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PLANNING APPLICATION FOR A DEVELOPMENT OF 105 DWELLINGS IN THE FORM OF DETACHED, SEMI-DETACHED, AND TERRACED HOUSES AND BLOCKS OF FLATS, WITH ASSOCIATED ACCESS ROADS, PARKING AND AMENITY OPEN SPACE

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

LAND ADJOINING ST ANTHAN ROAD, COWBRIDGE

ON BEHALF OF REDROW SOUTH WALES

Pegasus Group

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PLANNING | DESIGN | ENVIRONMENT | ECONOMICS

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1. INTRODUCTION (DEFINITION, SCOPE AND CONTEXT)

1.1 Pegasus Group have been commissioned by Redrow South Wales to prepare a Landscape and Visual Impact Assessment (LVIA) in support of a planning application for a development of 105 dwellings in the form of detached, semi-detached, and terraced houses and blocks of flats, with associated access roads, parking and amenity green space at land adjoining St Anthan Road, Cowbridge (see appendix 1). The layout of the scheme is illustrated on the Concept POS Landscape Proposal plan (appendix 11) and Concept On-Plot Landscape Proposal plan (appendix 12).

1.2 This LVIA has been prepared by Isaac Winchcombe, Chartered Member of the Landscape institute.

1.3 The development of the layout has been informed by on-going pre-application consultation between the client and the council, resulting in extensive layout changes; including an increase in proposed dwellings from 87 initially to 105 currently. Failed attempts have also been made to consult with the councils landscape officer, Jonathan Green, on landscape specific issues.

1.4 The main objectives of the LVIA are:

- To describe the landscape character of the site and its surroundings, evaluate its sensitivity to change and, taking into account the magnitude of change, assess the effect that the proposal would have on the landscape character.
- To identify potential visual receptors (i.e. people who would be able to see the development), evaluate their sensitivity to change and, taking into account the magnitude of change, assess the effect that the proposal would have on visual amenity. Residential visual amenity issue is excluded from this LVIA.
- To identify landscape elements associated with the site, evaluate their sensitivity to change and, taking into account the magnitude of change, assess the effect the proposals would have on landscape elements.
- To identify mitigation measures and opportunities for landscape character and visual amenity enhancement, in order to mitigate, offset or reduce the predicted adverse effects.

Assessment Approach and Methodology

1.5 This LVIA assesses the impacts of the completed proposed development only and does not consider the construction stage as this is short and temporary in duration: any potential effects brought about by the construction stage are likely to be lower or similar to those assessed post construction. The effects are therefore assessed at Year 1, immediately post-completion, and at Year 5 to take into account the proposed mitigation and enhancement measures. The assumed vegetative growth is taken as 0.5m per year.

1.6 This LVIA has been undertaken with regards to the best practice guidelines within the *Guidelines for Landscape and Visual Impact Assessment* Edition 3 (hereafter referred to as GLVIA3). The GLVIA3 states in paragraph 1.1 that:

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

1.7 The proposed scheme, however, is a non-EIA development. GLVIA3 states in paragraph 1.17 that when identifying landscape and visual effects there:

> **"…is a need for an approach that is in proportion to the scale of the project that is being assessed and the nature of the likely effects. Judgement needs to be exercised at all stages in terms of the scale of investigation that is appropriate and proportional."**[2]

1.8 GLVIA3 also recognises in paragraph 2.23 that:

> **"…professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters much of the assessment must rely on qualitative judgements"**[3]

1.9 As such, this LVIA has been undertaken with regards to GLVIA3 best practice guidelines, but to a non-EIA level.

1.10 All effects are taken as adverse unless otherwise stated. This LVIA should be read in conjunction with the supporting Planning Statement and Design and Access Statement (DAS). The detailed methodology for this LVIA is provided in appendix 2.

[1] Paragraph 1.1, Page 4, GLVIA3rd Edition
[2] Paragraph 1.17, Page 9, GLVIA, 3rd Edition
[3] Paragraph 2.23, Page 21, GLVIA, 3rd Edition

1.11 The photographic evidence has been prepared with regard to the new Technical Guidance Note 06/19 published 17th September 2019 by the Landscape Institute: *Visual Representation of Development Proposals.*

1.12 A preliminary 3km radii study area has been initially identified to review the baseline condition and planning policies that may be relevant to the proposed development. This study area captures the nearby settlements and public vantage points that may offer views of or towards the site.

2. DESCRIPTION OF PROPOSALS

2.1 The landscape proposals for the green infrastructure will be broadly naturalistic in character with the strong use of soft landscaping and natural design celebrating the use of native and wildlife attracting plants. Appropriate areas will be designed with a semi-natural/semi-formal character due to their location within the development, reflecting the introduction of built form.

2.2 The central open space will provide opportunity for recreational opportunities which will include equipped play, encouraging the community out into the green spaces to play in and amongst the natural environments.

2.3 The significant green elements include:

- Central green space – a semi-formal centralised space along the north-eastern boundary linking to, and expanding, an existing adjacent area of public open green space. This area will contain a Local Area for Play, including items of play equipment and incidental play opportunities. Extensive tree planting shall be proposed within the space to mitigate against the removal of hedgerow and trees (forming the north-eastern field boundary) required to combine the spaces.

- Eastern entrance gateway – an informal linear green space framing the main access point into the site. A simple landscape approach in the form of hedgerow, grassland types and scattered trees will reflect the local character, mitigate against the removal of hedgerow and trees (forming the eastern field boundary) required to create the vehicular site access.

- Northern entrance – a small area of green space encompassing the public right of way (PRoW) entrance into the site with opportunities for naturalistic planting will soften the introduction of built form and provide a pleasant transition in/out of the site; reducing the impact on the PRoW crossing the site by softening the transition from lower density built form set further back along Windmill Lane to more dense built form facing on to the PRoW route through the site.

- South-western boundary green space – a larger linear area of public green space containing an attenuation basin, with the potential to have a pedestrian route and nature/play trail to allow enjoyment of the natural landscape and an active lifestyle. Planting shall include mixed native

hedgerows, grasslands and scattered native trees to mitigate against removal of existing hedgerows within the site and provide visual screening of proposed built form from view points to the south.

- Tree lined streets provide vertical interest and softening density of built form from view points to the south.

2.4 Across the site much of the existing vegetation will be retained, which broadly consists mixed-species hedgerows and scattered broad-leaved hedgerow trees. The retention of these valuable site assets will provide an existing landscape framework and existing habitats.

2.5 An understanding of the existing landscape character will influence the type of landscaping proposed. Species will include native plants, using a wide mix of species to increase biodiversity. Where planting is closer/within the development native plants may be less suitable, in which case wildlife attracting species will be utilised to ensure the biodiversity value of the entire development.

2.6 Alongside this the landscape proposals aim to create a variety of habitat types including, grassland, wildflower, shrub, hedgerows and trees, to attract and support a wide range of wildlife.

3. EFFECT ON LANDSCAPE ELEMENTS

Existing Land Cover

3.1 The existing ground cover that characterises the site is improved pastoral grassland. As part of the proposals this would be entirely removed, replaced by built form, associated infrastructure, and extensive areas of mixed grasslands.

3.2 The ephemeral nature of the improved pastoral grassland suggests a low susceptibility to change as such form of vegetation can be easily replaced in a relatively short period of time. In terms of its value pastoral land use is abundent in the local area and highly characteristic of the local landscape, suggesting a low value. Overall, the sensitivity of pastoral grassland is low.

3.3 The proposals would bring about minor adverse change with the improved pastoral grassland replaced by built form and associated infrastructure, as well as extensively diversified areas of grassland. The magnitude of change is considered to be moderate with the effects minor beneficial from a landscape elements point of view. In terms of biodiversity this would be considerably more advantageous, due to the diversification of habitats created by changing from a low diversity grass cover to a diverse range of highly diverse types of grassland.

Effect upon topography in the site

3.4 The topography within the study area consists of multiple high points of relatively steep incline, cutting down to wide, flat valley floors; the site topography being typical of this wider landform. The contours across the site are smooth without any pronounced changes in levels, falling consistently north-west (from higher ground at Cowbridge) to south-east (to flatter ground around the River Thaw) [see appendix 6]. For this reason, its value is considered low. The susceptibility of the site's topography to this development is assessed as being low due to the limited impact it would have upon it. Overall, the sensitivity of the site topography is also considered low.

3.5 The proposed development would bring about negligible change to the site topography, closely follow existing topography to minimise visibility. It shall allow the landform to influence the layout of the development, with very limited localised changes spread across the site to achieve flat bases to built form and acceptable levels to roads; ensuring that the topography continues to form a recognisable feature in the landscape. Consequently, it is assessed that the magnitude of change would be negligible and effects negligible.

Effect upon tree and hedge resource

3.6 The site's boundaries are characterised by mixed native hedgerows (maintained at approximately 1.5m height) and occasional clusters of hedgerow trees, typical of this landscape. There are no isolated trees within the site. None of the trees within the site's boundaries are protected by any Tree Preservation Order (TPO) or are part of a designed or designated landscape. Similarly, the hedgerow vegetation represents a traditional but typical field boundary treatment. For this reason, the value of tree and shrub vegetation is considered to be medium.

