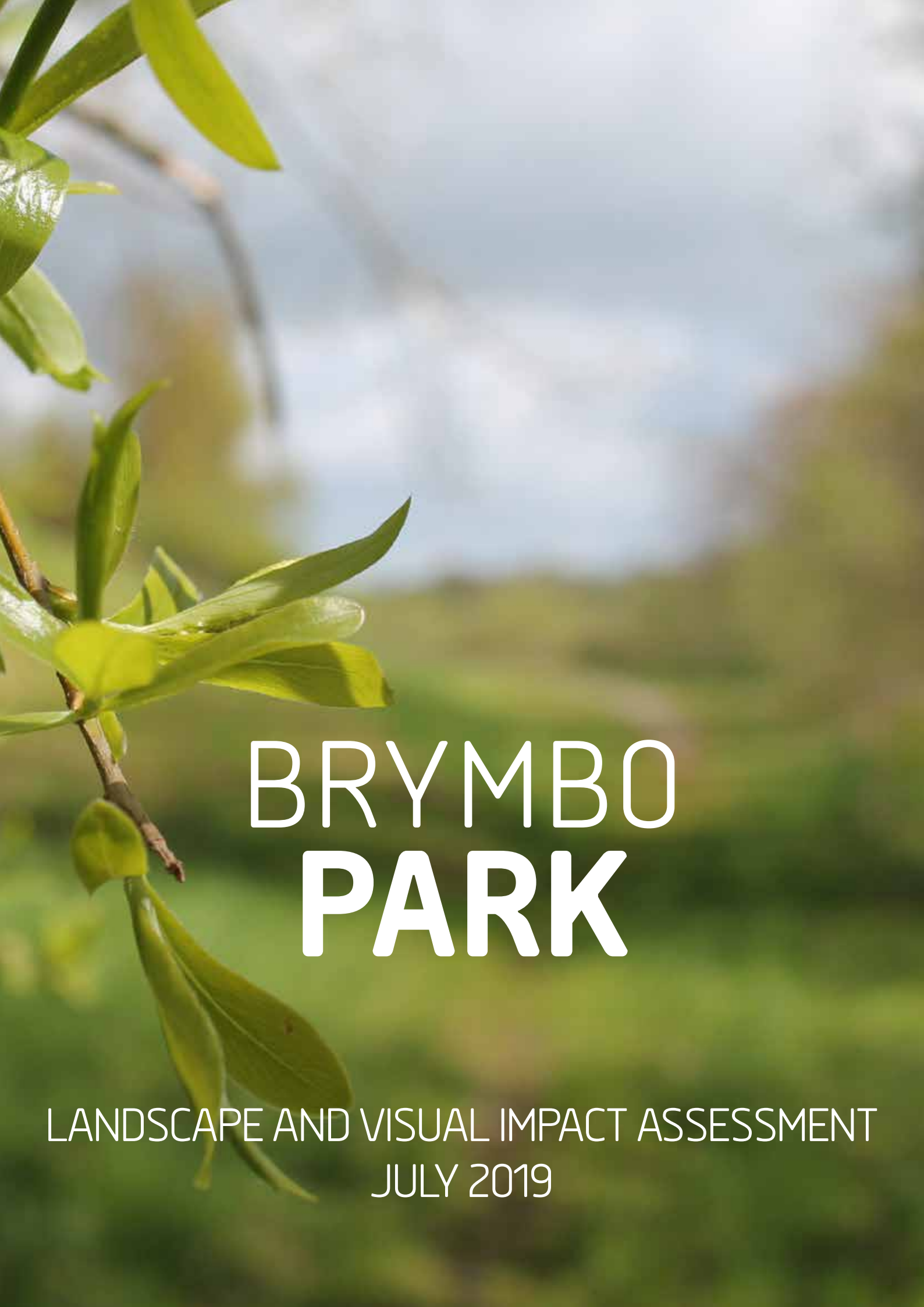




BRYMBO **PARK**

LANDSCAPE AND VISUAL IMPACT ASSESSMENT
JULY 2019

Brymbo Former Steelworks, Wrexham: Landscape and Visual Impact Assessment

Prepared on behalf of Brymbo Developments Ltd

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1.0 INTRODUCTION

- 1.1 Barton Willmore Landscape Planning and Design (BWLPD) were commissioned by Brymbo Developments Ltd in April 2018 to undertake a Landscape and Visual Impact Assessment (LVIA) of land at the Brymbo Former Steelworks, Wrexham, (the 'Site') to support an outline planning application for a residential led, mixed-use development with associated infrastructure and open space (the 'Proposed Development').
- 1.2 BWLPD were also appointed to develop a suitable approach to the strategic landscape design, to successfully absorb development into the surrounding landscape and provide a positive landscape setting to the Proposed Development.
- 1.3 In order to explain the likely landscape and visual effects of the Proposed Development, the objectives of this LVIA are to:
 - Assess the landscape character and features of the Site and its context;
 - Assess the visibility of the Site from the surrounding area and the nature of existing views;
 - Develop suitable landscape proposals that assist in absorbing the Proposed Development within the landscape; and
 - Describe the predicted landscape and visual effects of the Proposed Development.
- 1.4 The work undertaken includes an assessment of the existing landscape features of the Site, together with a visual appraisal of the Site and its context. A landscape appraisal is the systematic description and analysis of the features within the landscape, such as landform, vegetation cover, settlement and transport patterns and land use which create a particular sense of place. A visual appraisal assesses visual amenity resources, which are the viewers of the landscape and could include locations such as residential or business properties, public buildings, public open space, roads and public rights of way.
- 1.5 The principal elements of the LVIA are an appraisal of the landscape baseline, description of the Proposed Development, including any landscape mitigation, and an assessment of the landscape and visual effects likely to result from the Proposed Development. The baseline appraisal comprises a description of the landscape characteristics of the study area, summaries of relevant planning policy and published landscape character documentation, an appraisal of the landscape features and

character of the Site and consideration of the Site's visibility from the wider landscape, both during daylight and night-time hours.

- 1.6 The LVIA process has been used to guide the design evolution of the Proposed Development, based on a robust analysis of the landscape and visual characteristics of the local landscape, and informed by a series of development principles identified with the aim of avoiding or reducing adverse effects. The methodology used for the LVIA is drawn from principles of good practice in Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013) and is set out in **Appendix 1**.
- 1.7 The study area for this assessment is equivalent to the extents of the area shown on **Figure 1: Site Context Plan**, included within the illustrative material that accompanies this report and includes the following plans and photographs:

2.0 SITE CONTEXT

Location and Land Use

- 2.1 The Site covers an area of approximately 32.59 hectares of former industrial land which has been remediated and regraded, formed of two distinct areas separated by a steeply sloping bank.
