predominantly screened, as demonstrated by the following extract of the photowire, with the effects reducing to negligible adverse.



Image 9-5: Photowire from Viewpoint 10.

- 9.32 For road users on Green Lane, (**Viewpoint 11**), the Proposed Development would be largely softened by the density of the intervening vegetation in winter, with resulting negligible adverse effects. In summer, with the vegetation in leaf, the Proposed Development would not be visible, resulting in a neutral effect.
- 9.33 Once in proximity to the Percoed Reen (**Viewpoint 12**), the Proposed Development would be predominantly softened by the density of intervening vegetation and seen beyond and below the

overhead pylons, such that the change to the composition of the view would be very small, with a resulting negligible adverse effect. In summer, the Proposed Development would remain predominantly screened, apart from the upper sections of the western façade and parts of the roof. It would result in a very small change to the composition of the view, as demonstrated by the following photowire and a negligible adverse effect.



Image 9-6: Photowire from Viewpoint 12.

- 9.34 Continuing along Green Lane, from the south of the Site (**Viewpoint 13**), the southern facade, along with the movement of equipment and machinery on the loading platform (when in use) would be visible, beyond the pylon wires. In summer, the visibility of the building of the building would reduce due to the intervening vegetation being in leaf, as demonstrated by the following photowire, reducing the change to the composition of the view in comparison to winter, but retaining the minor adverse effect. The effect is reduced from a potential moderate adverse due to the existing features within the view, including the overhead pylons and wires, beyond which the GIS building would be seen.



Image 9-7: Photowire from Viewpoint 13, on Green Lane.

9.35 For receptors at Celtic Lakes, (**Viewpoint 14**), the upper part of the northern façade of the GIS building would be visible, but seen at distance from the receptor and in the context of overhead pylons, such that the change to the composition of the view would be very small, via additional built form in the background of the view, with resulting negligible adverse effects in winter and summer.

9.36 From elevated land in the northern part of the study area (**Viewpoint 15**), the grey roof of the GIS building would be visible, but at distance from the receptor and seen in the context of large box style buildings at Celtic Lakes and the Substation, such that it would result in a very small change to the composition of the view, with resulting negligible adverse effects in winter and summer.

Visual Summary

9.37 With reference to **Appendix V**, the following table summarises the visual effects during the construction and operational phases of the Proposed Development.

Table 9-2: Visual Effects Summary

VP	Visual Receptor	Year 1 (winter)	Year 1 (summer)
1	1. Recreational users on PRoW (footpath) 412/13/4, part of the Wales Coast Path	Neutral	Neutral
2	2. Recreational users on Green Lane (412/GL2/1)	Negligible adverse	Neutral
3	3. Road users on Hawse Lane	Negligible adverse	Neutral
4	4. Recreational users on Percoed Reen (390/GL/2)	Neutral	Neutral
5	5. Recreational users on Percoed Reen (390/GL/2)	Minor adverse	Negligible adverse
6	6. Recreational users on Percoed Reed (390/GL/1)	Minor adverse	Negligible adverse
7	7. Recreational users on Percoed Reed (390/GL/1)	Neutral	Neutral
8	8. Recreational users on Percoed Reed (390/GL/1)	Negligible adverse	Negligible adverse
9	9. Recreational users on Percoed Reed (390/GL/1)	Minor adverse	Negligible adverse
10	10. Residents at Bronllys Grove	Minor adverse	Negligible adverse
11.	11. Road users on Green Lane	Negligible adverse	Neutral
12.	12. Recreational users on Green Lane	Negligible adverse	Negligible adverse
13	13. Recreational users on Green Lane	Minor adverse	Minor adverse
14	14A. Road users on Celtic Way	Negligible adverse	Negligible adverse
	14B. Employment users at Celtic Lakes	Negligible adverse	Negligible adverse
15	15. Recreational users on PRoW (footpath) 390/8/1	Negligible adverse	Negligible adverse

9.38 From the above, the tiers of visual effects are low across the winter and summer phases of the Proposed Development. This is mainly due to the Proposed Development being seen in the context of notable electrical infrastructure via the Substation and pylons, such that the composition of views

is already demarcated by vertical features. Whilst the GIS building c.19m in height, it would be seen below the height of the overhead pylon wires and often below the height of vegetation along the southern edge of the Substation. Therefore, the GIS building would appear as a lower height structure relative to surrounding features.

- 9.39 The minor adverse effects are for recreational users to the immediate south of the Site, on Percoed Reen and Green Lane, from which the southern façade of the GIS building would be visible, including activity on the loading platform (when in use). However, this represents a very small part of these recreational routes, such with no visibility of the Proposed Development from along the majority of Percoed Reen (390/GL/2) to the west of the GIS Site and in views from the east, the GIS building would be seen beyond the intervening Substation.
- 9.40 The predicted visual effects would reduce between the winter and summer seasons due to the intervening vegetation being in leaf, such that the majority of the visual effects would range between negligible adverse and neutral.

RESPONSE TO POLICY

- 9.41 The following section sets out the Proposed Developments response to policies relevant to landscape and visual matters.

Future Wales: The National Plan 2040

- 9.42 The Proposed Development would respond positively to the stated visions and policies for low carbon energy.

Planning Policy Wales (PPW) Edition 12, 2024

- 9.43 In respect of paragraph 5.77, the Proposed Development would integrate with the existing Substation and therefore optimise the location of new development to allow for the efficient use of resources.
- 9.44 In respect of PPW paragraph 5.9.20, the Proposed Development has assessed the impact of the Proposed Development. The landscape and visual effects of the Proposed Development are predicted to be 'lesser importance' due to ranging between minor adverse and neutral.

Newport Local Development Plan

- 9.45 Due to the localised and low tiers of landscape and visual effects, the Proposed Development is considered to respond positively to Policy SPI: Sustainability, via avoiding higher tiers of effects on the wider landscape and thereby protecting the overall character of the natural environment.

- 9.46 The Proposed Development is considered to be an appropriate land use given its position adjacent to the Substation and the design has sought to respect the landscape character via enclosing the GIS equipment within a brick building, so as to accord with Policy SP5: Countryside.
- 9.47 In respect of SP7: Green Wedges, the Proposed Development would result in a reduction of the open nature of the GIS Site due to the introduction of new buildings and equipment. However, the GIS Site is not located between settlements identified in the policy wording, and would not result in their coalescence. Therefore, the Proposed Development would not prejudice the open nature of the Green Wedge in respect of its function of preventing coalescence of settlements.
- 9.48 In relation to Policy SP8: Special Landscape Areas, the Proposed Development is considered to achieve a high quality design given the operation constraints of infrastructure use, via the brick building enclosing the GIS equipment. The GIS Site is not representative of the Wentlooge Levels SLA special features and was not included in the original designation of the area. Given the Substation is within the Wentlooge Levels SLA and has already locally altered the character and visual amenity of the SLA, the lower tiers of landscape and visual effects resulting from the Proposed Development would avoid undue levels of harm to the SLA. The Proposed Development would contribute positively in respect of introducing new electrical infrastructure in a manner which mitigates the potential landscape and visual effects, thereby responding positively to the policy requirements.
- 9.49 Due to the low tiers of landscape and visual effects, which are predominantly concentrated within close proximity of the GIS Site and to a part of the landscape where the quality is already influenced by the Substation, the Proposed Development would not result in unacceptable impacts, thereby responding positively to Policy GP5: Natural Environment.
- 9.50 As noted above, given the infrastructure nature of the Proposed Development and the operational requirements, the GIS building is considered to be a good quality design via the brick work and enclosure of the external staircases, thereby responding positively to Policy GP6: General Development Principles.

10.0 REVIEW OF NEW PLANTING AND SECONDARY MITIGATION

Review of Potential On-Site Planting

10.1 With reference to the following extract of the Site Plan, the constraints of new planting are that:

- The southern part of the Site, between the red line and the GIS building are within the high voltage overhead cable swing safety zone (illustrated via the orange and red dashed lines). National Grid¹⁶ require a minimum distances between the conductors and the ground, such that new planting to the south of the GIS building would need to be low in height
- The existing pumping station is in the southern part of the Site, with below ground services, which requires access (illustrated by the blue hatch);
- Below ground services are proposed between the southern edge of the GIS building and the transformer on the eastern edge of the Site (illustrated by the yellow hatch);
- The eastern side of the building is required to be accessible for the lifting platform and a new transformer, which is proposed adjacent to the GIS Building;
- There are several 132kV high voltage below ground cables to the north of the GIS building (illustrated via the pink hatch);
- A path will be required around the perimeter of the GIS building for maintenance access, negating the ability to plant adjacent to the building, including along the western façade, due to the 2m between the building and the new electric fence;
- Below ground cables extend between the existing and proposed equipment, with operational requirements needing this areas to be accessible; and
- Future below ground cable routes will be required, which will be subject to new planning applications, thereby requiring areas around the building to be accessible.