3.7 In terms of susceptibility of the hedgerows vegetation this is considered to be medium to the proposals with this type of vegetation requiring some time to mature and establish as a landscape element. Trees, as a landscape feature are generally more difficult to replace and require longer time to establish, thus are judged to be of high susceptibility. Overall, the sensitivity of hedgerow vegetation is medium and tree vegetation high.

3.8 As stated in the Tree Report the proposed development would require the removal of: G12 to combine the open space on the northern boundary to the existing open space to the north; G17, part of G53, T55, G56 and G57 to create the eastern site access; G58 and G59 from within the site to allow for development of housing plots. This equates to a total of 1no. Category C tree, XX linear metres Category C hedgerow and XX linear metres Category U hedgerow.

3.9 All other peripheral hedgerows will be retained and protected during the construction phase and as a consequence will remain unaffected by the proposed development. Development will be offset from the existing boundary vegetation to provide clear maintenance and access routes and protect the Root Protection Zone and tree canopies. This would help protect the condition and longevity of the tree and hedgerow resource within the site.

3.10 As part of the proposals the existing hedgerow network bounding the site would be enhanced in its structure with a considerable number of native hedgerow trees such as Hawthorn (Crataegus sp.) planted alongside the amongst tussocky grassland. Hedgerows would be managed to a less rigorous practice and allowed to grow higher (up to maximum 3m height) and slightly wider. This strategy aims to retain the characteristically strong field patterns, whilst more closely reflecting the outgrown taller hedgerows associated with the current of edge Cowbridge as opposed to those bounding surrounding agricultural fields. Extensive additional

planting is also proposed throughout the site, greatly increasing the diversity of vegetation types within the site. The layout of the scheme is illustrated on the Concept POS Landscape Proposal plan (appendix 11) and Concept On-Plot Landscape Proposal plan (appendix 12).

3.11 Considering the proposed planting plan, it is assessed that the magnitude of change upon the tree and hedgerow resource would be moderate. This would translate to moderate beneficial effects upon the tree and hedgerow resource within the site.

Effect upon water features

3.12 There are no diches, ponds, or watercourses etc within or immediately adjacent to the site's boundaries therefore there would be no direct effects upon these features.

3.13 A comprehensive SuDS scheme has been developed for the site with a series of underground storage tanks connected to an attenuation area in the south of the site, ensuring no effects on the River Thaw outside of the site.

Effect upon Public Rights of Way (PRoWs)

3.14 The existing PRoWs crossing the site would be retained, and the proposed development would not have any direct effects upon these routes.

Summary Statement

3.15 The proposed development would have minor beneficial effects upon the grassland of the site, due to the change from pastoral a variety of diverse grasslands. With regard to the tree and hedgerow resource the proposals would bring about moderate beneficial effects. Other landscape features, such as water features and PRoWs would be retained and would not be affected.

4. EFFECTS ON LANDSCAPE CHARACTER AND DESIGNATIONS

4.1 Effects on landscape character and designations will arise either through the introduction of new elements during the construction and operational stage, that alter the distinct and recognisable pattern of elements in a particular type of landscape, or through visibility of the proposed development, which may alter the way in which the pattern of elements is perceived.

Landscape Designations

4.2 The application site is not covered by any statutory or non-statutory landscape designations (see appendix 7).

4.3 The site does however sit on the boundary of 'Upper and Lower Thaw Valley Special Landscape Area' [SLA] (Policy MG17, Vale of Glamorgan Local Development Plan 2021-226), and as such consideration should be given to this. Key policy and management issues of this designation relevant to this development include:

- *'Maintain hedgerow and tree cover;…*
- *Improve development to ensure rural detailing and character;*
- *Restrict development in widely visible areas and introduce blocks of broadleaf woodland to integrate settlement…'*

4.4 It is considered that the sites exclusion from the SLA and inclusion within 'Land adjoining St Anthan Road, Cowbridge' housing allocation (Policy MG2, Vale of Glamorgan Local Development Plan 2021-226) suggests its capacity for development to integrate more closely with existing extensive residential development to the north of the site at Cowbridge than the SLA to the south. Hedgerow and tree cover shall be increased as a result of the development.

4.5 'Cowbridge' conservation area sits approximately 350m north of the site, with 'Llanblethian' conservation area approximately 400m to the west; however, both are distinctly separated from the site in terms of character, physically and visually by extensive areas of residential development and landform. Therefore, it is not considered that development of the site would have any impact upon these designations.

4.6 There are no listed buildings within the immediate vicinity of the site, or which development of the site is considered to have an impact on the setting of.

4.7 St Quintin's Castle scheduled ancient monument sits approximately 500m west of the site; however, the castle is distinctly separated from the site by extensive areas of residential development and landform. Therefore, it is not considered that development of the site would have any impact upon this designation.

National Character Area (NCA)

4.8 According to Natural Resources Wales, the site and study area fall within the National Landscape Character Area (NLCA) 36 'Vale of Glamorgan'. This national level assessment, however, is considered too coarse and geographically too extensive to provide detailed information that would be relevant to the site and proposed development. For this reason, the description of the national level NLCA 36 has been reviewed to inform this LVIA but has not been assessed as a specific landscape receptor.

4.9 The published assessment can be found at: h https://cdn.cyfoethnaturiol.cymru/media/682623/nlca36-vale-of-glamorgan-description.pdf?mode=pad&rnd=131550626020000000 [4]

LANDMAP Classification

4.10 The study area has been detailed and classified as part of the LANDMAP landscape classification assessments. LANDMAP is an all-Wales landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated. It's a tool to help sustainable decision-making and natural resource planning, at a range of levels from local to national.

4.11 LANDMAP describes and evaluates aspects of the landscape and provides the basis of a consistent Wales-wide approach to landscape assessment. The landscape within the study area and that of the site, has been categorised by five spatial datasets of information as follows:

- Geological Landscape;
- Landscape Habitats;
- Visual & Sensory;

[4] Accessed 9th June 2022

- Historic Landscape; and
- Cultural Landscape

4.12 Given the nature of this report it focusses on the information detailed within the Visual and Sensory dataset, this being the most relevant to this scale and nature of proposed development; however key information extracts for each of the five data sets can be found within appendix 3 of this appraisal.

4.13 In respect of 'Visual and Sensory', the site is identified as being within the Mid Thaw Valley area and comprises mosaic lowland valleys. It is described as follows:

"The area is confined, sinuous lowland valley with steep sides up to 50m in height... The landcover is a small to medium sized field pattern of pastoral fields and managed hedgerows often containing trees. Deciduous woodlands tend to be located on the steeper valley sides. These woodlands, in association with strong topography, gives the valley a dramatic, confined character. There are several farms scattered throughout the area plus two villages and Beaupre castle and grounds. Settlement complements the character of the landscape. The area itself is enclosed by Cowbridge to its north and thus creates a green wedge into the town... There are several minor roads which cross the area. There is little effect on tranquillity from these roads, however the edge of Cowbridge effects tranquillity to the north."

Local Landscape Character

At a local level, the character of the site itself and its immediate surrounding landscape is consistent with that of the LANDMAP Sensory and Visual categorisation: formed of a small to medium sized pastoral fields contained by managed hedgerows with occasional hedgerow tree clusters; enclosed by Cowbridge to the north of the site; with the developed edge of Cowbridge and minor road (St Anthans Road) affecting the tranquillity of the area.

4.14 At a site-specific level, the slightly gentler hillside with very limited tree cover sets it aside from the described character relating to surrounding steep heavily wooded hillsides.

Description of the character within the site, i.e. land within the red line

4.15 The site is currently improved pastoral grassland used for grazing, with further pastoral grassland to the south, residential built form to the north and west, and

St Anthans Road to the east; reflective of the suburban edge character of the site. The landform within the site is smooth flowing without any pronounced changes in levels, falling consistently north-west (from higher ground at Cowbridge) to south-east (to flatter ground around the River Thaw); typical of the valley forms of the surrounding landscape, but gentle in contrast to the steep slopes associated with inclines to surrounding areas of higher ground. The site's boundaries are characterised by mixed native hedgerows (maintained at approximately 1.5m height) and occasional clusters of hedgerow trees; highly typical of this landscape. There are no diches, ponds, or watercourses etc within or immediately adjacent to the site. The existing PRoWs crosses north-west through the centre of the site and appears infrequently used.

4.16 Overall, the site is highly incontiguous in character with the surrounding pastoral landscape in terms of its composition and features; however, given its close proximity to suburban development at Cowbridge to the north and St Anthans Road to the east it lacks the intrinsic tranquil quality associated with more remote fields within the surrounding area.

Proposed change to the character of the site itself

4.17 As part of the proposals the improved pastoral grassland would be entirely removed, replaced by built form, associated infrastructure, and extensive areas of mixed grasslands.

4.18 The proposals would closely follow existing topography to minimise visibility of built form, with very limited localised changes spread across the site to achieve flat bases to built form and acceptable levels to roads; ensuring that the topography continues to form a recognisable feature in the landscape.