- 2.2 The lower eastern part of the Site (Area 1) is separated from the west by Phoenix Drive. This area has been regraded into a plateau which sits lower than the western parcel and has significantly less vegetative cover. The bank which separates the two areas (Area 2) has been planted with woodland and has an extensive network of informal footpaths running across. This part of the Site is accessed from Brymbo Road. The uppermost area is known as Ty Cerrig, forming the western part of the Site (Area 3). Ty Cerrig has been returned to open fields separated by hedgerows.
- 2.3 The Site is located 4.6km to the north-west of Wrexham in a landscape strongly influenced by existing settlements including Coedpoeth and Gwersylt, approximately 1.8km south-east and 1.6km east of the Site respectively. The overriding settlement pattern is demonstrated on **Figure 1**.
- 2.4 More locally, the Site lies immediately to the south of the existing settlement of Brymbo and the remaining structures of the former Brymbo Steelworks, and approximately 700m to the north of Tanyfron. Extensive areas of recently constructed housing are notable features in the landscape to the south of the Site, as is a substantial existing electrical substation located adjacent to the western site boundary.
- 2.5 The settlements of New Broughton, Brynteg, Pentre Broughton and Moss are distributed in a contiguous north-south oriented ribbon of existing built-form extending from the outskirts of Wrexham to the south-eastern edge of Brymbo. The village of Cymau is located approximately 2km north-east of the Site.
- 2.6 At a wider scale, the Site is located in a transitional landscape between the strongly settled areas of Wrexham, and a predominantly agricultural landscape, albeit scattered with small settlements and farmsteads, extending to the north and west, and with areas of upland heaths to the south-west.
- 2.7 Brymbo and the surrounding villages are primarily characterised by 18th and 19th century local stone and brick buildings at their core, with more recent expansions to the edges of the settlements including recreation and commercial uses, such as the Brymbo Sports and Social Complex east of Coedpoeth. The pattern of development is

heavily influenced by the topographical variation of the locality, with settlements occupying the broad, elevated ridges that sit between valley landforms.

- 2.8 The Brymbo Enterprise Centre is located to the north of the Site and provides facilities such as a community hub, sports hall, meeting rooms, café and post office. To the east are existing footpaths running adjacent to the site and Kent Road (B5101) and to the west there is agricultural land as well as the aforementioned substation and a number of farmsteads.
- 2.9 The settlement pattern of the core of Brymbo is irregular and strongly influenced by sloping topography, with built form distributed on terraced platforms leading up the slope. Housing is predominantly semi-detached interspersed with larger detached buildings, including most notably the Brymbo Enterprise Centre.
- 2.10 More recently constructed residential development in Mount Zion is located near to the crest of the local rising landform on which Brymbo is situated, approximately 175m north of the Site. The settlement pattern in this area is more regular as a result of the relatively shallow gradient with two storey semi-detached and terraced houses distributed along looped residential streets.