¹⁶ National Grid,
<https://www.nationalgrid.com/sites/default/files/documents/Working%20near%20electricity%20equipment.pdf>

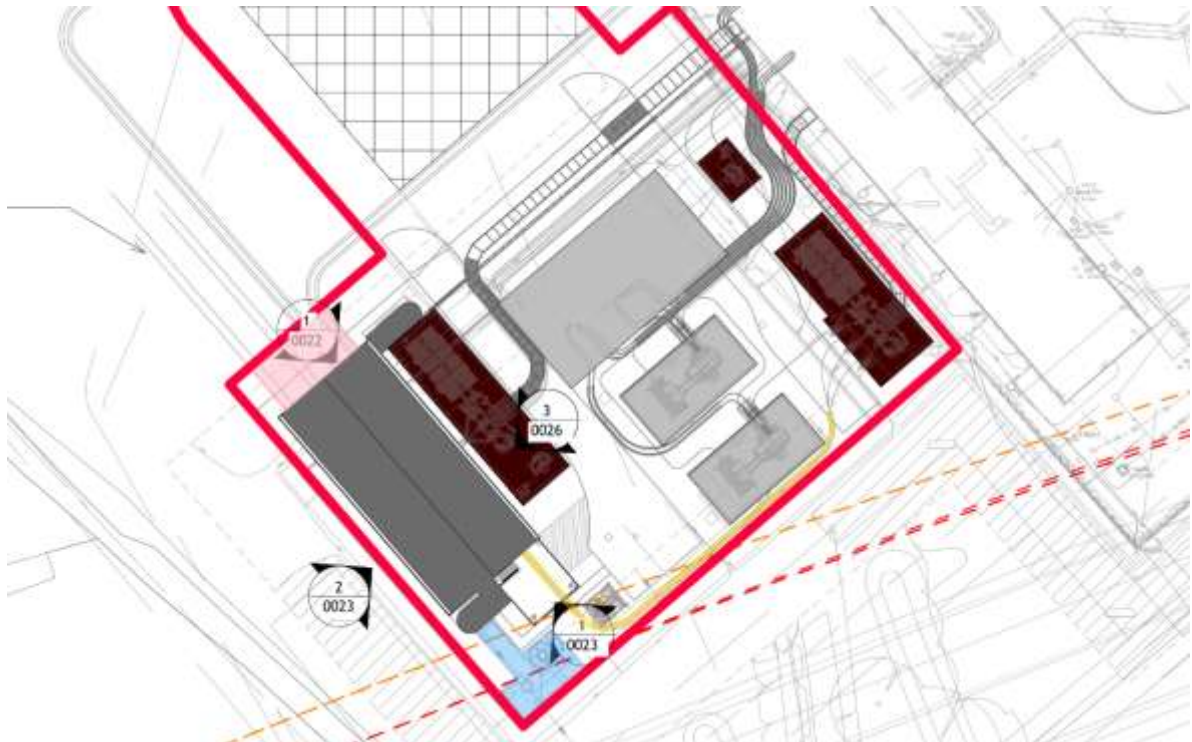


Image 10-1: Schematic Illustration of the constraints to new planting.

- 10.2 Due to the constraints, it is considered that new planting is not practicable in proximity to GIS building to enable any effective visual screening of the GIS building.

Off-Site Management of Existing Vegetation

- 10.3 As set out in the baseline review, land to the south and west of the Site consists of varying vegetation cover. Land to the immediate south of the Site is owned by NCC, where vegetation is already present beneath the overhead pylons and within the 'swing zones', as demonstrated by the following image.

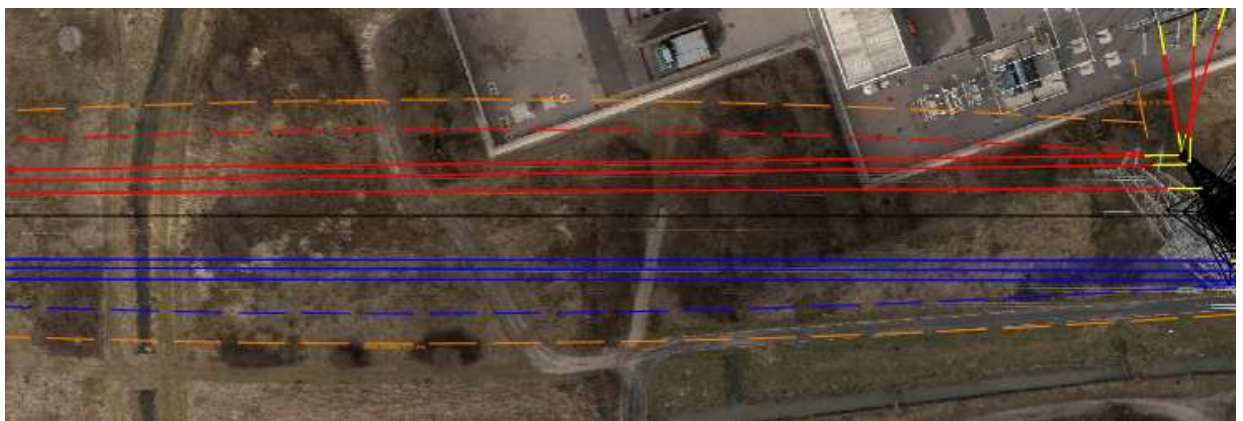


Image 10-2: Illustration of the overhead pylon line 'swing zones' to the south of the Site, which cover vegetation on land owned by NCC.

- 10.4 As land to the south of the Site is well vegetated and provides a degree of visual softening, the design intent is to retain this vegetation and enable natural succession of trees, so that they become taller in height and increase the potential visual screening.
- 10.5 In order to achieve this management, post validation discussions between the Applicant and NCC has agreed to the management of the existing vegetation by the Applicant, via a Unilateral Undertaking.
- 10.6 The management objectives for this are set out in the separate Landscape Management Plan, with the area of existing vegetation with NCC land to be retained illustrated on the following extract of **Figure A**.



Image 10-3: Extract of Landscape Management Plan Figure A, illustrating the areas of retained vegetation within NCC land to be managed during the operational phases of the Proposed Development.

New Planting

- 10.7 In respect of new planting, the visual appraisal has identified views of the GIS from parts of the Green Lane, to the south of the Site (**Viewpoint 13**).
- 10.8 From reviews of land ownership surrounding the Site, NCC also own land between the Percoed Reen footpath and the Percoed Reen, which is beyond the swing zones illustrated in Image 10-2.
- 10.9 With reference to the following extract of **Figure 12**, it is proposed to plant new native tree and scrub planting within this NCC land, so as to reduce the visibility of the GIS from along Green Lane.

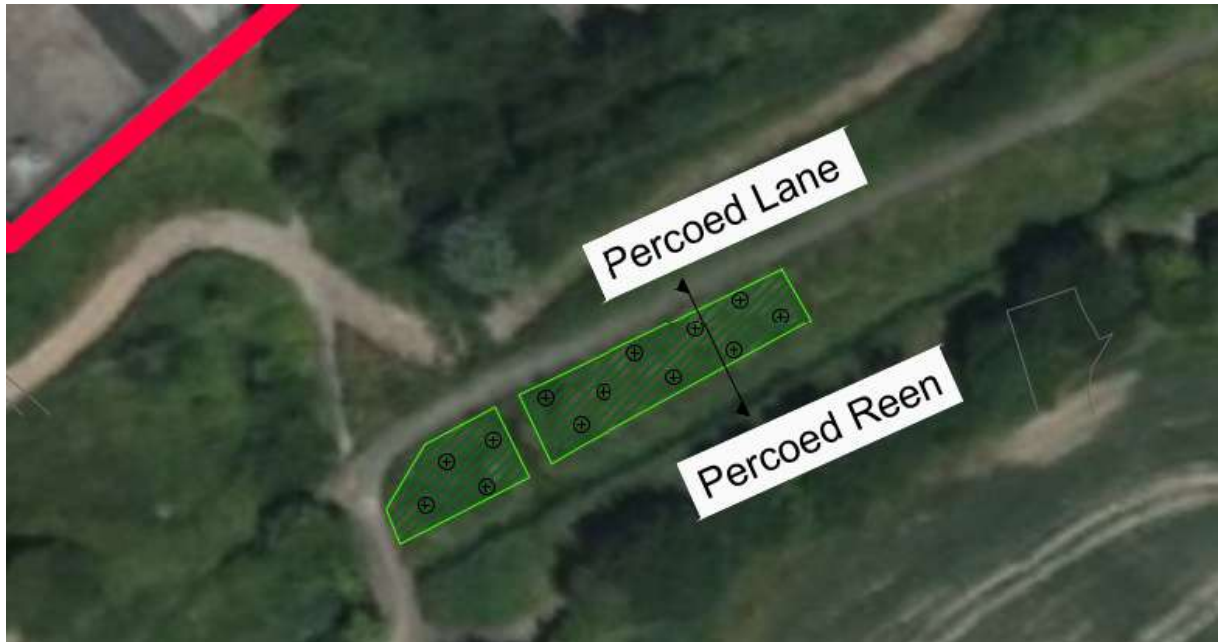


Image 10-4 :Extract of Figure 12, illustrating the proposed location for new native tree and shrub planting.