4.19 As stated in the Tree Report the proposed development would require the removal of a total of 1no. Category C tree, XX linear metres Category C hedgerow and XX linear metres Category U hedgerow. All other peripheral hedgerows will be retained. As part of the proposals the existing retained hedgerow network would be enhanced in its structure with a considerable number of native hedgerow trees. Hedgerows would be managed to a less rigorous practice and allowed to grow higher (up to maximum 3m height) and slightly wider. This strategy aims to retain the characteristically strong field patterns, whilst more closely reflecting the outgrown taller hedgerows associated with the current edge of Cowbridge as opposed to those bounding surrounding agricultural fields. The

layout of the scheme is illustrated on the Concept POS Landscape Proposal plan (appendix 11) and Concept On-Plot Landscape Proposal plan (appendix 12).

4.20 A comprehensive SuDS scheme has been developed for the site with a series of underground storage tanks connected to an attenuation area in the south of the site, ensuring no effects on the River Thaw outside of the site.

4.21 The existing PRoWs crossing the site would be retained, and the proposed development would not have any direct effects upon these routes; however, the user experience along this route shall change from views across open countryside to being confined to relatively dense housing.

4.22 Based on the above assessment the proposed development would bring about a moderate magnitude of change to the character of the site itself. With the low overall sensitivity and moderate magnitude of change, the proposals would result in a minor adverse effect on landscape character.

4.23 The proposed mitigation and enhancement measures relate to the management of the existing vegetation and additional tree and hedgerow planting. Once matured this planting would help reinforce the field pattern and overall perception of the well treed landscape but is unlikely to be sufficient to reduce the scale of effects to negligible, in landscape terms.

Summary Statement

4.24 The proposed development would have minor beneficial effects upon the site, due to the change from improved pastoral grassland to permanent bio-diverse grasslands, built form and associated infrastructure. With regard to the tree and hedgerow resource the proposals would bring about moderate beneficial effects due to removal of some hedgerow and trees, alongside enhancement of existing and extensive addition of new. Other landscape features, such as water features and PRoWs would be retained and would not be affected.

5. EFFECTS ON GENERAL VISUAL AMENITY

5.1 Attempts have been made to consult with the councils landscape officer, Jonathan Green, on landscape issues to ensure that this report can adequately assess and evidence any specific concerns they may have regarding the impacts of these proposals. However, despite multiple attempts, we have been unable to make contact.

5.2 A preliminary 3km radii study area had been initially identified to review the baseline condition and to consider potential publicly accessible views of the site.

5.3 The effects on visual amenity consider the changes in views arising from the proposals in relation to visual receptors including residential properties, highways, PRoWs, and recreational areas; and the effect on representative viewpoints or specific locations within the study area. Visual amenity is defined in GLVIA3 as:

> **"…the overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area."**[5]

5.4 The assessment was carried out in early March 2022 as part of on-site survey. Site photographs were taken to record the character and nature of the views, and the existing visibility of the site. Where relevant the seasonal changes to the vegetative cover have been considered as part of the visual assessment.

General Visibility from the Site

5.5 As indicated by the ZTV plan (appendix 4) the proposed solar farm would be theoretically visible from: higher ground to the north of the site at Coed y Brain; higher ground to the east of the site at St. Hilary Down; the valley floor running south of the site as well as higher ground further south on the opposite side of the valley at Lllandough and Coed y Grabia; from higher ground to the south-west of the site near Nash Manor; and higher ground west of the site at Llanblethian Hill. The intervening woodlands and belts of trees, however, would restrict the extent of the ZTV to a much smaller area as evidenced by the SZTV plan (appendix 5). It is important to reiterate that this is a theoretical visibility and does not fully take into account small groups of trees, hedgerows, changes in landform, and full extent of built form. This is particularly evident when comparing the SZTV plan and Site Context Views 5-7 and 10-12 (appendix 9),

[5] GLVIA (3rd Edition 2013), Glossary, p. 158.

which illustrate a considerable amount of tree vegetation intervening hedgerows heavily filtering or obscuring views towards the site.

Sensitivity of Receptors

5.6 With regards to the sensitivity of visual receptors this is established by cross referencing the value of views gained and their inherent susceptibility to change brought about by the proposed scheme. In terms of value, the local area is an mostly agricultural landscape of medium value. In terms of their susceptibility, this will vary with users of PRoWs and those exercising their right to access considered to be of high susceptibility. This is on the basis that the surrounding landscape forms a strong component of their visual amenity. The same approach is taken for residential receptors. Overall, the sensitivity of PRoW users and residential receptors is assessed as high. In comparison, road users travel across different landscapes and are influenced by a variety of views, built form and elements of infrastructure. On that basis their susceptibility is taken as medium, and their sensitivity assessed as medium.

Viewpoints

5.7 A set of preliminary viewpoints has been selected based on the available OS maps, aerial photographs, ZTV and SZTV. Their locations have been verified during the site visit and represent views from public highways and Public Rights of Way (PRoWs), whilst falling within the 'screened' ZTV. Following the site visit a number of the preliminary viewpoints have been excluded due to lack of views of the site, for example: from surrounding higher ground in the mid-long distance to the north, east, south and west of the site; PRoW from which adjacent hedgerows fully obscure outward views towards the site; PRoW between the north-west and north-east of the site from which intervening built form fully obscures views towards the site. The remaining viewpoints aim to be representative of views of the proposed scheme, and prove the limited and confined visibility of the site.

5.8 The location of the shortlisted viewpoints is shown in appendix 8 with the Context Baseline Views and Photoviews included in appendix 9.

5.9 The inclusion of a viewpoint in this LVIA does not imply that predicted effects will occur, or will be of higher magnitude of change. A variety of landscape and visual mitigation measures have been incorporated through the iterative design process in order to prevent, reduce or offset potential landscape and visual effects. This

informed the location, height, massing and integrated mitigation planting measures within the proposed scheme.

Views from within the site

5.10 At the time of the site visit (March 2022), highways construction works were underway on St Anthans Road, necessitating the closure of the far eastern extent of footpath L4/58/1 (which links from Windmill Lane to the west through the site to St Anthans Road to the east). At its far western extent clear views are possible across the entirety of the site, framed by; existing residential development at Cowbridge to the north, with well managed hedgerow with occasional clusters of hedgerow trees defining the boundary; and open rolling valley floor agricultural fields to the south, defined by well managed hedgerows; **see viewpoint 1.**

5.11 From the furthest eastern extent accessible at the time of the site visit, views are possible across the entirety of the site framed by; existing residential development at Cowbridge to the north, with well managed hedgerow with occasional clusters of hedgerow trees defining the boundary; and open rolling valley floor agricultural fields to the south, defined by well managed hedgerows; **see viewpoint 2.**

Opportunities & Constraints

5.12 Consideration should be given to ensuring that an appropriate set back of built form from the route of the PRoW is integrated into the design to protect the accessibility and visual amenity of its users.

Near distance views from the valley floor, south of the site

5.13 'Iolo Morganwg – Heritage Walk' vale trail, and 'Eastward from Cowbridge and Llanblethian' and 'The Llanfair Walk/St Mary Church' circular walks run along the banks of the River Thaw running south of the site. Given the inclusion of these PRoW within a wider footpath network, additional consideration is given to the effect on users of these routes.

5.14 From St Anthans Road within the valley floor and along footpath L4/59/3 clear views are possible across the entirety of the site above the well managed intervening hedgerows. The site is framed by: existing residential development on the skyline at Cowbridge to the north; views west down the flat valley floor to residential development at Llanblethian visible amongst dense tree cover to the

steep hillside; and views east down the flat valley floor of well treed steep hillsides; **see viewpoints 3 and 4.**

5.15 Further west along this route, from footpath L4/59/2, intervening land form heavily restricts views of the site, with the hedgerow forming the southern site boundary forming the skyline of views towards the site; **see viewpoint 5.**

Opportunities & Constraints

5.16 The southern boundary to be retained should be reinforced with tree planting to further filter views of proposed built form within the southern extent of the site from the circular footpath route. Hedgerows to be removed to accommodate development should be replaced along the south-eastern site boundary with mixed native hedgerow with regular hedgerow trees.

5.17 Tree planting should be heavily integrated within the streetscape to ensure greening of the landscape and to visually break down the massing of built form.

Near distance views from the valley floor, east of the site

5.18 'Iolo Morganwg – Heritage Walk' vale trail, and 'Eastward from Cowbridge and Llanblethian' and 'The Llanfair Walk/St Mary Church' circular walks continue east of the site along the valley floor, along a track towards Long Grove quarry (diverging away from the river banks).

5.19 From footpath L4/42/1 (track heading towards Long Grove quarry) clear views are possible across the majority of the site above the well managed intervening hedgerows; with views becoming increasingly more partial heading east as intervening landform and hedgerow trees begin to obscure and heavily filter views towards the site. The site is framed by: existing residential development on the skyline at Cowbridge to the north; views west down the flat valley floor to residential development at Llanblethian visible amongst dense tree cover to the steep hillside; and views east down the flat valley floor of well treed steep hillsides; **see viewpoint 6.**

Opportunities & Constraints

5.20 Hedgerows to be removed to accommodate development should be replaced along the south-eastern site boundary with mixed native hedgerow with regular hedgerow trees.

5.21 Tree planting should be heavily integrated within the streetscape to ensure greening of the landscape and to visually break down the massing of built form.