Topography and Hydrology

- 2.11 At a regional scale, and as shown on **Figure 2: Topographical Features Plan**, the Site is located in a transitional landscape between the broad, low lying vale of the Cheshire Plain to the west, and the sharply rising hills and mountains of the Clwydian Range to the east. Limestone outcrops such as Esclusham Mountain form prominent highpoints in the landscape to the east of the Site. The strongly undulating and widely varying landform found across the study area has a primary influence on the overriding character and landscape pattern of the area.
- 2.12 At a more local level, the Site is located on the east facing slopes of a broad elevated foothill which rises to 275m AOD, approximately 500m north-west of the site boundary. Further west, levels briefly dip and then rise again to approximately 360m AOD in the western extent of the study area. The landscape in this vicinity is marked by a series of increasingly elevated hills, ridges and mountains, most notably Esclusham Mountain, which peaks at 457m AOD, approximately 4.1km south-west of the Site.
- 2.13 To the east of the Site, levels fall abruptly to the valley floor of a small, south flowing unnamed watercourse, which joins the River Clywedog, itself a tributary of the River Dee, in the vicinity of Wrexham. This valley landform is sharply incised to the east of

the Site, becoming increasingly broad further south and subsequently opening out into the vale landform of the Cheshire Plain to the east of Wrexham.

- 2.14 A pronounced, north-south oriented ridgeline occupied by the settlements of Brynteg, Pentre Broughton and Moss is located approximately 500m to the east of the Site. This ridgeline creates a substantial physical barrier between the Cheshire Plain and the local landscape containing the Site.
- 2.15 To the north, a sharply incised ravine separates the Site from high ground where existing settlement in Mount Zion occupies land at between 230 and 255m AOD. A hillock of made ground rises locally to the north-west of the Site. Further north the landform falls away gently beyond the settlement of Brymbo to the valley of the River Cegidog, before rising again in the vicinity of Cymau to 330m AOD on Hope Mountain, approximately 3.2km distant.

Vegetation

- 2.16 As demonstrated by **Figure 1**, the vegetation pattern within the wider rural landscape of the study area is primarily characterised by networks of hedgerows with numerous canopy trees, enclosing a patchwork of large to medium-sized agricultural fields. Robust linear belts of woodland reinforce the topography, extending along valley floors, enclosing river corridors and flanking ridgelines in the local area.
- 2.17 Further to the west the landscape of the higher ground of the Clwydian Range is characterised by open heaths on the exposed mountain tops and extensive areas of woodland, often plantation, covering the sheltered slopes.
- 2.18 Locally, existing vegetation is most notable within the ravine to the north of the Site, following steep sloping ground within Brymbo and encompassing the north-western edge of the Site. There are also substantial stands of semi-mature trees on the sloping ground immediately to the east of the Site.

Transport

- 2.19 The A483 is the principal transport route within the study area extending between Chester and Halton and passing through the landscape to the north-west of Wrexham, approximately 3km south-east of the Site.
- 2.20 The study area is punctuated by an extensive network of secondary transport routes, with a widespread and irregular pattern of main roads and residential streets predominantly following the pattern of landform. Several B-class roads extend along

the valleys and ridgelines to the north-west of Wrexham, interconnecting the smaller settlements of Brymbo, Coedpoeth, Pentre Broughton and New Broughton.

- 2.21 The Site is principally accessed by Phoenix Drive, a recently constructed road extending between Brymbo Road to the south and the settlement of Brymbo itself to the north. Brymbo Road extends in a north-westerly direction from Tanyfron, passing adjacent to the Site's south-western boundary before following a westerly course to its junction with Minera Road (B5102). An additional arm of Brymbo Road extends north towards Brymbo, approximately 200m to the west of the Site. Blast Road runs westwards from Brymbo following the ravine to the north of the Site, with Pool Road/Mount Zion Road continuing the route to Minera Road.
- 2.22 Phoenix Drive splits the Site from north to south and forms the main route into Brymbo as well as to Wrexham to the south-east. Brymbo Road is located on the southern boundary of Ty Cerrig and links Brymbo with Bwlchgwyn to the west.
- 2.23 The route of Kent Road/New Road (B5101) follows the valley bottom to the east of the Site on a north-south alignment, linking Brymbo with Pentre Broughton. The route of Station Road/High Street/Wrexham Road (B5433) follows the settled ridge further east. Lodge Lane also extends on a north-south alignment, located on the west facing slopes of the same ridgeline.

Rights of Way

- 2.24 As shown in **Figure 1**, the landscape around the Site is well served by Public Rights of Way (PRoW). The most notable of these are as follows:
- PRoW BRY/0 wraps around the eastern, western and northern boundaries of the western uppermost part of the Site (Ty Cerrig), enabling access between Brymbo Road and Brake Road;
 - PRoW BRY/38 extends in a south-westerly direction from the remaining structures of the former Brymbo Steelworks, leading through part of the Site to meet PRoW BRY/0; and
 - PRoW BRY/40 crosses the northern tip of the Site, linking Mount Hill with Brymbo Enterprise Centre.
 - Other PRoW traverse the landscape and built up settlements within the wider landscape and townscape.