- 10.10 **Figure 12** sets out the proposed native species, implementation and management of this new planting. With reference to the following extract of the wireline for **Viewpoint 13**, the green horizontal lines show the varying heights of the new planting following planting, at years 5 and 10 and an eventual height. These green lines demonstrate that the new planting would soften and screen views of the GIS from the Green Lane, particularly from year 10 onwards.

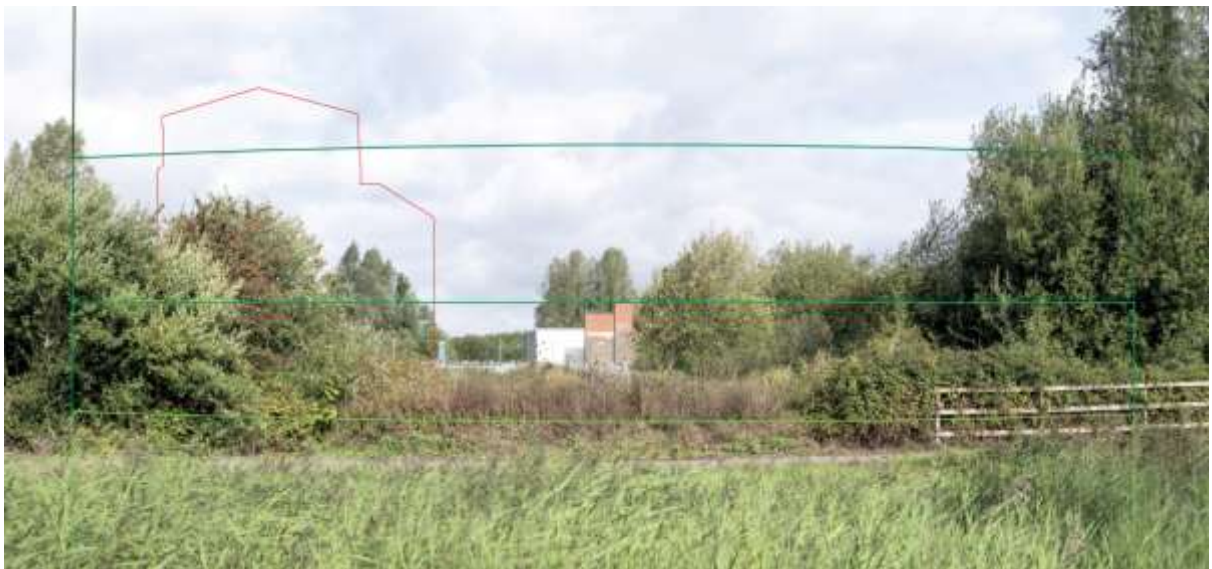


Image 10-5: Extract of the wireline for Viewpoint 13, demonstrating the proposed height of new planting at various years via horizontal green lines.

- 10.11 With the combination of the management of existing retained vegetation and new planting, the visual effects of the GIS building would reduce during the operational phases of the Proposed Development.

11.0 SUMMARY AND CONCLUSION

Baseline

- 11.1 With reference to **Figure I**, the Site ('the red line') borders the Imperial Park Substation and consists of hardstanding, a control room and two transformers. The existing structures within the GIS Site consist of a range of materials, including red brick. There is no scenic quality to the GIS Site due to the hardstanding and existing structures, nor is there any sense of remoteness, nor tranquillity, due to the proximity to the Substation. There are no rare or distinctive landscape features within the GIS Site.
- 11.2 The Site is in a low lying position in relation to more elevated land across Celtic Lakes and to the north of the M4. The Site's topographic position reflects most of the Wentlooge Levels, which extend to the east, south and west of the Site, consisting of generally flat landform, crossed by numerous drainage ditches. There is localised alteration to this pattern of flat landform via the railway line embankment and the coastal defences, but otherwise there is a consistent pattern of flat and low lying landform to the south of Celtic Lakes, extending to the coast.
- 11.3 With reference to **Figure I**, the Site, Substation and most of the landscape to the east, south and west are within the Wentlooge Levels Special Landscape Area (SLA). The SLA is predominantly characterised by small to medium scale rectangular fields, divided by hedgerows and trees. The fields are divided by numerous drainage ditches, resulting in a consistent open and undeveloped character to much of the southern part of the study area. The stated primary landscape qualities and features of the SLA include an extensive tract of low lying, reclaimed marsh and wetlands; large open expanse of primary pastoral land and a distinctive pattern of drainage ditches ('reens'), deriving from Roam reclamation work. The Site is also within a Green Wedge.
- 11.4 The Wentlooge Levels SLA are also crossed by several PRow, including the Wales Coast Path. In closer proximity to the GIS Site, the Percoed Reen is a path/cycleway extending between residential land uses at Bronllys Grove, to the north-east of the GIS Site, and Hawse Lane to the west of the Site. To the south of the GIS Site, the Percoed Way is connected to Green Lane, a track which extends southwards to become a narrow road and which is also publicly accessible.
- 11.5 When travelling along the Percoed Reen, there is notable difference in character between the eastern part of the route, between residential land uses and the existing Substation, and the western part of the route, between the Substation and Hawse Lane. The eastern part of the Percoed Reen has a developed character via a range of land uses and no sense of remoteness and limited tranquillity. In contrast, the western part of the route, has a higher degree of tranquillity and a reduced perception of the existing Substation due to the density of intervening vegetation, although remoteness remains limited due to intervisibility with other features across the landscape, including the overhead pylons and railway line.

- 11.6 With reference to the **Figure 2** and the on-line data sets for the Welsh Landscape (LANDMAP), the GIS Site is within a cultural dataset of stated low value, meaning and an area of low visual value, due to the existing land uses, meaning it is of lower influence and of lower local importance or landscape influence. The GIS Site is in an area of moderate historic value and outstanding landscape habitat value; but the GIS Site does not comprise terrestrial habitats nor the ecological quality of the remainder of the area. The GIS Site is therefore considered not to reflect these tiers of value.
- 11.7 With reference to **Figure 3**, a Zone of Theoretical Visibility (ZTV) has been generated for the Proposed Development. The ZTV suggests that the theoretical visibility of the Proposed Development would be intermittent to the north of the GIS Site, due to the extent of intervening vegetation, but would extend across parts of Celtic Lakes and more elevated land to the north and north-west of the M4. The theoretical visibility would be limited to the east of the GIS Site due to existing infrastructure and vegetation, but would extend to the edge of residential land uses adjacent to Bronllys Grove. To the south of the GIS, the theoretical visibility would be concreated within 1km of the south of the GIS Site, before becoming intermittent across south-west part of the study area and Wentlooge Levels; and
- 11.8 From the fieldwork, the visibility of the GIS Site and Proposed Development is considered to be less than suggested by the ZTV. This is due to a greater density of vegetation 'in reality', than is accounted for in the on-line data sources for the ZTV. The main views of the GIS Site are from the Percoed Reen and Green Lane to the immediate south of the GIS Site. Although the GIS Site is seen beyond a pylon tower and overhead wires, with the existing transformers within the GIS Site also visible.
- 11.9 Once to the west or east of the GIS Site, along the Percoed Reen, the visibility of the Site is substantially reduced, becoming screened in summer due to the density and height of vegetation bordering the Percoed Reen. In winter months, the density of this vegetation is considered to retain a very high degree of softening to views; with the visibility of the existing Substation increasing due to the deciduous vegetation not being in leaf.
- 11.10 From the wider landscape, the GIS Site is not visible due to its low lying position and the density of intervening vegetation. In views towards the GIS Site from the Wentlooge Levels, the rows of overhead pylons are noticeable, such that the composition of views is already demarcated by tall structures to the north of the railway line, as well as tall and large scale buildings within Celtic Lakes.
- 11.11 From elevated land across the northern part of the study area, the existing Substation is visible, such that the GIS Site can be located. The GIS Site forms a very small part of the wider panoramic views, seen beyond the large scale buildings in Celtic Lakes and within the setting of overhead pylons, such that it is part of a more developed part of the composition of the view, in comparison to the wider visible extent of predominantly undeveloped land across the Wentlooge Levels.

Primary Mitigation

- 11.12 The planning application layout includes mitigation to reduce the potential landscape and visual effects via the design of the brick building to enclose the GIS equipment and that the building is orientated north to south, so as to present the shorter (southern façade) in relation to views from Percoed Reen and the Green Lane.

Likely Landscape and Visual Effects

Landscape Effects

- 11.13 The LVA has identified a range of landscape receptors. The higher sensitivity receptors reflect the arable and inherently more rural parts of the study area, specifically those parts of the Wentlooge Levels, where the key features of the landscape are notable. The lower sensitivity areas (including the GIS Site) reflect developed parts of the study area, where the existing land uses result in less attributes of landscape value, or enable a higher degree of change, and therefore a lower susceptibility.
- 11.14 At the Site scale, the Proposed Development would result in localised excavation of landform for the foundations of the GIS building and below ground cabling; however this would be to modified landform. The Proposed Development would increase the number of electrical related buildings and structures within the GIS Site, with the GIS building taller than the existing buildings. Its red brick façade would be a passive facade, with some articulation via the perforated brick. The metal enclosure to the external fire escapes would provide a neater and higher architectural quality by reducing the perception of the stairs. The increased extent of buildings and height of structures within the Site would result in a partial alteration in comparison to the lower height and generally open character of the Site. The impact would result in a negligible adverse effect during the operational phases.
- 11.15 In relation to the published and local landscape character areas, the effects of the Proposed Development predominantly range between negligible adverse and neutral in winter conditions. This is due to the Proposed Development being situated in an area of existing electrical infrastructure, including taller pylons, which already demarcate an electrical infrastructure character and perception of taller vertical features on the skyline. There would be no loss of key landscape physical features across the NLCA or local landscape character areas.