Mid-distance views from the opposite valley side, south of the site

5.22 From St Anthans Road as it rises up the opposite valley side towards Coed y Grabla, heavily filtered views of the site are possible through tree tops of intervening hedgerow trees; with views becoming minorly clearer as the road rises to higher ground. The site is framed by: existing residential development on the skyline at Cowbridge to the north; and views west down the flat valley floor to residential development at Llanblethian visible amongst dense tree cover to the steep hillside; **see viewpoint 7.**

Opportunities & Constraints

5.23 The southern boundary to be retained should be reinforced with tree planting to further filter views of proposed built form within the southern extent of the site from the circular footpath route. Hedgerows to be removed to accommodate development should be replaced along the south-eastern site boundary with mixed native hedgerow with regular hedgerow trees.

5.24 Tree planting should be heavily integrated within the streetscape to ensure greening of the landscape and to visually break down the massing of built form.

Long-distance views from the opposite valley side, south-west of the site

5.25 'Millennium Heritage Trail' and 'The Llanfair Walk/St Mary Church' circular walks run from higher ground at Llandough across the valley edge towards higher ground at Llanblethian Hill. Given the inclusion of these PRoW within a wider footpath network, additional consideration is given to the effect on users of these routes.

5.26 From footpath L/4/60/4, at higher ground towards Llandough, views of the majority of the site are possible, heavily filtered in parts by intervening hedgerow trees. The site is framed by: extensive existing residential development at Cowbridge to the north; and extensive residential development further west along the valley at Llanblethian along Broadway, as well as on higher ground at Castle Hill; **see viewpoint 8.**

5.27 From footpath L/4/60/1, as this route descends from higher ground at Llandough towards its connection to Bridge Road closer to the valley floor, views become

increasingly heavily filtered by intervening hedgerow trees, as well as a minor crest in landform along the western site boundary. Site visibility decreases from heavily filtered views of the western and central portion of the site only, to views of the hedgerow forming the southern site boundary only; **see viewpoints 9-11.**

5.28 From footpath L/4/66/1, at higher ground towards Moorshead Farm, outward views are obscured for the majority of the route by dense hedgerows to both sites of the PRoW as it ascends the hillside. As the footpath emerges on to a plateau it cuts through open fields with outward views north-east towards the site; however, a hedgerow running along the plateau top and multiple hedgerows cutting across the plateau confine the views to the foreground (the plateau top) and long-distance views towards higher ground at Stalling Down / Bryn Owen.

Opportunities & Constraints

5.29 The southern boundary to be retained should be reinforced with tree planting to further filter views of proposed built form within the southern extent of the site from the circular footpath route.

5.30 Tree planting should be heavily integrated within the streetscape to ensure greening of the landscape and to visually break down the massing of built form.

Summary of Visual Effects

5.31 Based on the viewpoint assessment and site visit it transpires that the proposed development would be generally well screened from the surrounding highway and PRoW network, taking advantage of topographical variations in the local landscape, screening provided by existing vegetative cover such as woodlands, roadside vegetation and boundary hedgerows and hedgerow trees across the landscape.

5.32 The majority of assessed visual receptors would not be affected or be affected to a limited degree only; with the exception of PRoW users crossing through the site itelf, who shall be affected to a greater degree. The majority of the selected viewpoints illustrate views from those locations where some level of inter-visibility of the site was theoretically available, or likely inter-visibility of the proposals.

5.33 Of the 12 viewpoints, 2 viewpoints have been assessed as subject to moderate adverse visual effects due to close range views of the proposals (Views 1 and 2), and 4 to minor adverse visual effects due to close proximity to the site or the site

topography giving greatest visibility of the proposals (Views 3, 4, 6 and 7). Otherwise, views from PRoWs within the study area are mostly well screened and there is a distinct separation between the PRoWs and the proposed scheme, with the remaining viewpoints assessed as subject to negligible, neutral effects or no effects at all.

Summary of Visual Effects of Scheme

5.34 From the PRoW within the site, the visual receptor experience whilst crossing the site shall change greatly; from crossing open fields, to through a built-up streetscape. Heavy street tree cover along this main street shall greatly soften the impact of the proposals.

5.35 The proposals would also have a strong impact on views from the south-east of the site, particularly from higher ground on the opposite valley side, due to the rising site topography meaning the site occupies a large area within the landscape in view; however, landscape mitigation planting along the southern boundary shall heavily filter views of the southern portion of the site, with heavy street tree coverage also breaking down the perceived massing of built form to decrease the impact from this location.

5.36 From close-distance PRoWs to the south of the site along the valley floor the proposals shall have a limited effect as the site occupies a limited area of the view due to the ascending landform, and sits with existing built form at Cowbridge on the skyline. From this location, proposals would bring the built extent of Cowbridge closer to the PRoW, with proposed built form still occupying the skyline. Landscape mitigation planting along the southern boundary shall heavily filter views of the proposals from this location.

5.37 From longer distance views from the south-west of the site, site visibility is limited due to intervening landform and vegetation. The site is also seen in the context of existing built form to the north, north-east and north-west of the site. Landscape mitigation planting along the southern boundary shall heavily filter views of the proposals from this location.

5.38 Although the proposals pose impacts on the high sensitivity receptors (especially given the PRoWs inclusion within wider circular walks and trails), these represent a relatively limited visibility from within the wider landscape, and proposals shall sit within the context of surrounding existing dense residential development.

Visual Assessment Table

View	Value of View (L/M/H)	Susceptibility of Visual Receptor (L/M/H)	Sensitivity of Visual Receptor (L/M/H)	Change to View (Proposed) (Year 1)	Change to View (Proposed) (Year 5)	Degree of Effect (Year 1)	Degree of Effect (Year 5)
1	H	H	H	High	High	Major adverse	Moderate adverse
2	H	H	H	High	High	Major adverse	Moderate adverse
3	M	M	M	High	High	Moderate adverse	Minor adverse
4	H	H	H	Moderate	Low	Moderate adverse	Minor adverse
5	H	H	H	Low	Low	Minor adverse	Neutral
6	H	H	H	High	High	Moderate adverse	Minor adverse
7	M	M	M	High	High	Moderate adverse	Minor adverse
8	H	H	H	Low	Low	Minor adverse	Neutral
9	H	H	H	Low	Low	Minor adverse	Neutral
10	H	H	H	Low	Low	Minor adverse	Neutral
11	H	H	H	Low	Low	Negligible	Negligible
12	H	H	H	None	None	None	None

6. SUMMARY AND CONCLUSIONS

Summaries

6.1 The proposed development would have minor beneficial effects upon the grassland of the site, due to the change from pastoral a variety of diverse grasslands. With regard to the tree and hedgerow resource the proposals would bring about moderate beneficial effects. Other landscape features, such as water features and PRoWs would be retained and would not be affected.

6.2 The proposed development would have minor beneficial effects upon the site, due to the change from improved pastoral grassland to permanent bio-diverse grasslands, built form and associated infrastructure. With regard to the tree and hedgerow resource the proposals would bring about moderate beneficial effects due to removal of some hedgerow and trees, alongside enhancement of existing and extensive addition of new. Other landscape features, such as water features and PRoWs would be retained and would not be affected.

6.3 Although the proposals pose impacts on the high sensitivity receptors (especially given the PRoWs inclusion within wider circular walks and trails), these represent a relatively limited visibility from within the wider landscape, and proposals shall sit within the context of surrounding existing dense residential development.