Historic Settlement Pattern

- 2.25 The historical phases of development and the principal patterns of change that have occurred in the landscape containing the Site are illustrated in historical OS Mapping as demonstrated on **Figure 3: Historic Mapping Progression Plan**. The principal patterns of change are summarised below.
- 2.26 The progression begins at 1897. At this time the Site formed part of a varied landscape including industrial works, quarry pits and transport routes as well as areas of settlement, parkland and agricultural land. The eastern part of the Site was primarily occupied by quarries / areas of excavation and railway infrastructure (the Great Western Railway). The Brymbo Iron Works was established by this time and the cluster of built structures (much of which remains intact) was located between the Site and the nascent settlement of Brymbo.
- 2.27 The parkland associated with Brymbo Hall was located within Ty Cerrig on the western part of the Site while the settlement of Brymbo was established to the north of the Site, albeit limited in scale to a linear settlement following the route of High Street. To the south-east of the Site, the residential area around Broughton Road was more extensive than it is today, also following a linear form. To the east of the Site, the settlement of Pentre was established, albeit much smaller in scale than today. Agricultural land east of Brymbo provided clear separation between Brymbo and Moss Pentre / Pentre Broughton. To the west of the Site, coal and iron shafts were present between Brymbo Hall and Brymbo Road/ Mount Pleasant.
- 2.28 In the subsequent phase of development (1909-10, with additions in 1949) the industrial operations grew and are labelled on the map as 'Steel and Iron Works' suggesting an increased complexity of operation. Railway infrastructure, including sidings and a station, increased in scale across the eastern part of the Site while quarrying remained operational. Agricultural land west of the Site was largely unchanged from 1897-1910; to the south of the Site Tan-y-fron [sic] developed as a settlement. Underground shafts to the west of Area 3: Ty Cerrig appear to have been converted to open quarrying. Brymbo was an expanding settlement at this time and the road layout for future residential development can be identified north-west of the Site, along Pen-Y-Craig Road; former agricultural land to the edges of the settlement were developed. Bryn-teg [sic] emerged as a settlement at this time and the introduction of a new road layout for future residential development at Bryteg [sic] Crescent is notable.
- 2.29 By 1991 industrial operations across the Site had been further enlarged with large scale built form occupying much of Area 1 and extending beyond the Site to the South, near

Tanyfron [sic]. Brymbo Hall had been demolished by this time (purportedly in 1973) and its parkland was in agricultural use; field boundaries reflect those present today. Brymbo expanded to the west, around Dyke Street during this phase of development. New residential development (between 1949-1974) is notable in the south-east corner of the study area, comprising what is today New Broughton. The road layout for future residential development is visible to the north-east of the Site, on Queens Road. Agricultural land west of the Site was largely unchanged from the study area's previous phase of development (1909-10, plus additions 1949).

- 2.30 The steel works closed in 1991 and Areas 1 and 2 of the Site became vacant; a new road connection was built (Phoenix Road), connecting the Site with residential development to the north-east of the Site, around Queens Road. Works buildings and railway sidings to the south of the site were also demolished by 2018 and residential development to the southern end of Phoenix Drive completed. Residential development has resulted in contiguous settlement between Pentre Broughton and Brymbo at Broughton Heights to the east of the Site by this time, and with Tanyfron to the south.

Designations

- 2.31 The location and extents of national and local landscape and landscape-related designations is illustrated on **Figure 1** and summarised below:
- 2.32 A small area of land within the western boundary of the Site is a Scheduled Monument identified as part of Offa's Dyke, forming a small part of an ancient linear earthwork feature which extends between the Severn Estuary and Liverpool Bay, over a distance of approximately 240km.
- 2.33 The retained structures of Brymbo Steelworks comprising the early blast furnace, cast house & foundry are designated as a Scheduled Monument whilst the Former Agent's House is a Grade II* Listed Building.
- 2.34 The Brymbo Fossil Forest SSSI abuts the Site to the north, lying to the south of the retained Brymbo Steelworks structures.
- 2.35 The Clwydian Range Area of Outstanding Natural Beauty (AONB) encompasses land in the south-west of the study area as shown in **Figure 1**. The AONB comprises a north-south oriented range of high hills and mountains separating the Cheshire Plain and the Vale of Clwyd. The AONB encompasses Esclusham Mountain, a prominent geographical feature in the south-west of the study area.

3.0 LANDSCAPE PLANNING POLICY

National Planning Policy

Planning Policy Wales (PPW), December 2018 (10th Ed)

- 3.1 The PPW promotes a presumption in favour of sustainable development, defined as:

"the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals".