Visual Effects

- 11.16 The visual appraisal has identified a range of representative receptors from across the 3km study area. The sensitivity of the visual receptors is generally higher due to most of the receptors either being recreational users of the local routes, or where present residents with fixed views. For recreational users of the Percoed Reen, their sensitivity varies between medium and high, because when in proximity to the GIS Site, the visibility of the existing pylons and Substation are such discordant features, that the value of their views is notably reduced, thereby reducing their overall sensitivity.

The low sensitivity receptors relate to employment and road users at Celtic Lakes, for whom their attention is considered not to be on the surrounding landscape.

- 11.17 The tiers of visual effects are low across the winter and summer phases of the Proposed Development. This is mainly due to the Proposed Development being seen in the context of notable electrical infrastructure via the Substation and pylons, such that the composition of views is already demarcated by vertical features. Whilst the GIS building c.19m in height, it would be seen below the height of the overhead pylon wires and often below the height of vegetation along the southern edge of the Substation. Therefore, the GIS building would appear as a lower height structure relative to surrounding features.
- 11.18 The minor adverse effects are for recreational users to the immediate south of the Site, on Percoed Reen and Green Lane, from which the southern façade of the GIS building would be visible, including activity on the loading platform (when in use). However, this represents a very small part of these recreational routes, such with no visibility of the Proposed Development from along the majority of Percoed Reen (390/GL/2) to the west of the GIS Site and in views from the east, the GIS building would be seen beyond the intervening Substation.

Secondary Mitigation

- 11.19 The GIS Site has a high number of operational constraints to new planting, including being within the swing safety zone of overhead cables, retaining below ground pumping stations, implementing below ground cables and requiring external access around the perimeter of the GIS building. Due to the constraints, it is considered that new planting is not practicable in proximity to the GIS building, nor within the swing zones.
- 11.20 To aid in reducing the potential landscape and visual effects of the Proposed Development, it is proposed to retain and manage the existing vegetation to the south of the Site, so that it becomes denser and taller in height. The location of this vegetation and the proposed management are set out in the Landscape Management Plan.
- 11.21 In addition, it is proposed to implement new native planting between the Percoed Reen footway and the Percoed Reen so as to reduce the visibility of the GIS building from Green Lane. Once established, this new planting would provide additional visual screening in addition to the retained vegetation to the south of the Site.
- 11.22 The predicted visual effects would therefore reduce from along the Percoed Reen and Green Lane due to the above secondary mitigation measures.

Wentlooge Special Landscape Area and Green Wedge

- 11.23 The Proposed Development would be located along part of the northern edge of the designation and adjacent to the existing Substation, which is also within the area. The physical extent of the Proposed Development would be very small in relation to the wider geographic area of the SLA, at less than 0.009%.
- 11.24 The Proposed Development would not alter the small to medium scale field patterns, nor field boundary vegetation. There would be no change to the pattern of drainage ditches, nor the SSSI designation. The Proposed Development would not represent one of the stated 'threats' of leisure, turf cutting or horsiculture, although would result in additional built form and electrical infrastructure and an increase in development within the SLA.
- 11.25 The GIS building would be perceived from within the SLA, although in the context of pylons and existing electrical features. As a red brick building, it would have a passive exterior, unlike the angular forms of the pylons or the electrical equipment across the Substation. Similarly, the enclosure to the external fire escapes would reduce the perception of their utilitarian form.
- 11.26 The removal of the vegetation (G22) would not alter the vegetated character of the area. The impact would therefore be very low during the operational phase. In winter conditions, the effect is predicted to be minor adverse and in summer conditions the effect is predicted to be negligible adverse. The reduction in the effects at summer is due to the reduced perception of the Proposed Development due to the density of the intervening vegetation
- 11.27 In respect of the Green Wedge, the Proposed Development would result in a reduction of the open nature of the GIS Site due to the introduction of new buildings and equipment. However, the GIS Site is not located between settlements identified in the policy wording, and would not result in their coalescence. Therefore, the Proposed Development would not prejudice the open nature of the Green Wedge in respect of its function of preventing coalescence of settlements

Conclusion

- 11.28 The Proposed Development is considered to achieve a high quality design given the operation constraints of infrastructure use, via the brick building enclosing the GIS equipment.
- 11.29 Given the Substation is within the Wentlooge Levels SLA and has already locally altered the character and visual amenity of the SLA, the lower tiers of landscape and visual effects resulting from the Proposed Development would avoid undue levels of harm to the SLA.
- 11.30 The design of the proposed GIS and the proposed secondary mitigation of managing existing vegetation and new planting would mitigate the potential landscape and visual effects, thereby responding positively to the policy requirements.

- 11.31 Due to the low tiers of landscape and visual effects, which are predominantly concentrated within close proximity of the GIS Site and to a part of the landscape where the quality is already influenced by the Substation, the Proposed Development would not result in unacceptable landscape and visual impacts.

12.0 LVA APPENDIX I: LVA METHODOLOGY

12.1 The methodology for of landscape and visual appraisal has been devised to address the specific issues raised by a development of this scale and nature. The methodology draws upon the following established best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, (GLVIA 3), (Landscape Institute and Institute of Environmental Management and Assessment) 2013.
- Landscape Institute Assessing Value outside of national designations (2021).
- Landscape Institute Guidance Note 06/19 2019: Visual Representation of Development Proposals.
- Landscape Institute Notes and Clarifications on aspects of the 3rd Edition.
- Using LANDMAP in LVIA GN46.

Assessment Process

12.2 This methodology identifies potential landscape character and visual receptors within the study area in order to establish the baseline conditions. The receptor sensitivity is assessed, followed by an assessment of the likely impact of the Proposed Development. The relationship between the receptor sensitivity and impact results in the landscape or visual effects. The approach to this assessment is based on GLVIA 3 and is outlined below:

- The sensitivity of the receptor is derived from the value and susceptibility of the receptor.
- The potential magnitude of impact is described as High, Medium, Low, Very Low or None based criterion.
- The assessment of effects is derived through a combination of sensitivity of the receptor and the magnitude of impact associated with the Proposed Development, defined as Major, Moderate, Minor, Negligible or Neutral; and
- Effects of major and moderate are important. Effects of minor, negligible and neutral are of lesser importance.

Landscape Character Assessment Methodology

The Nature of the Landscape Receptor (Sensitivity)

12.3 The sensitivity of a landscape receptor is defined via a combination of their landscape value and susceptibility.

Landscape Value

12.4 The value of the landscape receptor is based upon the consideration of any landscape designations and the criteria outlined in GLVIA 3 Box 5.1 along with consideration of LI Technical Note assessing landscape value outside of designated landscapes:

- Quality (condition).
- Scenic quality;
- Rarity;
- Representativeness;
- Conservation Interests;
- Recreation value;
- Perceptual aspects; and
- Associations and functionality.

12.5 From the consideration of these factors, an assessment of the landscape value is based upon the criteria outlined in the following table.

Table 12-1: Landscape Value Criteria

Value	Criteria
Very High	The receptor may be internationally designated or exhibit the most of the key features of a designated landscape.
High	The receptor is likely to be highly valued for one or more of its attributes and may be protected by a statutory landscape designation. The landscape receptor may contain elements/features that could be described as unique; or are nationally scarce; or mature vegetation such as ancient woodland. Mature landscape features which are characteristic of and contribute to a sense of place and illustrates time-depth in a landscape and if replaceable, could not be replaced other than in the long term.
Medium	The receptor is likely to have a positive landscape character but could include some areas of alteration/degradation/or erosion of features; and/or perceptual/aesthetic aspects. The receptor may have locally commonplace features. The receptor is likely to be valued at a district or local level only.
Low	The receptor is likely to be undesignated and with little recognised value. Areas which are relatively commonplace in character with few/no notable features and/or landscape elements/features that make a contribution to local distinctiveness.
Very Low	The receptor is likely to be a detracting feature, damaged or eroded or is considered not to contribute positively to the landscape.

Landscape Susceptibility

12.6 GLVIA 3 defines landscape susceptibility as “the ability of a defined landscape receptor to accommodate the specific Proposed Development without undue negative consequences.” (within the GLVIA 3 glossary) and also as “the ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.” (GLVIA pages 88 and 89).