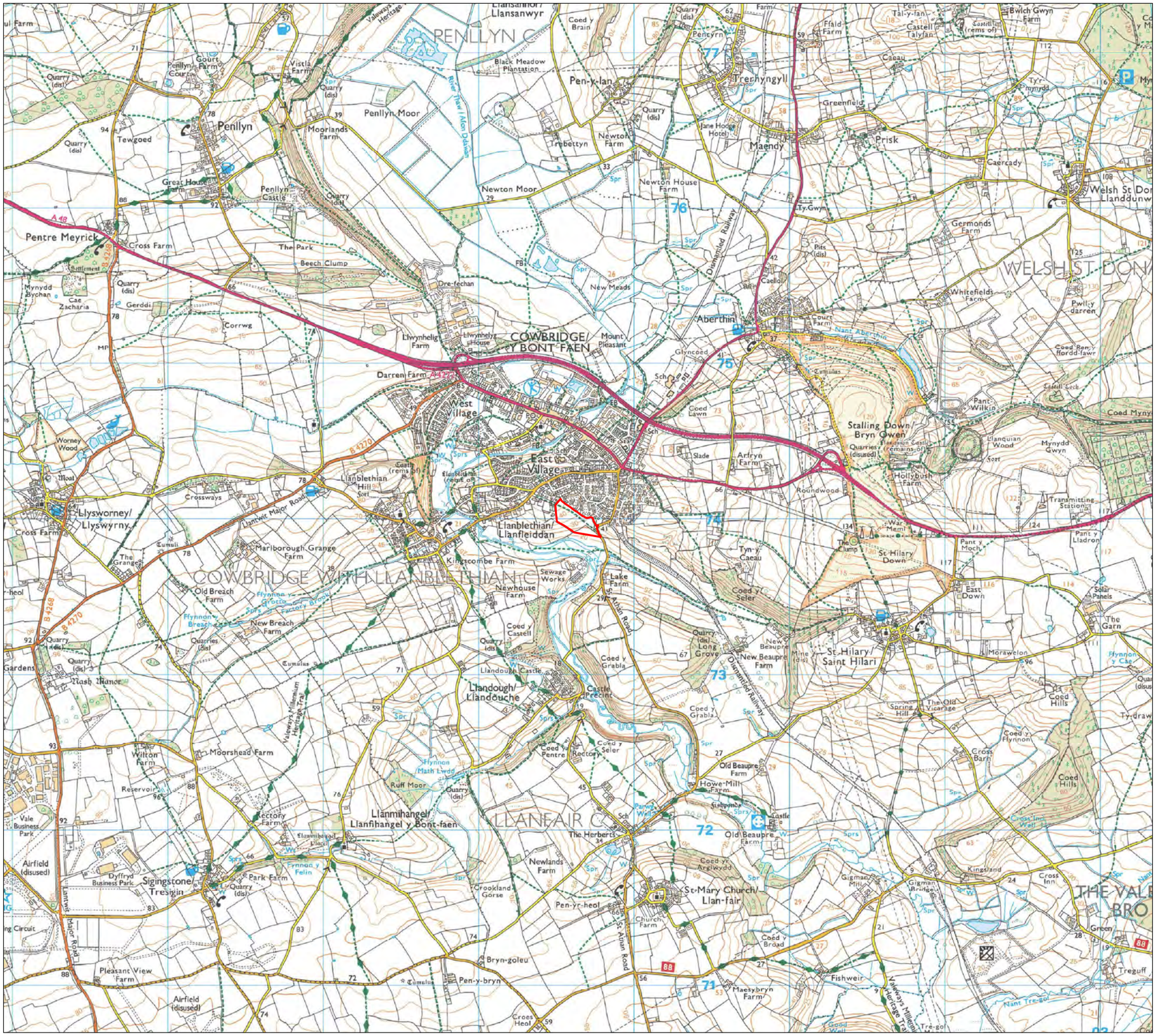
Conclusions

6.4 The proposed development would be effectively integrated and assimilated into the surrounding landscape/townscape as a consequence of good building and green infrastructure and would reflect the general character and appearance of the locality. The site shall change from being highly reflective of the adjoining agricultural landscape character to that of the adjoining developed residential character.

6.5 Siting of built form on the site, along with well-considered landscape mitigation planting measures, shall appropriately limit visibility of proposed built form from surrounding highways and PRoW networks, whilst also complementing the character of the adjoining residential and agricultural landscape. Proposals have been developed to giving great consideration to how the built form can appear a well-considered extension to existing development at Cowbridge, creating a re-defined developed boundary to Cowbridge.

APPENDIX 1

SITE LOCATION PLAN



KEY

Site Boundary

DESIGN | ENVIRONMENT | PLANNING | ECONOMICS | HERITAGE

0 1 km

N

Revisions:
First Issue-13/06/2022 SC

Site Location Plan

Land adjoining St. Athan Road, Cowbridge

Client:	Redrow Homes South Wales		
DRWG No:	**P20-1849_12**	Sheet No: -	REV: -
Drawn by:	SC	Approved by:	IW
Date:	13/06/2022		
Scale:	1:25,000 @ A3		

Pegasus Environment

APPENDIX 2

LVIA Methodology

1. Landscape and Visual Impact Assessment Methodology

1.1 This Landscape and Visual Impact Assessment (LVIA) has been undertaken with regards to best practice, as outlined within the following publications:

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

1.2 GLVIA3 states within paragraph 1.1 that *"Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity."*[6]

1.3 GLVIA3 also states within paragraph 1.17 that when identifying landscape and visual effects there is *a "need for an approach that is in proportion to the scale of the project that is being assessed and the nature of the likely effects. Judgement needs to be exercised at all stages in terms of the scale of investigation that is appropriate and proportional."*[7]

1.4 GLVIA3 recognises within paragraph 2.23 that *"professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters much of the assessment must rely on qualitative judgements"*[8] undertaken by a landscape consultant or a Chartered Member of the Landscape Institute (CMLI).

1.5 GLVIA3 notes in paragraph 1.3 *that "LVIA may be carried out either formally, as part of an Environmental Impact Assessment (EIA), or informally, as a contribution to the 'appraisal' of development proposals and planning*

[6] Para 1.1, Page 4, GLVIA, 3rd Edition
[7] Para 1.17, Page 9, GLVIA, 3rd Edition
[8] Para 2.23, Page 21, GLVIA, 3rd Edition

applications."[9] Although the proposed development is not subject to an EIA requiring an assessment of the likely significance of effects, this assessment is also titled as an LVIA rather than an 'appraisal' in the interests of common understanding.

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

Study Area

1.7 The study area for this LVIA covers a 5km radius from the site. However, the main focus of the assessment was taken as a radius of 3km from the site as it is considered that even with clear visibility the proposals would not be perceptible in the landscape beyond this distance.

Effects Assessed

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

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

1.9 Sensitivity is defined in GLVIA3 as *"a term applied to specific receptors, combining judgments of susceptibility of the receptor to a specific type of change or development proposed and the value related to that receptor."*[10] Various factors in relation to the value and susceptibility of landscape elements, landscape character, visual receptors or representative viewpoints are considered below and cross referenced to determine the overall sensitivity as shown in Table 1:

[9] Para 1.3, Page 4, GLVIA, 3rd Edition
[10] Glossary, Page 158, GLVIA, 3rd Edition

Table 1, Overall sensitivity of landscape and visual receptors				
	VALUE			
SUSCEPTIBILITY		**HIGH**	**MEDIUM**	**LOW**
	HIGH	High	High	Medium
	MEDIUM	High	Medium	Medium
	LOW	Medium	Medium	Low

1.10 Magnitude of change is defined in GLVIA3 as *"a term that combines judgements about the size and scale of the effect, the extent over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration."*[11] Various factors contribute to the magnitude of change on landscape elements, landscape character, visual receptors and representative viewpoints.

1.11 The sensitivity of the landscape and visual receptor and the magnitude of change arising from the proposals are cross referenced in Table 9 to determine the overall degree of landscape and visual effects.

2. Effects on Landscape Elements

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

Sensitivity of Landscape Elements

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

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

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

Table 2, Criteria for assessing the value of landscape elements and landscape character	
HIGH	Designated landscape including but not limited to World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty considered to be an important component of the country's character experienced by a high number of people. Landscape condition is good and components are generally maintained to a high standard. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has an elevated level of tranquillity. Rare or distinctive landscape elements and features are key components that contribute to the landscape character of the area.
MEDIUM	Undesignated landscape including urban fringe and rural countryside considered to be a distinctive component of the national or local landscape character. Landscape condition is fair and components are generally well maintained. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has a moderate level of tranquillity. Rare or distinctive landscape elements and features are notable components that contribute to the character of the area.
LOW	Undesignated landscape including urban fringe and rural countryside considered to be of unremarkable character. Landscape condition may be poor and components poorly maintained or damaged. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has limited levels of tranquillity. Rare or distinctive elements and features are not notable components that contribute to the landscape character of the area.

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

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

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

Magnitude of Change on Landscape Elements

2.6 Professional judgement has been used to determine the magnitude of change on individual landscape elements within the site as shown in Table 4:

Table 4, Criteria for assessing magnitude of change for landscape elements	
HIGH	Total loss/gain of a landscape element.
MEDIUM	Partial loss/gain or alteration to part of a landscape element.
LOW	Minor loss/gain or alteration to part of a landscape element.
NEGLIGIBLE	No loss/gain or very limited alteration to part of a landscape element.

3. Effects on Landscape Character

3.1 Landscape character is defined as the *"distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse."*[12]

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

Sensitivity of Landscape Character

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

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

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

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

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

Magnitude of Change on Landscape Character

3.7 Professional judgement has been used to determine the magnitude of change on landscape character as shown in Table 5:

Table 5, Criteria for assessing magnitude of change on landscape character	
HIGH	Introduction of major new elements into the landscape or some major change to the scale, landform, landcover or pattern of the landscape.
MEDIUM	Introduction of some notable new elements into the landscape or some notable change to the scale, landform, landcover or pattern of the landscape.
LOW	Introduction of minor new elements into the landscape or some minor change to the scale, landform, landcover or pattern of the landscape.
NEGLIGIBLE	No notable or appreciable introduction of new elements into the landscape or change to the scale, landform, landcover or pattern of the landscape.

4. Effects on Visual Amenity

4.1 Visual amenity is defined within GLVIA3 as the *"overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area."*[13]

4.2 The effects on visual amenity considers the changes in views arising from the proposals in relation to visual receptors including settlements, residential properties, transport routes, recreational facilities and attractions; and representative viewpoints or specific locations within the study area as agreed with the Local Planning Authority.