- 3.2 Sustainable Development should be in accordance with the relevant up-to-date Technical Advice Notes (TANs), Local Development Plan (LDP), Wales Spatial Plan (WSP) and policies set out in the PPW including those identifying restrictions with regard to designated areas, such as National Parks, Areas of Outstanding Natural Beauty (AONB) and Green Belt.

- 3.3 With regards to the role of planning in Wales, the PPW states that:

"It must reconcile the needs of development and conservation, securing economy, efficiency and amenity in the use of land, ensuring the sustainable management of natural resources and protecting, promoting, conserving and enhancing the built and historic environment".

- 3.4 Chapter 2 establishes the concept of ***"placemaking"*** in development management decisions to maximise well-being and sustainable places; it states:

"Sustainable Places are the goal of the land use planning system in Wales; they are the output of the planning system rather than the process of achieving them. All development decisions, either through development plans policy choices or individual development management decisions should seek to contribute towards the making of sustainable places and improved well-being".

- 3.5 Placemaking is described as a process that ***"considers the context, function and relationships between a development site and its wider surroundings"***. Paragraph 3.3 sets out the role of good design and that to achieve sustainable development ***"design must go beyond aesthetics and include the social, economic, environmental, cultural aspects of the development"***.

- 3.6 The PPW adds at paragraph 3.8 that ***"Landscape and green infrastructure considerations are an integral part of the design process"*** and that ***"The special characteristics of an area should be central to the design of a development"***. (Paragraph 3.9). It further adds:

"In areas recognised for their particular landscape, townscape, cultural or historic character and value it can be appropriate to seek to promote or reinforce local distinctiveness. In those areas, the impact of development on the existing character, the scale and siting of new development, and the use of appropriate building materials (including where possible sustainably produced materials from local sources), will be particularly important".

- 3.7 Paragraph 6.3.3 relates to the importance of valued landscapes, stating that:

"All the landscapes of Wales are valued for their intrinsic contribution to a sense of place, and local authorities should protect and enhance their special characteristics, whilst paying due regard to the social, economic, environmental and cultural benefits they provide, and to their role in creating valued places".

Paragraph 6.3.4 adds that ***"Where adverse effects on landscape character cannot be avoided, it will be necessary to refuse planning permission"***.

- 3.8 In terms of how planning authorities should use their policies, Paragraph 4.11.15 sets out that ***"Local planning authorities should encourage good quality design of buildings and spaces in their policies and guidance and should use these to eliminate poor quality development"***.
- 3.9 The PPW sets out that the need for lighting should be balanced with the need to, *inter alia*:

- ***"protect the natural and historic environment including wildlife and features of the natural environment such as tranquillity;***
- ***retain dark skies where appropriate; and***
- ***prevent glare and respect the amenity of neighbouring land uses"***.

Technical Advice Notes (TANs)

- 3.10 To support the policies of the PPW, the Welsh Government has prepared Technical Advice Notes (TANs) covering a number of topics.
- 3.11 Under the title of Design (TAN 12, March 2016), sub-heading 5.5 *Landscape and Townscape*, Paragraph 5.5.1, the TAN supports the use of landscape character assessment as a tool for understanding and responding to a site: ***"The way in which development relates to its urban or rural landscape or seascape context is critical to its success. Because of this, an understanding of landscape quality, including its historic character, is fundamental to the design process"***. The site analysis process is further supported by the Site and Context Analysis Guide: Capturing the value of a site, commissioned by the Welsh Assembly Government (March 2016), which provides an informative approach to site analysis, to support all development proposals.
- 3.12 Paragraph 5.5.4 of TAN 12, elaborates further on the role of landscape assessment, stating that: ***"For larger developments, undertaking strategic landscape assessment at the outset of the design process should help to define the capacity of the natural and historic environment to absorb development. It should also provide a broad context for decisions on appropriate scale, form and layout and determine which landscape features need to be protected or enhanced"***.
- 3.13 Paragraph 5.8.2 of TAN 12 considers that: ***"Policies and guidance should take account of the need to steer activity to avoid negative impact on distinctive rural landscapes and the best agricultural land and to conserve and enhance diversity of species and habitats. Managing change by means of a landscape strategy based on a thorough landscape assessment is one means of safeguarding a rural sense of place"***.