12.7 The following table sets out the criteria for landscape susceptibility.

Table 12-2: Landscape Susceptibility Criteria

Susceptibility	Criteria
Very High	The landscape is likely to have a very strong pattern / texture or unique and/or rare and intact and/or with a no or very limited ability to accommodate change.
High	The landscape is likely to have a strong pattern / texture or is a simple but very distinctive landscape and essentially intact and/or with a small ability to accommodate change.
Medium	The landscape is likely to have a moderate pattern / texture or is simple but distinctive and mostly intact and/or reasonably tolerant of change.
Low	The landscape is likely to have a weak pattern / texture and or is simple but not distinctive and may already be partially degraded with common/ indistinct features and minimal variation in the landscape pattern and/or tolerant of substantial change.
Very Low	The landscape is likely to have a damaged or a substantially modified pattern / texture and/or able to accommodate change.

Landscape Sensitivity

12.8 The following table sets out the criteria for landscape sensitivity, resulting from the combination of the landscape value and landscape susceptibility.

Table 12-3: Landscape Sensitivity

Sensitivity	Criteria
Very High	A designated landscape that is highly valued and is likely to be fully representative of the designations, such that is susceptibility to very small changes only.
High	A valued landscape, whether through landscape designations or distinctive components and characteristics, susceptible to small changes.
Medium	Landscape with some value (including designated landscapes), but of relatively common components and characteristics, reasonably tolerant of changes.
Low	Landscape of limited value, relatively inconsequential components and characteristics, unlikely to be designated, the nature of which is potentially tolerant of substantial change.
Very Low	Very low or no value, a degraded landscape or landscape with very few or no natural or original features remaining and not designated, such that it is tolerant of change.

Landscape Nature of Effect (Magnitude of Impact)

12.9 The magnitude of impact is determined by considering the following aspects of the Proposed Development to derive an overall magnitude of change, as set out in the following table.

Table 12-4: Landscape Magnitude of Impact

Landscape Impact	Criteria
High	The total or major loss or alteration of key characteristics or the addition of new features or components that would substantially alter the character or setting of the area. Change may be permanent or temporary.

Landscape Impact	Criteria
Medium	The partial loss or alteration of characteristics or the addition of new features or components that would alter the character or setting of the area. Change may be permanent or temporary.
Low	The limited loss or alteration of components or the addition of new features or components that reflect the character or setting of the area. Change may be permanent or temporary.
Very Low	Virtually imperceptible loss or alteration or addition of new features or components that overall retain the character or setting of the area. Change may be permanent or temporary.
None	No change to the character or setting of the area. Change may be permanent or temporary.

Visual Appraisal Methodology

The Nature of the Visual Receptor (Sensitivity)

- 12.10 In line with GLVIA 3, visual sensitivity is a combination of the value of the view, combined with the susceptibility of the viewer to the particular or specific change arising from the Proposed Development.

Visual Value

- 12.11 The following table sets out the criteria and descriptions for visual value.

Table 12-5: Visual Value

Value	Criteria
Very High	A view which is recognised as 'iconic' and/or a specific visitor attraction or fully representative of a designated landscape.
High	A recognised high-quality view, likely to be well frequented and/or promoted as a beauty spot/visitor destination; a view with strong cultural associations (recognised in art, literature or other media); a view which relates to the experience of other features, for example heritage assets in which landscape or visual factors are a consideration; and a view which is likely to be an important part of, or primary reason, for the receptor being present at the location.
Medium	A view, whilst it may be valued locally, is not widely recognised for its quality or has low visitor numbers. The view has may have cultural associations. An attractive view which is however unlikely to be the receptor's primary reason for being there.
Low	An ordinary, but not necessarily unattractive view, with no recognised quality which is unlikely to be visited specifically to experience the views available. Although the view may be appreciated by receptors, it is typically incidental to the receptor's reason for being there.
Very Low	A poor quality or degraded view which is unvalued or discordant and is unlikely to be the receptor's reason for being there. A view which detracts from the receptors experience of being there.

Visual Susceptibility to Change

- 12.12 The following table sets out the relevant criteria and descriptions.

Table 12-6: Visual Susceptibility

Susceptibility	Criteria
Very High	Visitors to iconic view locations.
High	Residents at home; people engaged in outdoor recreation, whose attention/interest is likely to be focused on the landscape or particular views, including strategic/ popular public rights of way; visitors to heritage assets or other attractions, where views of the surroundings are an important contributor to the experience; communities where views contribute to the landscape setting enjoyed by residents and travellers on identified scenic routes which people take to experience or enjoy the view.
Medium	Travellers on road, rail, or other transport routes who anticipate some enjoyment of landscape as part of the journey but where the attention is not primarily focused on the landscape; users of Public Rights of Way or where the attention is not focused on the landscape; and schools and other institutional buildings and their outdoor areas, play areas.
Low	Travellers on road, rail or other transport routes not focused on the landscape/particular views e.g., on motorways and "A" road or commuter routes; and people engaged in outdoor sport/recreation which does not involve/depend upon appreciation of views of the landscape.
Very Low	People at their place of work whose attention may be focused on their work/activity and not their surroundings.

Visual Sensitivity

- 12.13 From the consideration of the visual value and visual susceptibility, the visual sensitivity of a receptor is classified as per the following table.

Table 12-7: Visual Sensitivity

Sensitivity	Criteria
Very High	Activity specifically focused on a designated or iconic view.
High	Activity resulting in a particular interest or appreciation of the view (e.g. residents or people engaged in outdoor recreation whose attention is focused on the landscape) and/or a high value of existing view (e.g. a designated landscape, unspoilt countryside or conservation area designation).
Medium	Activity resulting in a general interest or appreciation of the view (e.g., residents or people engaged in outdoor recreation that does not focus on an appreciation of the landscape, residents) and/or a medium value of existing view (e.g., suburban residential areas or intensively farmed countryside).
Low	Activity where interest or appreciation of the view is secondary to the activity (e.g., people at work or motorists travelling through the area) and/or low value of existing views (e.g., featureless agricultural landscape, poor quality urban fringe).
Very Low	Activity where interest or appreciation of the view is inconsequential (e.g., people at work with limited views out, or drivers of vehicles in cutting) and/or very low value of existing view (e.g., Industrial areas or derelict land).

Visual Nature of Effect (Magnitude of Impact)

- 12.14 The following factors are considered to determine an overall visual magnitude as set out in the following table.

Table 12-8: Visual Magnitude of Impact

Visual Impact	Criteria
High	Extensive change to the composition of the existing view (e.g., widespread loss of characteristic features or the widespread addition of new features within the view) and/or high degree of exposure to view (e.g., close, direct or open views). Change may be permanent or temporary.
Medium	Partial change to the composition of the existing view (e.g., loss of some characteristic features or the addition of new features within the view) and/or medium degree of exposure to the view (e.g. middle-distance or partially screened views). Change may be permanent or temporary.
Low	Subtle change to existing view (e.g., limited loss of characteristic features or the addition of new features within the view) and/or low degree of exposure to view (e.g., long-distance, substantially screened or glimpsed views). Change may be permanent or temporary.
Very Low	Barely perceptible change to the existing view and/or very brief exposure to view. Change may be permanent or temporary.
None	No change to the view.

Classification of Landscape and Visual Effects

- 12.15 The overall significance of landscape and visual effects has been derived by considering the combination of the sensitivity of the receptors and the magnitude of the Proposed Development. A guide to these combinations to determine importance is set out below.
- 12.16 Where the guide allows for a choice (e.g. major or moderate) a reasoned explanation is provided in the assessment narrative for the single effect, i.e. major.

Table 12-9: Classification Guide for the Importance of Landscape and Visual Effects

Sensitivity of Receptor	Magnitude of Impact				
	High	Medium	Low	Very Low	None
Very High	Major	Major	Major or Moderate	Moderate or Minor	Neutral
High	Major or Moderate	Major Moderate or	Moderate or Minor	Minor or Negligible	Neutral
Medium	Major or Moderate	Moderate Minor or	Minor or Negligible	Negligible	Neutral
Low	Moderate or Minor	Minor	Minor or Negligible	Negligible Neutral or	Neutral
Very Low	Minor Negligible or	Negligible	Negligible Neutral or	Neutral	Neutral

- 12.17 Major or moderate effects are important, with minor, negligible and neutral effects being less important.
- 12.18 A description of the landscape and visual importance of effects is set out in the following table.

Table 12-10: Landscape and Visual Importance of Effects

Effect	Landscape Effect	Visual Effect
Major beneficial	Where the Proposed Development substantially improves the scale, landform and pattern of the landscape and/or enriches the quality or characteristic features.	Where the Proposed Development results in a pronounced improvement to the existing view.
Moderate beneficial	Where the Proposed Development largely improves the characteristic of the scale, landform and pattern of the landscape, and/or quality or characteristic features.	Where the Proposed Development results in a notable improvement to the existing view.
Minor beneficial	Where the Proposed Development partially improves the scale, landform and pattern of the landscape, and/or quality or characteristic features	Where the Proposed Development causes a partial improvement to the existing view.
Negligible beneficial	Where the Proposed Development causes a very slight improvement to the existing landscape.	Where the Proposed Development causes a barely perceptible improvement to the existing view
Neutral	No change to the landscape character or landscape features.	No change to the view.
Negligible adverse	Where the Proposed Development causes a very slight deterioration to the existing landscape.	Where the Proposed Development causes a barely perceptible deterioration to the existing view
Minor adverse	Where the Proposed Development partially deteriorates the scale, landform and pattern of the landscape, and/or quality or characteristic features.	Where the Proposed Development causes a partial deterioration to the existing view.
Moderate adverse	Where the Proposed Development largely deteriorates the characteristic of the scale, landform and pattern of the landscape, and/or quality or characteristic features.	Where the Proposed Development results in a notable deterioration to the existing view.
Major adverse	Where the Proposed Development substantially deteriorates the scale, landform and pattern of the landscape and/or quality or characteristic features.	Where the Proposed Development results in a pronounced deterioration to the aesthetic quality or composition of the existing view.