[13] Page 158, Glossary, GLVIA3

Sensitivity of Visual Receptors

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

4.4 The criteria for assessing the value of views is shown in Table 6:

Table 6, Criteria for assessing the value of views	
HIGH	Views with high scenic value within designated landscapes including but not limited to World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty, etc. Likely to include key viewpoints on OS maps or reference within guidebooks, provision of facilities, presence of interpretation boards, etc.
MEDIUM	Views with moderate scenic value within undesignated landscape including urban fringe and rural countryside.
LOW	Views with unremarkable scenic value within undesignated landscape with partly degraded visual quality and detractors.

4.5 The criteria for assessing the susceptibility of views is shown in Table 7:

Table 7, Criteria for assessing visual susceptibility	
HIGH	Includes occupiers of residential properties and people engaged in recreational activities in the countryside using public rights of way (PROW).
MEDIUM	Includes people engaged in outdoor sporting activities and people travelling through the landscape on minor roads and trains.
LOW	Includes people at places of work e.g. industrial and commercial premises and people travelling through the landscape on major roads and motorways.

Magnitude of Change on Visual Receptors

4.6 Professional judgement has been used to determine the magnitude change on visual receptors as shown in Table 8:

Table 8, Criteria for assessing magnitude of change for visual receptors	
HIGH	Major change in the view that has a defining influence on the overall view with many visual receptors affected.
MEDIUM	Some change in the view that is clearly visible and forms an important but not defining element in the view.
LOW	Some change in the view that is appreciable with few visual receptors affected.
NEGLIGIBLE	No notable change in the view.

5. Degree of landscape and visual effects

5.1 The degree of effects are professional judgements based upon all the factors in terms of landscape and visual sensitivity and the magnitude of change arising from the proposals. The cross referencing of landscape and visual sensitivity and the magnitude of change determines the overall degree of effects as shown in Table 9:

Table 9, Degree of landscape and visual effects				
		Sensitivity		
		HIGH	**MEDIUM**	**LOW**
Magnitude of Change	**HIGH**	Major	Major	Moderate
	MEDIUM	Major	Moderate	Minor
	LOW	Moderate	Minor	Minor
	NEGLIGIBLE	Negligible	Negligible	Negligible

6. Typical Descriptors of Landscape Effects

6.1 The typical descriptors of the landscape effects are detailed within Table 10:

Table 10, Typical Descriptors of Landscape Significance of Effects	
MAJOR BENEFICIAL	The landscape resource has a high sensitivity with the proposals representing a high beneficial magnitude of change and/or the proposed changes would: - enhance the character (including value) of the landscape; - enhance the restoration of characteristic features and elements lost as a result of changes from inappropriate management or development; - enable a sense of place to be enhanced.
MODERATE BENEFICIAL	The landscape resource has a medium sensitivity with the proposals representing a medium beneficial magnitude of change and/or the proposed changes would: - enhance the character (including value) of the landscape; - enable the restoration of characteristic features and elements partially lost or diminished as a result of changes from inappropriate management or development; - enable a sense of place to be restored.
MINOR BENEFICIAL	The landscape resource has a low sensitivity with the proposals representing a low beneficial magnitude of change and/or the proposed changes would: - complement the character (including value) of the landscape; - maintain or enhance characteristic features or elements; - enable some sense of place to be restored.
NEGLIGIBLE	The proposed changes would (on balance) maintain the character (including value) of the landscape and would: - be in keeping with landscape character and blend in with characteristic features and elements; - Enable a sense of place to be maintained.
NO CHANGE / NEUTRAL	The proposed changes would not be visible and there would be no discernible change to landscape character.
MINOR ADVERSE	The landscape resource has a low sensitivity with the proposal representing a low adverse magnitude of change and/or the proposed changes would: - not quite fit the character (including value) of the landscape; - be a variance with characteristic features and elements; - detract from sense of place.
MODERATE ADVERSE	The landscape resource has a medium sensitivity with the proposals representing a medium adverse magnitude of change and/or the proposed changes would:

	- conflict with the character (including value) of the landscape; - have an adverse effect on characteristic features or elements; - diminish a sense of place.
MAJOR ADVERSE	The landscape resource has a high sensitivity with the proposals representing a high adverse magnitude of change and/or the proposed changes would: - be at variance with the character (including value) of the landscape; - degrade or diminish the integrity of a range of characteristic features and elements or cause them to be lost; - change a sense of place.

7. Typical descriptors of visual effects

7.1 The typical descriptors of the visual effects are detailed within Table 11:

Table 11, Typical Descriptors of Visual Significance of Effects	
MAJOR BENEFICIAL	The visual receptor is of high sensitivity with the proposals representing a high magnitude of change and/or the proposals would result in a major improvement in the view.
MODERATE BENEFICIAL	The visual receptor is of medium sensitivity with the proposals representing a medium magnitude of change and/or the proposals would result in a clear improvement in the view.
MINOR BENEFICIAL	The visual receptor is of low sensitivity with the proposals representing a low magnitude of change and/or the proposals would result in a slight improvement in the view.
NEGLIGIBLE	The proposed changes would be in keeping with, and would maintain, the existing view or where (on balance) the proposed changes would maintain the quality of the view (which may include adverse effects which are offset by beneficial effects for the same receptor) or due to distance from the receptor, the proposed change would be barely perceptible to the naked eye.
NO CHANGE/ NEUTRAL	The proposed changes would not be visible and there would be no change to the view.
MINOR ADVERSE	The visual receptor is of low sensitivity with the proposals representing a low magnitude of change and/or the proposals would result in a slight deterioration in the view.
MODERATE ADVERSE	The visual receptor is of medium sensitivity with the proposals representing a medium magnitude of change and/or the proposals would result in a clear deterioration in the view.
MAJOR ADVERSE	The visual receptor is of high sensitivity with the proposals representing a high magnitude of change and/or the proposals would result in a major deterioration in the view.

8. Natture of Effects

8.1 GLVIA3 includes an entry that states *"effects can be described as positive or negative (or in some cases neutral) in their consequences for views and visual amenity."*[14] GLVIA3 does not, however, state how negative or positive effects should be assessed and therefore becomes a matter of subjective judgement rather than reasoned criteria. Third party representations often refers to the industrial character of a solar PV development. Whilst local objectors would undoubtedly view the proposals in this way, equally, other people would simply view the development as essential infrastructure that should be delivered as a matter of urgency to tackle climate change. This disparity of opinions or public attitudes from negative to positive is known within LVIA as valency. Due to inconsistencies with the assessment of negative or positive effects a precautionary approach is applied to this LVIA that assumes all landscape and visual effects are considered to be negative or adverse unless otherwise stated.

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

APPENDIX 3

LANDMAP Extracts

LANDMAP DATA EXTRACTS

Area Unique ID:VLFGLVS139
Aspect:Visual and Sensory
Area:Mid Thaw Valley
Region:Vale of Glamorgan
Survey Date:2004-08-13
Level 1: Lowland
Level 2: Lowland Valleys
Level 3: Mosaic Lowland Valleys

Area Unique ID:VLFGLGL282
Aspect:Geological Landscape
Area:St. Hilary
Region:Vale of Glamorgan
Survey Date:2005-01-13
Level 1: Lowland hills and valleys
Level 2: Undulating lowland hill terrain
Level 3: Other

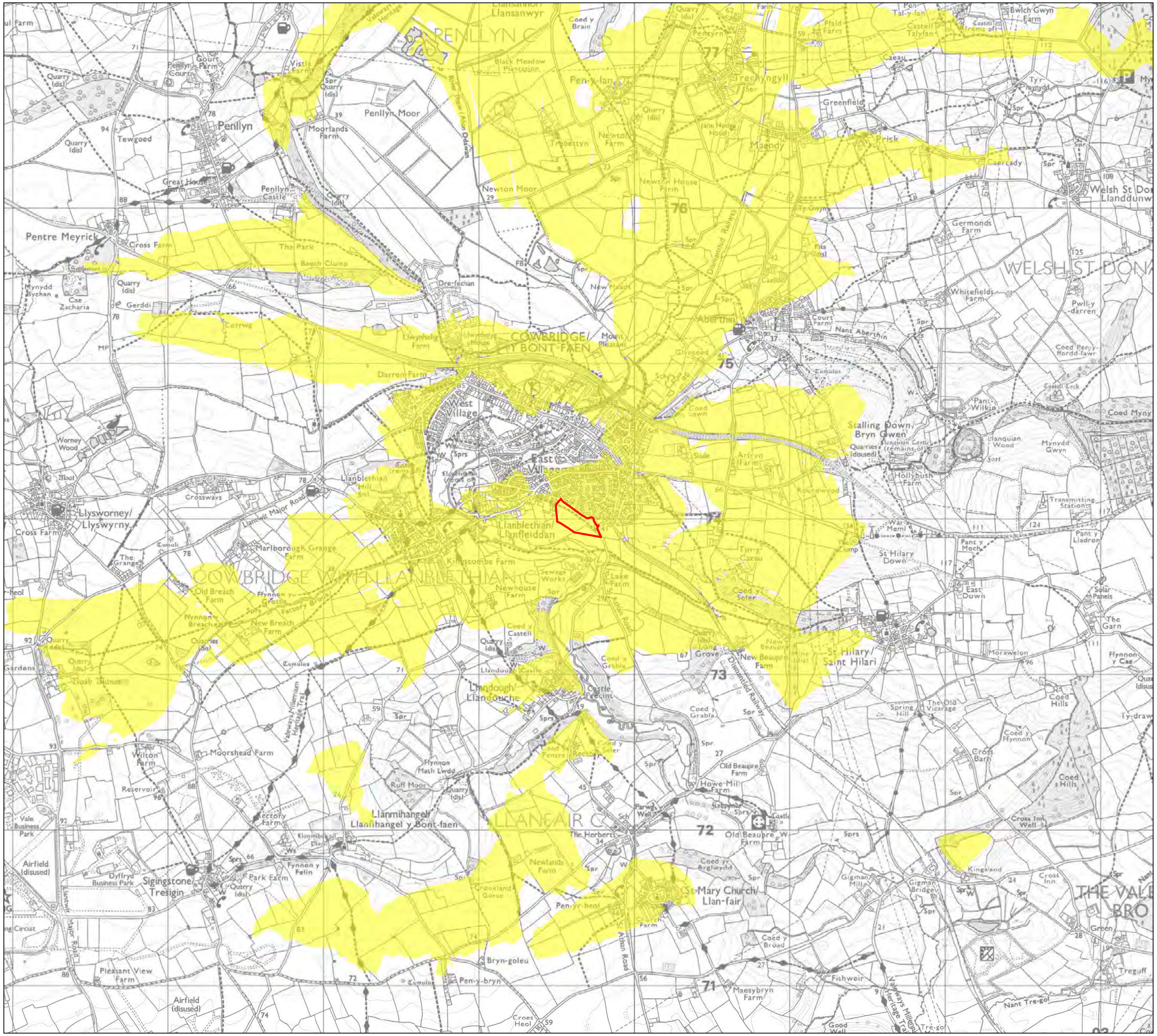
Area Unique ID:VLFGLLH436
Aspect:Landscape Habitats
Area:Cowbridge South - Thaw Valley
Region:Vale of Glamorgan
Survey Date:2006-04-18
Level 1: Dry (Relatively) Terrestrial Habitats
Level 2: Mosaic
Level 3: Mosaic