People, Places, Futures. The Wales Spatial Plan 2008 Update, July 2008

- 3.14 The Wales Spatial Plan (WSP) was prepared as part of the Welsh Assembly Government's duty to prepare a spatial plan under the Planning and Compulsory Purchase Act (2004). The WSP does not form part of the statutory development plan framework, however Local Development Plans must have regard to the WSP.
- 3.15 The WSP separates Wales into six Area Strategies, which set out the characteristics of these sub-regions and the linkages between them. The Site falls within the *North East Wales – Border and Coast Area Strategy*, which under the subheading of Valuing our

Environment, paragraph 16.54 sets out the aim: ***"To deliver the Spatial Strategy for North East Wales in a way which protects and enhances the natural and built environment and to realise the opportunities that these assets North East Wales provide in supporting the sustainable East growth of the Area".***

3.16 Paragraph 16.57 of the WSP lists the following relevant environmental opportunities in terms of landscape, which the Local Developments Plans must have regard to:

- ***"Protecting and enhancing protected wildlife, landscape and built heritage sites;***
- ***...***
- ***Developing and improving green transport links; and***
- ***Raising awareness and understanding and promoting the use of the natural and cultural environment".***

Local Planning Policy

Wrexham Unitary Development Plan (1996 – 2011, adopted 2005)

3.17 The Wrexham Unitary Development Plan (WUDP) represents the current spatial planning policy for the borough due to the withdrawal of the Wrexham Local Development Plan (WLDP, 2006-2021). The UDP lists 12 key Strategic Policies as part of the Planning Strategy, of which the following are relevant to landscape:

- ***"Policy PS2, Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment; and***
- ***Policy PS4, Development should maintain the existing settlement pattern and character and be integrated with the existing transport network to help reduce the overall need to travel and encourage the use of alternatives to the car;***
- ***Policy PS3 Development should use previously developed brownfield land comprising vacant, derelict or underused land in preference to the use of greenfield land, wherever possible, particularly so where greenfield land is of ecological, landscape or amenity value, or comprises agricultural land of grades 1, 2 or 3a quality; and***
- ***Policy PS11, Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced".***

3.18 The WUDP expands upon the Strategic Policies of the Planning Strategy and sets out General Development Principles (GDP), which contain more detail on the specific policies of the development plan.

- 3.19 Policy GDP1 covers development objectives and, in relation to landscape, states that all new development should: ***"Ensure that built development in its scale, design and layout, and in its use of materials and landscaping, accords with the character of the site and makes a positive contribution to the appearance of the nearby locality"***.
- 3.20 Furthermore, Policy GDP1 states that new development should: ***"Safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest"***.
- 3.21 Chapter 5 of the WUDP sets out the Council's position on environment and conservation. Policy EC1 relates to Green Barriers and states: ***"Within Green Barriers, development will only be granted planning permission if it is for agriculture, forestry, essential facilities for outdoor sport and recreation, cemeteries and other uses of land which maintain the openness of the Green Barrier and do not conflict with the purpose of including land within it"***.
- 3.22 Policy EC4 sets out the council's approach to the protection of hedgerows, trees and woodland and states: ***"Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted"***.
- 3.23 In relation to habitats and species, Policy EC6 states: ***"Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported"***.
- 3.24 Policy EC16 highlights the current derelict land sites, which could be reclaimed and restored for beneficial use. The policy goes on to state that: ***"Priority will be given to those derelict sites which are close to residential areas or main communication routes, and where beneficial after-uses can be established"***.

Brymbo Steelworks is a listed derelict site under Policy EC16, with the potential to provide housing, employment and amenity value.

Emerging Planning Policy

National Development Framework (Issues, Options and Preferred Option, April 2018)

- 3.25 The National Development Framework's (NDF) priority is to "**support the delivery of Prosperity for All by developing a clear long term spatial direction for Government policy, action and investment**" by identifying key growth areas and coordinating delivery.
- 3.26 This report was published for consultation in April 2018 and a consultation report is now being progressed. When adopted, it is intended that the NDF replace the current Welsh Spatial plan (2008).
- 3.27 The NDF sets out in its vision that it will help deliver sustainable places, which is the goal of the planning system. This will help deliver well-being goals, which include:
- **"distinctive and natural places;**
 - **productive and enterprising place;**
 - **active and social place; and**
 - **prosperous, distinctive and diversified regions".**
- 3.28 Relevant NDF Objectives are included in Paragraph 3.6.3: **"To protect, promote and enhance nationally important landscapes".**
- 3.29 To help deliver the vision of delivering **"distinctive and natural places"** the NDF, under DN3, sets out that **"Nationally important landscapes, seascapes, nature conservation sites and habitats will be identified. Opportunities for growth, expansion, greater connectivity and enhancement will be identified ... NDF policies will require the protection and enhancement of nationally important landscapes, seascapes, nature conservation sites and habitats".**
- 3.30 DN5 of the NDF sets out that **"Nationally important green infrastructure and opportunities for new infrastructure will be identified... NDF policies will require the protection and enhancement and facilitate the delivery of new green infrastructure".**

Wrexham Local Development Plan 2 2013-2028 (LDP2) (Deposit Plan, March 2018)