I3.0 LVIA APPENDIX II: PUBLISHED LANDSCAPE CHARACTER EXTRACTS

14.0 LVIA APPENDIX III: RELEVANT POLICY

14.1 The following policies are relevant to landscape and visual matters.

Future Wales The National Plan 2040

14.2 Policy 17 states:

“The Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs.

In determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales’ international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency. In Pre-Assessed Areas for Wind Energy the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. There is a presumption in favour of large-scale wind energy development (including repowering) in these areas, subject to the criteria in policy 18.

Applications for large-scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment.

Proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities.

New strategic grid infrastructure for the transmission and distribution of energy should be designed to minimise visual impact on nearby communities.

The Welsh Government will work with stakeholders, including National Grid and Distribution Network Operators, to transition to a multi-vector grid network and reduce the barriers to the implementation of new grid infrastructure.”

Newport Local Development Plan

14.3 Policy SP5: Countryside states:

“Development in the countryside (that is, that area of land lying beyond the settlement boundaries shown on the proposal and inset maps) will only be permitted where the use is appropriate in the countryside, respects the landscape character and biodiversity of the immediate and surrounding area and is appropriate in scale and design. housing development, rural diversification and rural enterprise uses, beyond settlement boundaries, will only be appropriate where they comply with national planning policy.”

14.4 Policy SP7: Green Wedges states:

“Green wedges have been identified in order to prevent coalescence between the following settlements:

- i) Newport and Cardiff*
- ii) Rogerstone and Risca*
- iii) Malpas and Cwmbran*
- iv) Caerleon and Cwmbran.*

Within these areas development which prejudices the open nature of the land will not be permitted. An increase in size of a dwelling of more than 30% of the volume of the original size of the dwelling, or as existed in 1948, will not be approved.”

I4.5 Policy SP8: Special Landscape Areas states:

“Special landscape areas are designated as follows within which proposals will be required to contribute positively to the area through high quality design, materials and management schemes that demonstrate a clear appreciation of the area’s special features:

- i) North of Bettws*
- ii) West of rhiwderin*
- iii) Wentlooge levels*
- iv) River usk*
- v) Caldicot levels*
- vi) Wentwood.”*

I4.6 Policy GP5: Natural Environment states:

“Development will be permitted where, as applicable:

- i) the proposals are designed and managed to protect and encourage biodiversity and ecological connectivity, including through the incorporation of new features on or off site to further the UK, Welsh and/or Newport biodiversity action plans;*
- ii) the proposals demonstrate how they avoid, or mitigate and compensate negative impacts to biodiversity, ensuring that there are no significant adverse effects on areas of nature conservation interest including international, European, national, Welsh section and local protected habitats and species, and protecting features of importance for ecology;*
- iii) the proposal will not result in an unacceptable impact on water quality;*
- iv) the proposal should not result in the loss or reduction in quality of high quality agricultural land (grades 1, 2 and 3a);*
- v) there would be no unacceptable impact on landscape quality;*
- vi) the proposal includes an appropriate landscape scheme, which enhances the site and the wider context including green infrastructure and biodiversity networks;*
- viii) the proposal includes appropriate tree planting or retention where appropriate and does not result in the unacceptable loss of or harm to trees, woodland or hedgerows that have wildlife or amenity value.”*

15.0 LVIA APPENDIX IV: LIKELY LANDSCAPE EFFECTS

15.1 The following table sets out the likely landscape effects of the Proposed Development.

Table 15-1: Likely Landscape Effects

Landscape Receptor	Sensitivity	Assessment Narrative	Impact	Effect
The GIS Site	<u>Value</u> The GIS Site is an area of hardstanding and single storey structures associated with electrical land uses. There is no recreational value, no notable vegetation structure, no cultural value due to the land use and the GIS does not contribute positively to the landscape. It is within a Special Landscape Area, however it is not representative of the key landscape features, such that the value is assessed as very low. <u>Susceptibility</u> As the GIS Site is an area of modified landform with existing structures, it is able to accommodate change and its susceptibility is very low. <u>Sensitivity</u> The combination of the very low value and very low susceptibility results in a very low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would introduce a new GIS substation, approximately 27m in length and 19m in height, which would consist of a red brick façade and profiled metal roof. There would be 2 external fire escapes, enclosed in a metal mesh on the eastern and southern facades of the building. There would also be a loading platform on the southern façade of the building, aligned with the first storey on the building. The western façade of the building would have a rectangular area of perforated brick. Surrounding the GIS building would be the pumping station and DG Set to the south, an unloading hardstanding area and switchgear to the east and car-parking to the north. The Proposed Development would result in localised excavation of hardstanding for the foundations and below ground cabling. There would be new electric boundary fencing and access gates around the perimeter of the Site. The Proposed Development would therefore increase the number of electrical related buildings and structures within the Site, with the GIS building being taller than the existing buildings. Its red brick façade would be a passive building, with articulation only on the western façade via the perforated brick. The metal enclosure to the external fire escapes would provide a neater and higher architectural quality by reducing the perception of the stairs. The increased extent of buildings and height of structures within the Site would result in a partial alteration in comparison to the lower height and generally open character of the Site. <u>Year 1 (summer)</u> The assessment would reflect that in winter.	Year 1 (winter): Medium Year 1 (summer): Medium	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse
Dyffryn Lane	<u>Value</u> The lane does not exhibit any features of landscape value that contribute to local distinctiveness. It does not provide a recreational value. The southern part of the track is within the Special Landscape Area, but does not exhibit the key features of the designation. The value is low. <u>Susceptibility</u> As a track, the susceptibility is very low. <u>Sensitivity</u> The combination of the low value and very low susceptibility results in a low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The alignment of the lane would remain. The perception of the buildings within the GIS Site would reflect that of the existing perception of electrical infrastructure bordering the lane. With reference to the AIA, G22 would be removed, due to underground cables; however the removal of this vegetation would not alter the character of the lane, such that whilst the impact is very low, the effect is predicted to be neutral. <u>Year 1 (summer)</u> The assessment would reflect that in winter.	Year 1 (winter): Very low Year 1 (summer): Very low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse
Published Landscape Character Assessments				
NLCA 34: Gwent Levels	<u>Value</u> There is a cultural value via the historic association of the reclaimed land. There is a recreational value via several PROW, along with a functional value via the vegetation patterns. The area is also covered in part by Special Landscape Areas, such that the value is high. <u>Susceptibility</u> The landform across the NLCA is predominantly flat, with a consistent pattern of fields, drawing ditches and water courses. Whilst there are a range of land uses across the NLCA, it is a distinctive landscape, such that the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would introduce additional electrical infrastructure and related land uses within the NLCA, including a building at c.19m in height. The Proposed Development would be located adjacent to an existing Substation, such that it would be consolidated to a part of the NLCA where similar land uses are present and are noted by the published study as standing out in the landscape. The perceived height of the proposed GIS building would be lessened by its proximity to taller overhead pylons, such that it would appear as a lower height building, with a passive facade, rather than apparent electrical form of the pylons or the structures along the railway line. The Proposed Development would be located across previously developed land, such that there would be no change to the watercourses or fields. There would be no change to the key characteristics of alluvium, reclaimed landscape, the Usk estuary, reens, willows and hedgerow and wet pasture. The Proposed Development would not alter the perceptions of tranquillity and remoteness due to being located adjacent to the Substation. Therefore, there would be no change to the character of the NLCA. <u>Year 1 (summer)</u> The assessment would reflect that in winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral

Landscape Receptor	Sensitivity	Assessment Narrative	Impact	Effect
NLCA 35: Cardiff, Barry and Newport	<u>Value</u> There is a cultural, recreational and functional value, along with some degradation from the range of land uses, such that the value is medium. <u>Susceptibility</u> As an area of undulating landform, along with areas of extensive development, the susceptibility is assessed as medium. <u>Sensitivity</u> The combination of the medium value and medium susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be located in the NLCA and therefore there would be no physical changes to the physical features of the landscape. Any perception of the Proposed Development would be in the context of the existing Substation and infrastructure across the Wentlooge Levels, such that the Proposed Development would not alter the character of the NLCA. <u>Year 1 (summer)</u> The assessment would reflect that in winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
Wentlooge Levels Special Landscape Area	<u>Value</u> There is a cultural value via the historic association of the reclaimed land. There is a recreational value via several PROW, along with a functional value via the vegetation patterns. The area is also locally designated, such that its value is high. <u>Susceptibility</u> The landform across the SLA is predominantly flat, with a consistent pattern of fields, drawing ditches and water courses. Whilst there are a range of land uses, it is a distinctive landscape, such that the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would be located in the Special Landscape Area (SLA), along part of the northern edge of the designation and adjacent to the existing Substation, which is also within the area. The physical extent of the Proposed Development would be very small in relation to the wider geographic area of the SLA, at less than 0.009%. The Proposed Development would not alter the small to medium scale field patterns, nor field boundary vegetation. There would be no change to the pattern of drainage ditches, nor the SSSI designation. The Proposed Development would not represent one of the stated 'threats' of leisure, turf cutting or horsiculture, although would result in additional built form and electrical infrastructure and an increase in development within the SLA. The GIS building would be perceived from within the SLA, although in the context of pylons and existing electrical features. As a red brick building, it would have a passive exterior, unlike the angular forms of the pylons or the electrical equipment across the Substation. Similarly, the enclosure to the external fire escapes would reduce the perception of their utilitarian form. The removal of the vegetation (G22) would not alter the vegetated character of the area. The impact would therefore be very low. <u>Year 1 (summer)</u> In summer, with the intervening vegetation in leaf, the perception of the Proposed Development, specifically the GIS building would reduce, such that the impact would be very low, with the effect reducing in comparison to the year 1 winter assessment.	Year 1 (winter): Very low Year 1 (summer): Very low	Year 1 (winter): Minor adverse Year 1 (summer): Negligible adverse
Local Landscape Character Areas				
LLCA 1: Existing Substation (covers the GIS Site)	<u>Value</u> As an area of electrical land uses, which are not reflective of the key characteristics of the Special Landscape Area, the value is very low. <u>Susceptibility</u> Due to the range of structures across developed flat landform with no notable vegetation cover, the susceptibility is very low. <u>Sensitivity</u> The combination of the very low value and very low susceptibility results in a very low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The impacts would reflect those stated above at the GIS Site scale, with additional electrical equipment and buildings within the LLCA. Given the dominance of the electrical character of the LLCA, the impact would be very low. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): Very low Year 1 (summer): Very low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse
LLCA 2: Percoed Reen East	<u>Value</u> There is a recreational value via PROW and a functional value via the vegetation patterns. There is no sense of remoteness due to the surrounding land uses. The fields within the LLCA are representative of the wider Special Landscape Area which covers the LLCA, such that the value is medium. <u>Susceptibility</u> Due to vegetation cover, drainage ditch and arable land uses, the susceptibility is high. <u>Sensitivity</u> The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be located in the LLCA and therefore there would be no physical change to its landscape features. The GIS building would be perceived from fields to the north-east of the Site, but beyond the existing sub-station. Therefore, there would be no change to the character of the LLCA, due to the existing influence of electrical and residential land uses. <u>Year 1 (summer)</u> The perception of the GIS building would reduce in summer, with no change to the character of the LLCA, due to the existing perception of residential and electrical land uses.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral

Landscape Receptor	Sensitivity	Assessment Narrative	Impact	Effect
LLCA 3: Percoed Reen West	<u>Value</u> There is a recreational value via PRoW and a functional value via the vegetation patterns. There a sense of remoteness and tranquillity. The fields within the LLCA are representative of the wider Special Landscape Area which covers the LLCA, such that the value is high. <u>Susceptibility</u> Due to vegetation cover, drainage ditch and arable land uses, the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be located in the LLCA and therefore there would be no physical change to its landscape features. The GIS building would be perceived from the Percoed Reen, along with external activity and movement of vehicles and use of the lifting bay when in proximity to the GIS Site. This would result in the perception of increased activity in comparison to recreational users across the LLCA. The perception would be, beyond an overhead pylons and in the context of the Substation. Therefore, there would be an increase in the developed setting of the LLCA, but one which results in a very limited change to the character of the LLCA given the influence from the existing Substation. <u>Year 1 (summer)</u> The perception of the GIS building would reduce in summer, such that there would be no change to the character of the LLCA.	Year 1 (winter): Very Low Year 1 (summer): None	Year 1 (winter): Negligible adverse Year 1 (summer): Neutral
LLCA 4: Bronllys Grove Residential	<u>Value</u> There is no notable cultural association, nor landscape designations, such that the value is low. <u>Susceptibility</u> As a developed area, the susceptibility is low. <u>Sensitivity</u> The combination of the low value and low susceptibility results in a low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper parts of the GIS building would be perceived beyond the intervening Substation and in the context of existing electrical development, such that there would be no change to the dominant residential character of the LLCA. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
LLCA 5: Green Lane	<u>Value</u> There is a recreational and functional value to the LLCA, as well as being within the Special Landscape Area. Perceptions of remoteness and tranquillity are lowered by the proximity to the railway line, such that the value is medium. <u>Susceptibility</u> As fields, vegetation and lanes, the susceptibility is high. <u>Sensitivity</u> The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper parts of the GIS building would be perceived, but in the context of existing electrical infrastructure and pylons, such that the change to the setting of the LLCA would be very limited. <u>Year 1 (summer)</u> The perception of the Proposed Development would be notably reduced and would not alter the character of the LLCA.	Year 1 (winter): Very low Year 1 (summer): None	Year 1 (winter): Negligible adverse Year 1 (summer): Neutral
LLCA 6: Celtic Lakes Ruderal	<u>Value</u> There is a functional value to the LLCA due to the vegetation patterns, such that the value is medium. <u>Susceptibility</u> As an area of vegetation, the susceptibility is high. <u>Sensitivity</u> The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The loss of vegetation for the below ground cables would not alter the overall vegetated character of the LLCA. The perception of the Proposed Development would be in the context of the existing Substation, so as not to alter the character of the LLCA. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
LLCA 7: Celtic Lakes Employment	<u>Value</u> As an area of large scale employment land uses, the value is low. <u>Susceptibility</u> As a developed area, the susceptibility is low. <u>Sensitivity</u> The combination of the low value and low susceptibility results in a low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> Any perception of the Proposed Development would relate to the upper parts of the GIS building. With the perception of this in the context of the overhead pylons and Substation, and at distance from the LLCA, there would be no change in the employment character of the LLCA. <u>Year 1 (summer)</u> The	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
LLCA 8: Railway Line	<u>Value</u> There is a functional value to the vegetation along the embankments, such that the value is low. <u>Susceptibility</u>	<u>Year 1 (winter)</u> There would be no change to the character of the LLCA due to the intervening distance from the GIS Site and the dominant transport character across the LLCA. <u>Year 1 (summer)</u>	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral

Landscape Receptor	Sensitivity	Assessment Narrative	Impact	Effect
	As a railway line, the susceptibility is very low. <u>Sensitivity</u> The combination of the low value and very low susceptibility results in a low sensitivity to the Proposed Development.	The assessment would reflect that at year 1 winter.		
LLCA 9: Wentlooge Levels Arable	<u>Value</u> There is a cultural value via the historic association of the reclaimed land. There is a recreational value via several PROW, along with a functional value via the vegetation patterns. The area is also locally designated, such that its value is high. <u>Susceptibility</u> The landform across the SLA is predominantly flat, with a consistent pattern of fields, drawing ditches and water courses. Whilst there are a range of land uses, it is a distinctive landscape, such that the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be located in the LLCA and therefore there would be no change to its character. Any perception of the Proposed Development would be in the context of the overhead pylons and such that there would be no change to the character of the LLCA. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral

16.0 LVIA APPENDIX V: LIKELY VISUAL EFFECTS

16.1 The following table sets out the likely visual effects of the Proposed Development.

Table 16-1: Likely Visual Effects

Visual Receptor	Sensitivity	Assessment Narrative	Impact	Effect
1. Recreational users on PRow (footpath) 412/13/4, part of the Wales Coast Path	<u>Value</u> As high quality views which are likely to be well frequented, the value is high. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be discernible due to the intervening distance and that it would be situated beyond intervening vegetation and in the context of pylons. Therefore, there would be no change to the composition of the view. <u>Year 1 (summer)</u> The Proposed Development would not be visible due to the intervening vegetation being in leaf and therefore there would be no change to the composition of the view.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
2. Recreational users on Green Lane (412/GL2/1)	<u>Value</u> The view may be valued locally, but it unlikely to be the receptor's primary reason for being present in the landscape. The value is medium. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper part of the southern and western facades, including the roof profile of the GIS building would be visible, but largely softened by the density of intervening vegetation and seen in the context of taller overhead pylons. The change to the composition of the view would be very small. <u>Year 1 (summer)</u> The Proposed Development would not be visible due to the intervening vegetation being in leaf.	Year 1 (winter): Very low Year 1 (summer): None	Year 1 (winter): Negligible adverse Year 1 (summer): Neutral
3. Road users on Hawse Lane	<u>Value</u> The view is incidental to the receptor's reason for being present, such that the value is low. <u>Susceptibility</u> As receptors on a local road where there is some enjoyment of the landscape, the value is medium. <u>Sensitivity</u> The combination of the low value and medium susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper part of the western facade, including the roof profile of the GIS building would be visible, but largely softened by the density of intervening vegetation and seen in the context of taller overhead pylons. The change to the composition of the view would be very low. <u>Year 1 (summer)</u> The Proposed Development would not be visible due to the intervening vegetation being in leaf.	Year 1 (winter): Very low Year 1 (summer): None	Year 1 (winter): Negligible adverse Year 1 (summer): Neutral
4. Recreational users on Percoed Reen (390/GL/2)	<u>Value</u> As high quality views which are likely to be well frequented, the value is high. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be visible due to the density of the intervening vegetation, and therefore there would be no change to the composition of the view. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
5. Recreational users on Percoed Reen (390/GL/2)	<u>Value</u> The existing features within the view result in the view being discordant and unlikely for the receptor to be present. The value is therefore very low. <u>Susceptibility</u>	<u>Year 1 (winter)</u> The upper part of the southern facade, including the external fire escape stair, and the fire escape stair on the western façade would be visible, although in part softened by the intervening vegetation. The GIS Building would result in additional and taller built form on the skyline and in the foreground of the view, but would be seen below the height of the intervening pylons and their associated wires. The red brick of the building would reflect the red brick within the GIS, with views of the new fencing reflecting views of the existing palisade fencing. There would be a limited loss of visibility of	Year 1 (winter): Low Year 1 (summer): Very Low	Year 1 (winter): Minor adverse Year 1 (summer): Negligible adverse