Area Unique ID:VLFGLHL049
Aspect:Historic Landscape
Area:Thaw River Valley
Region:Vale of Glamorgan
Survey Date:2006-02-26
Level 1: Rural environment
Level 2: Non agricultural
Level 3: Water & Wetland

Area Unique ID:VLFGLCLS007
Aspect:Cultural Landscape Services
Area:Mid Thaw Valley
Region:Vale of Glamorgan
Survey Date:2019-03-05
Level 1: Lowland
Level 2: Lowland Valleys
Level 3: Mosaic Lowland Valleys

APPENDIX 4

Zone of Theoretical Visibility



0 1 km

N

KEY

Site Boundary

Zone of Theoretical Visibility (9m)

ZTV Production Information -
- DTM data used in calculations is OS Terrain 5m
- Calculations based on a bare earth survey
- Viewer height set at 1.7m
  (in accordance with para 6.11 of GLVIA Third edition)
- Calculations include earth curvature and light refraction

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

Revisions:
First Issue- 08/10/2020 JS

Zone of Theoretical Visibility

Land adjoining St. Athan Road, Cowbridge

Client: Redrow Homes South Wales

DRWG No: **P20-1849_02** Sheet No: - REV: -

Drawn by: JS Approved by: TH

Date: 08/10/2020

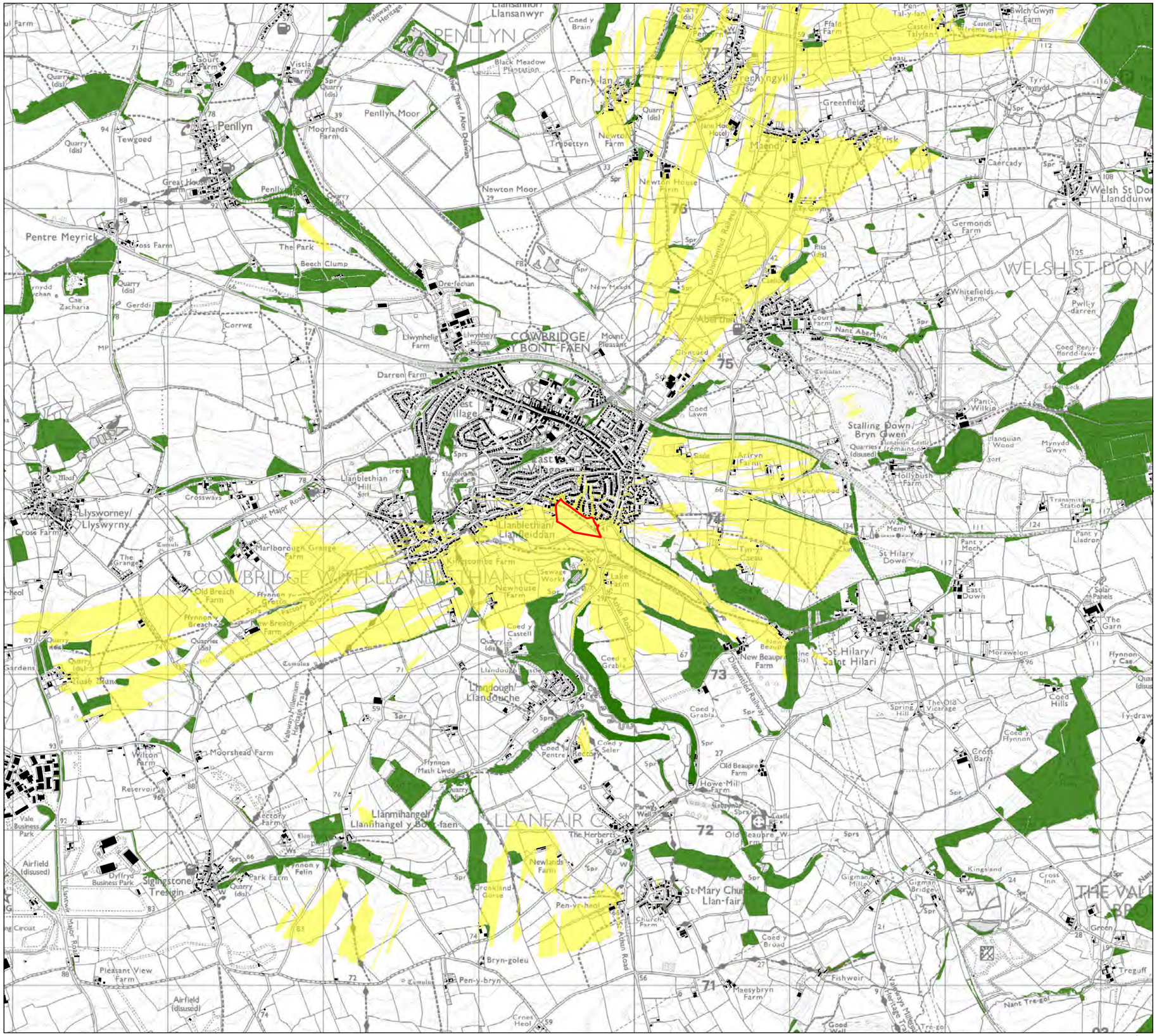
Scale: 1:25,000 @ A3

Pegasus Environment

DESIGN | ENVIRONMENT | PLANNING | ECONOMICS | HERITAGE

APPENDIX 5

Screened Zone of Theoretical Visibility



DESIGN | ENVIRONMENT | PLANNING | ECONOMICS | HERITAGE

0 1 km

N

KEY

- Site Boundary
- OS Open Map Local Building
- OS Open Map Local Woodland
- Zone of Theoretical Visibility (9m)

Screened ZTV Production Information -
- DTM data used in calculations is OS Terrain 5 that has been combined with OS Open Map Local data for woodland and buildings to create a Digital Surface Model (DSM).

- Indicative woodland and building heights are modelled at 15m and 8m respectively.
- Viewer height set at 1.7m (in accordance with para 6.11 of GLVIA Third Edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility, and includes the screening effect from vegetation and buildings, based on the assumptions stated above.