- 3.31 Wrexham County Borough Council has prepared the Wrexham Local Development Plan which is now with the Welsh Government for examination. Once adopted, the LDP2 will replace the WUDP and become the statutory planning framework for the borough. Further to public consultation on the LDP2, Wrexham County Borough Council considered representations received and is proposing 'Focussed Changes' to the submitted plan to ensure it is sound. The policies as set out below, and considered relevant to the Proposed Development, reflect the amended policies set out in the document "**KPD21 Schedule of Focussed Changes and Minor Editing Changes V17-12-18**", itself subject to a public consultation, 7th January-18th February 2019.
- 3.32 The WLDP separates the planning framework into Objectives, Strategic Policies and General Development Management Policies. Objective S09 specifically relates to landscape and states: **"Protect, manage and enhance the natural and historic environment and landscapes"**.
- 3.33 The Strategic Policies provide a broad policy overview and expand on the high-level Objectives Policy. SP13: Design Principles and Masterplanning Framework states that: **"All development will be required to be of a high quality, sustainable design which makes a positive contribution to the creation of locally distinctive places ..."**. SP13 also states: **"Proposals must demonstrate how they have taken account of the local characteristics of surrounding areas ..."**.
- 3.34 Policy SP15 states that: **"Development will only be supported where it protects, conserves and enhances the natural environment including:**
- **""
The Clwydian Range and Dee Valley Area of Outstanding Natural Beauty...;**
 - **""
Special Landscape Areas recognised for their outstanding local landscape character;**
 - **Natural landscape features such as trees, hedges and woodland and the green networks between them which contribute to the quality and diversity of the natural environment and play an important role in mitigating the impact of climate change;**
 - **Developing and maintaining Green Infrastructure links; and**
 - **Habitats and species of principal importance to Wales"**.
- 3.35 Policy SP16 is relevant to landscape in that it acknowledges the importance of protecting the setting of cultural and heritage assets, including Listed Buildings, Conservation Areas, Registered Historic Parks, Gardens and Landscapes and Scheduled Monuments.

- 3.36 Policy SP20 refers to the importance of Green Infrastructure (GI) and how:
"Development will be required to maintain the extent, quality and connectivity of multi-functional green infrastructure on or near a site, and, where appropriate to enhance it by:
- i) Creating new interconnected areas of green infrastructure between the proposed site and the existing network;***
 - ii) Filling gaps in the existing network to improve connectivity;***
 - iii) Protecting the features most valuable for both nature and people; and***
 - iv) In instances where loss of green infrastructure is unavoidable, provide mitigation and compensation for the lost assets".***
- 3.37 Policy DM1: Development Management Considerations states that all development must:
- a) "Accord with or enhance the character, local distinctiveness and appearance of the site, existing building(s) and surrounding landscape/ townscape in terms of its siting, layout, scale, height, design, density, use of materials and landscaping;***
 - b) Not have an unacceptable effect on the amenity of the occupiers of nearby properties/land by virtue of noise, disturbance and overlooking; and provides a satisfactory standard of amenity for the occupiers/users of the development itself; and***
 - c) Safeguard the environment from the adverse effects of pollution of water, land, light or air, or land instability, arising from development "***
- 3.38 Policy NE3: Trees, Woodlands and Hedgerows states that: ***"Development will only be permitted where it does not cause unacceptable harm to trees, woodlands and hedgerows of significant public amenity, natural or cultural heritage value or those that provide important ecosystem services including mitigating the effects of climate change"***. Furthermore, in relation to mitigation measures the policy states: ***"development should include proposals for the planting of new trees, woodlands, and hedgerows within the site, ensuring connectivity between proposed and existing green infrastructure"***.
- 3.39 Policy NE4: Area of Outstanding Natural Beauty (AONB) relates to the conservation and enhancement of the natural beauty of the AONB and its setting. The policy states: ***"Development proposals that are outside, but closely interlinked with the AONB must not have an adverse impact on the natural beauty of the AONB"***.

4.0 LANDSCAPE CHARACTER

- 4.1 Landscape character is the combination of physical, perceptual, cultural and historic features of a particular area which together create the unique and distinctive experiential qualities of a given landscape. In Wales, landscape character is defined and described with two approaches, both of which are included within this LVIA: LANDMAP and Landscape Character Assessment.
- 4.2 Landscape Character Assessment is a descriptive approach that seeks to identify and define the distinct character of landscapes that make up the country. This approach recognises the intrinsic value of all landscapes, not just 'special' landscapes, as contributing factors in people's quality of life, in accordance with the European Landscape Convention. It also ensures that account is taken of the different roles and character of different areas, in accordance with the PPW Principles.
- 4.3 LANDMAP is a national resource specific to Wales and is the starting point for all subsequent Landscape Character Assessments. It comprises a series of mapping and survey datasets, set out in 5 classifications: Geological Landscape; Landscape Habitats; Visual and Sensory; Historic Landscape; and Cultural Landscape. Each dataset includes mapping, classification and evaluation of the landscape whereby distinct 'Aspect Areas' are defined with corresponding key characteristics and management guidelines.
- 4.4 Landscape Character Assessment typically focuses on the identification of areas of landscape with relatively distinctive and cohesive landscape character types, resulting in a series of Landscape Character Areas (LCAs). The extent of LCAs in the vicinity of the Site, as featured in published assessments, is illustrated on **Figure 4: Landscape Character Plan**.
- 4.5 In relation to LANDMAP, this assessment considers direct landscape effects arising on Aspect Areas in which the Site is located for Geological Landscape, Landscape Habitats, Historic Landscape and Cultural Landscape. However due to the nature of their classification, effects arising from the Proposed Development further afield are considered likely to only result in effects that are either negligible or neutral and have therefore been scoped out of this assessment. The Aspect Areas for these datasets within proximity of the Site are shown on **Figure 5: LANDMAP Aspect Areas**, with their corresponding LANDMAP evaluations illustrated on **Figure 6: LANDMAP Aspect Areas - Evaluation**.