Visual Receptor	Sensitivity	Assessment Narrative	Impact	Effect
	As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the very low value and high susceptibility results in a medium sensitivity to the Proposed Development.	vegetation in the background of the view and given the transient nature of the receptor and low degree of exposure to the view, such that the impact would be very low. <u>Year 1 (summer)</u> With the intervening vegetation in leaf, the visibility of the southern façade would notably reduce. The impact would be very low, with the effect reducing in comparison to the year 1 winter.		
6. Recreational users on Percoed Reed (390/GL/1)	<u>Value</u> The existing features within the view result in the view being discordant and unlikely for the receptor to be present. The value is therefore very low. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the very low value and high susceptibility results in a low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper parts of the western façade of the GIS building would be visible, although seen beyond the Substation and pylon. There would be no loss of longer distance views, with only a short reduction in the visible extent of sky. The overall change to the composition of the view would be small. <u>Year 1 (summer)</u> With the intervening vegetation in leaf, the lower parts of the proposed GIS building would be screened, with the upper parts of the building remaining, but the impact would reduce to very low.	Year 1 (winter): Low Year 1 (summer): Very Low	Year 1 (winter): Minor adverse Year 1 (summer): Negligible adverse
7. Recreational users on Percoed Reed (390/GL/1)	<u>Value</u> The existing features within the view result in the view being discordant and unlikely for the receptor to be present. The value is therefore very low. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the very low value and high susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would not be visible due to the density of the intervening vegetation. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): None Year 1 (summer): None	Year 1 (winter): Neutral Year 1 (summer): Neutral
8. Recreational users on Percoed Reed (390/GL/1)	<u>Value</u> The existing features within the view result in the view being discordant and unlikely for the receptor to be present. The value is therefore very low. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the very low value and high susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper parts of the western façade of the GIS building would be visible, although seen beyond the Substation and pylon, but softened by intervening vegetation. There would be no loss of longer distance views, with only a short reduction in the visible extent of sky. The overall change to the composition of the view would be small. <u>Year 1 (summer)</u> With the intervening vegetation in leaf, the Proposed Development would not be visible..	Year 1 (winter): Very low Year 1 (summer): Very Low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse
9. Recreational users on Percoed Reed (390/GL/1)	<u>Value</u> The view is likely to be valued locally, such that the value is medium. <u>Susceptibility</u> As recreational users, their susceptibility is high. <u>Sensitivity</u> The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The external fire stair on the southern façade and the upper parts of the western façade would be visible from second and third storey windows for residents at Bronllys Grove. The GIS building would be seen beyond the Substation and in the context of overhead pylons, resulting in a very small addition to the developed skyline, although remaining below the height of the pylons. , <u>Year 1 (summer)</u> With the intervening vegetation in leaf, the upper parts of the proposed GIS building would be screened, with the impact and effect reducing in comparison to the year 1 assessment.	Year 1 (winter): Low Year 1 (summer): Very Low	Year 1 (winter): Minor adverse Year 1 (summer): Negligible adverse
10. Residents at Bronllys Grove	<u>Value</u> The view is likely to be valued locally, such that the value is medium. <u>Susceptibility</u>	<u>Year 1 (winter)</u> The external fire stair on the southern façade and the upper parts of the western façade would be visible from second and third storey windows for residents at Bronllys Grove. The GIS building would be seen beyond the Substation and in the context of overhead pylons, resulting in a very small addition to the developed skyline, although remaining below the height of the pylons.	Year 1 (winter): Low Year 1 (summer): Very Low	Year 1 (winter): Minor adverse Year 1 (summer): Negligible adverse

Visual Receptor	Sensitivity	Assessment Narrative	Impact	Effect
	As residents, their susceptibility is high. <u>Sensitivity</u> The combination of the medium value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (summer)</u> With the intervening vegetation in leaf, the upper parts of the proposed GIS building would be screened, with the impact and effect reducing in comparison to the year 1 assessment.		
11. Road users on Green Lane	<u>Value</u> The view is likely to be valued locally, such that the value is medium. <u>Susceptibility</u> As road users, their susceptibility is medium. <u>Sensitivity</u> The combination of the medium value and medium susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would be largely softened by the density of the intervening vegetation. <u>Year 1 (summer)</u> The Proposed Development would not be visible due to the density of intervening vegetation.	Year 1 (winter): Very Low Year 1 (summer): None	Year 1 (winter): Negligible adverse Year 1 (summer): Neutral
12. Recreational users on Green Lane	<u>Value</u> The existing features within the view result in the view being discordant and unlikely for the receptor to be present. The value is therefore very low. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the very low value and high susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The Proposed Development would be predominantly softened by the density of intervening vegetation and seen beyond and below the existing overhead pylons, such that the change to the composition of the view would be small, due to additional built form. <u>Year 1 (summer)</u> The Proposed Development would be predominantly screened, apart from the upper sections of the western façade and parts of the roof. It would result in a very small change to the composition of the view.	Year 1 (winter): Low Year 1 (summer): Very low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse
13. Recreational users on Green Lane	<u>Value</u> The existing pylons and electrical features within the view result in the view being discordant and unlikely for the receptor to be present. The value is therefore very low. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the very low value and high susceptibility results in a medium sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The southern facade, including the external fire escape stair, and the fire escape stair on the western façade would be visible, although in part softened by the intervening vegetation. The GIS Building would result in additional and taller built form on the skyline and in the foreground of the view, but would be seen below the height of the intervening pylons and their associated wires. The red brick of the building would reflect the red brick within the GIS, with views of the new fencing reflecting views of the existing palisade fencing. There would be a limited loss of visibility of vegetation in the background of the view and given the transient nature of the receptor and low degree of exposure to the view, such that the impact would be low. <u>Year 1 (summer)</u> With the intervening vegetation in leaf, the visibility of the southern façade would reduce. The impact would remain low, with the effect reducing in comparison to that in winter.	Year 1 (winter): Medium Year 1 (summer): Low	Year 1 (winter): Minor adverse Year 1 (summer): Minor adverse
14A. Road users on Celtic Way	<u>Value</u> The view is likely to be valued locally, such that the value is medium. <u>Susceptibility</u> As road users on a main road, their susceptibility is low. <u>Sensitivity</u> The combination of medium value and low susceptibility results in a low sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The upper part of the northern façade of the GIS building would be visible, but seen at distance from the receptor and in the context of overhead pylons, such that the change to the composition of the view would be very small, via additional built form in the background of the view. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): Very low Year 1 (summer): Very low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse
14B. Employment users at Celtic Lakes	<u>Value</u> The view is likely to be valued locally, such that the value is medium. <u>Susceptibility</u> As receptors at work, their susceptibility is very low. <u>Sensitivity</u>	<u>Year 1 (winter)</u> The upper part of the northern façade of the GIS building would be visible, but seen at distance from the receptor and in the context of overhead pylons, such that the change to the composition of the view would be very small, via additional built form on in the background of the view. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): Very low Year 1 (summer): Very low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse

Visual Receptor	Sensitivity	Assessment Narrative	Impact	Effect
	The combination of the very low value and medium susceptibility results in a low sensitivity to the Proposed Development.			
15. Recreational users on PRoW (footpath) 390/8/1	<u>Value</u> As high quality views which are likely to be well frequented, the value is high. <u>Susceptibility</u> As receptors engaged in outdoor recreation, the susceptibility is high. <u>Sensitivity</u> The combination of the high value and high susceptibility results in a high sensitivity to the Proposed Development.	<u>Year 1 (winter)</u> The grey roof of the GIS building would be visible, but at distance from the receptor and seen in the context of large box style buildings at Celtic Lakes and the Substation, such that it would result in a very small change to the composition of the view. <u>Year 1 (summer)</u> The assessment would reflect that at year 1 winter.	Year 1 (winter): Very low Year 1 (summer): Very low	Year 1 (winter): Negligible adverse Year 1 (summer): Negligible adverse