Revisions:
First Issue- 08/10/2020 JS

Screened Zone of Theoretical Visibility

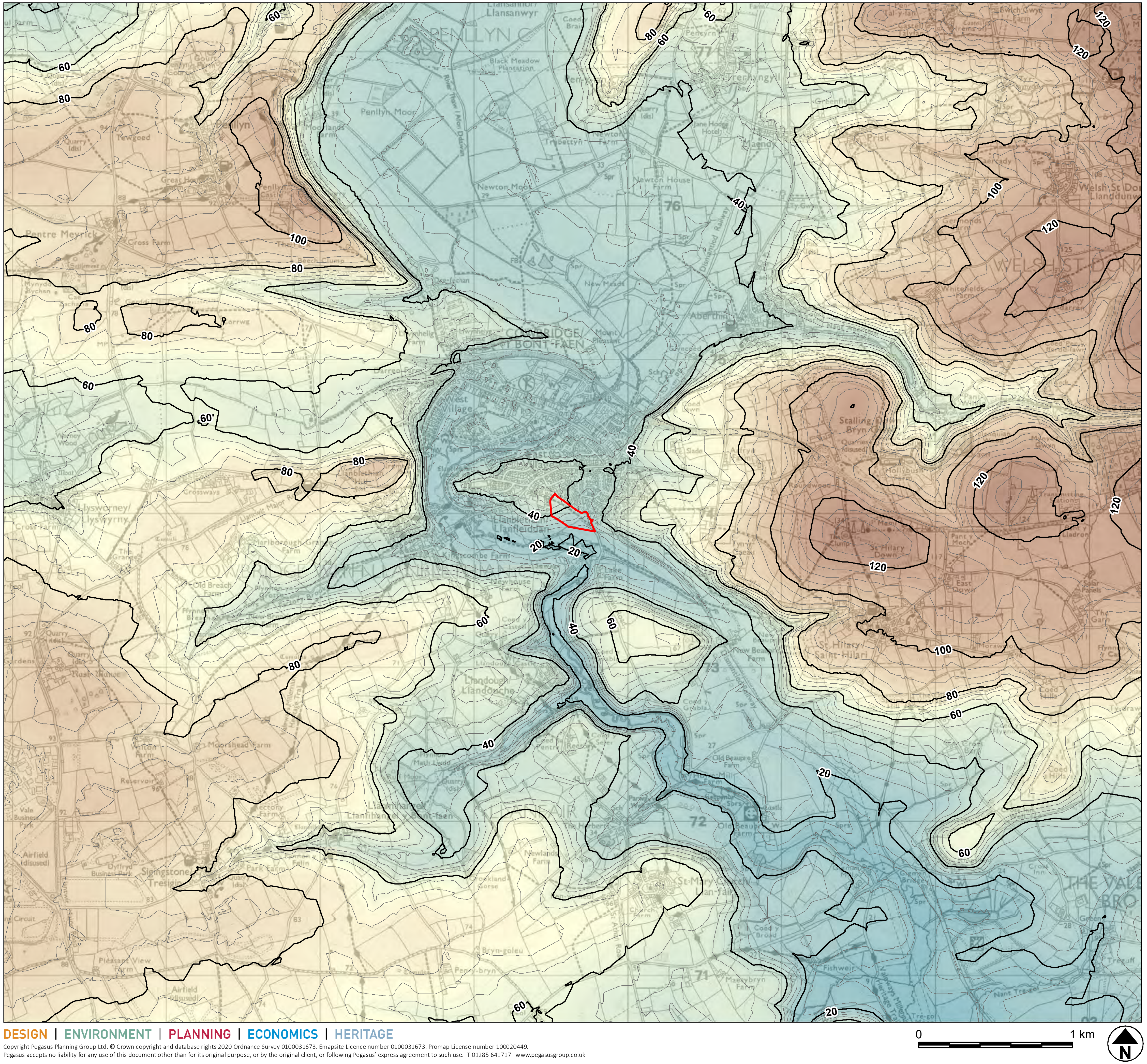
Land adjoining St. Athan Road, Cowbridge

Client:	Redrow Homes South Wales		
DRWG No:	**P20-1849_03**	Sheet No: -	REV: -
Drawn by:	JS	Approved by:	TH
Date:	08/10/2020		
Scale:	1:25,000 @ A3		

Pegasus Environment

APPENDIX 6

Topography Plan



KEY

Site Boundary

Contour

DTM (metres above ordnance datum)

High : 134.181

Low : 5.65418

Revisions:
First Issue- 08/10/2020 JS

Topography

Land adjoining St. Athan Road, Cowbridge

Client:	Redrow Homes South Wales
DRWG No:	**P20-1849_05** Sheet No: - REV: -
Drawn by:	JS Approved by: TH
Date:	08/10/2020
Scale:	1:25,000 @ A3

Pegasus Environment

DESIGN | ENVIRONMENT | PLANNING | ECONOMICS | HERITAGE

APPENDIX 7

Environmental Designations Plan

KEY

- Site Boundary
- Public Right of Way
- Registered Common Land (RCL)
- Grade I Listed Building
- Grade II* Listed Building
- Grade II Listed Building
- Registered Park / Garden (RPG)
- Site of Special Scientific Interest (SSSI)
- Ancient Woodland
- Scheduled Monument (SM)
- Conservation Area
- NRW Flood Zone 3
- NRW Flood Zone 2

0 1 km

N

Revisions:
First Issue- 08/10/2020 JS

Environmental Designations Plan

Land adjoining St. Athan Road, Cowbridge

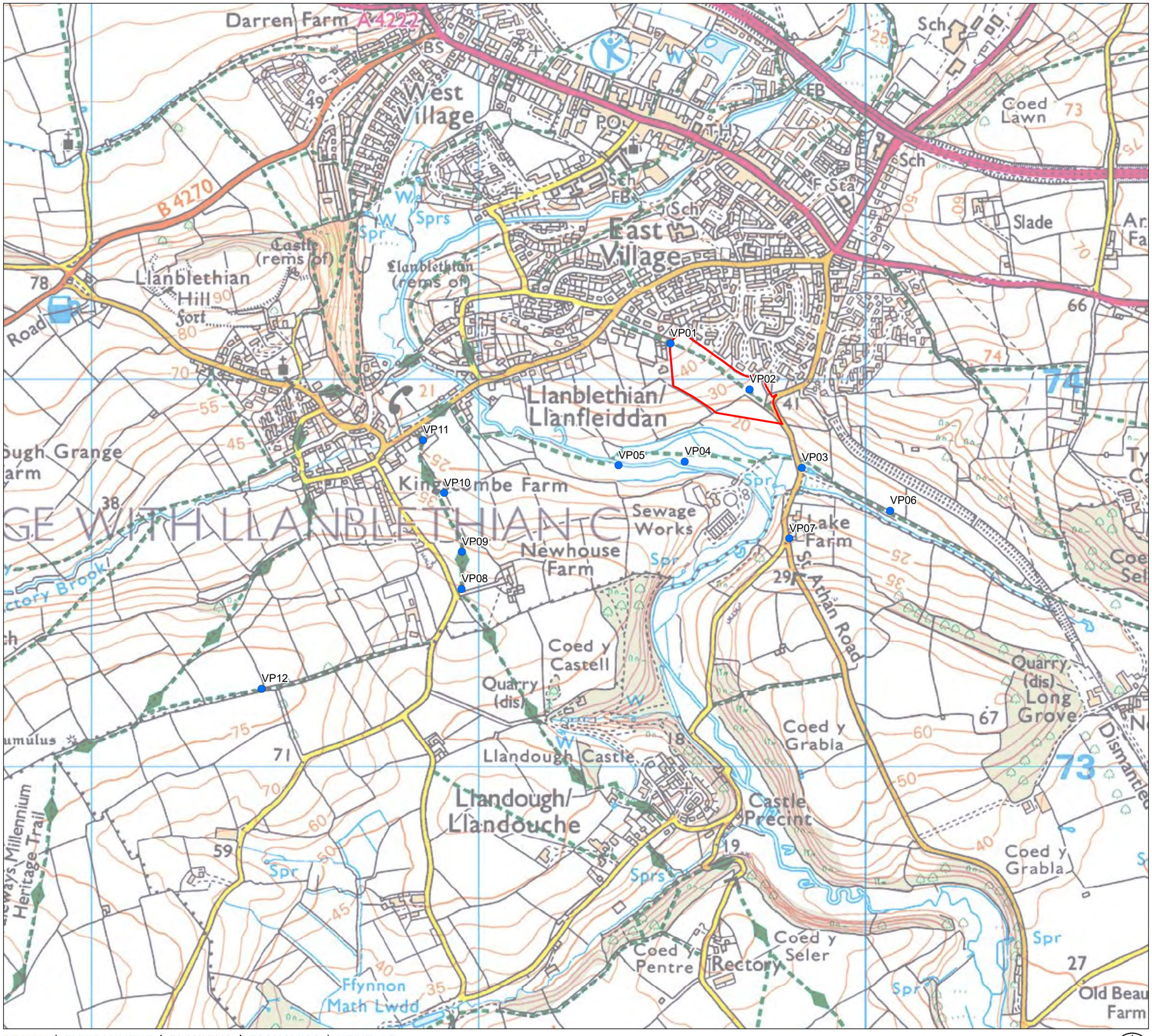
Client:	Redrow Homes South Wales		
DRWG No:	**P20-1849_04**	Sheet No: -	REV: -
Drawn by:	JS	Approved by:	TH
Date:	08/10/2020		
Scale:	1:25,000 @ A3		

Pegasus Environment

DESIGN | ENVIRONMENT | PLANNING | ECONOMICS | HERITAGE

APPENDIX 8

Viewpoint Location Plan



DESIGN | ENVIRONMENT | PLANNING | ECONOMICS | HERITAGE

KEY

Site Boundary

Viewpoint Location

Revisions:
First Issue- 09/10/2020 JS
A - (07/04/2022 CR) Viewpoints added

Viewpoint Locations

Land adjoining St. Athan Road, Cowbridge

Client:	Redrow Homes South Wales		
DRWG No:	**P20-1849_06**	Sheet No: **-**	REV: **A**
Drawn by:	CR	Approved by:	TH
Date:	07/04/2022		
Scale:	1:10,000 @ A3		

Pegasus Environment

APPENDIX 9

Context Baseline Views