- 4.6 In the case of the Visual and Sensory dataset, this assessment also considers effects on the setting of Aspect Areas in the wider study area. This is considered to be appropriate given the primary importance of views and aesthetic parameters in the classification of the Visual and Sensory Aspect Areas (VSAAs). However, it is also considered appropriate to scope out VSAAs which are unlikely to experience effects from the Proposed Development as a result of a lack of intervisibility.
- 4.7 In order to refine the scope of VSAAs included within the assessment, a Zone of Theoretical Visibility (ZTV) has been produced, demonstrating the potential visual envelope of the Proposed Development in the wider landscape. The ZTV is incorporated onto the following plans:
- Figure 3: Topographical Features Plan;
 - Figure 7: LANDMAP Visual and Sensory Aspect Areas;
 - Figure 8: LANDMAP Visual and Sensory Aspect Areas – Evaluation; and
 - Figure 10: Visual Appraisal Plan.
- 4.8 **Figure 7: Visual & Sensory Aspect Areas** presents the VSAAs within the study area, shown in the context of the ZTV, with corresponding LANDMAP evaluations illustrated on **Figure 8: Visual & Sensory Aspect Areas - Evaluation**. VSAAs that do not overlap with the ZTV and that are considered too distant to experience other sensory impacts (e.g. noise) are excluded from the scope of this assessment.
- 4.9 In relation to the published local Landscape Character Assessment, only direct effects on the LCA containing the Site have been included in this assessment, indirect effects on landscape setting from the Proposed Development having been considered as part of the assessment of LANDMAP VSAAs.

Sensitivity of LCAs and Aspect Areas

- 4.10 Judgements relating to the sensitivity of landscape receptors, including LCAs and Aspect Areas are set out in **Appendix 3: Landscape Effects Table**. The full methodology for the identification of sensitivity is set out in **Appendix 1: LVIA Methodology**.
- 4.11 Sensitivity judgements are based on a combination of Value and Susceptibility. Whilst value judgements for landscape and visual receptors are commonly made by a Landscape Architect as part of the LVIA process, based on a number of criteria, it is considered appropriate to use the evaluations included in the LANDMAP Aspect Area datasets. LANDMAP is the definitive landscape resource for Wales where landscape characteristics, qualities and influences have been recorded and evaluated. These

evaluations are based on robust and detailed surveys carried out by relevant professionals for each dataset classification.

- 4.12 Table 1 below demonstrates the approach to the translation of LANDMAP values into value judgements for the purposes of this assessment. The corresponding criteria for the three levels of value identified for this assessment are set out in Table 3.1 of the LVIA Methodology.

LANDMAP Value	Corresponding LVIA Value
Low	Low
Moderate	Medium
High	Medium
Outstanding	High

Table 1: LANDMAP Value Judgements

- 4.13 Notwithstanding the approach set out above, professional judgement has also been used in the assignment of all value, susceptibility and sensitivity judgements based on a robust analysis and understanding of the characteristics of the landscape.

LANDMAP Aspect Areas

Cultural Landscape

- 4.14 The eastern part of the Site is located in Cultural Landscape Aspect Area (CLAA) Brymbo-Gwersylt, while the western part is encompassed within CLAA Mynydd Rhiwabon Esclusham (lower slopes). Key information from the LANDMAP survey records for these Aspect Areas is set out in Table 2 below:

Aspect Area Code/Name	Aspect Area Classification	LANDMAP Summary Description:	LANDMAP Evaluation
WRXHMCL005 Brymbo-Gwersylt	Influences/Material expressions/Urban/Urban Settlement (Level 4)	<i>"The closure of the Brymbo steel-works has dealt the area a blow from which it has not yet recovered. Its site remains a void in the middle of this area. The settlement patterns and street layouts are interesting. Much of the infrastructure of these communities is redundant, and a management regime should be considered for them."</i>	High
WRXHMCL017 Mynydd Rhiwabon	Influences/Material expressions/Rural/	<i>"An area now devoted largely to sheep-rearing but which has historically been exploited for lead and coal. The lead-mining</i>	High

Esclusham (lower slopes)	Agricultural (Level 4)	<i>history of the area is interpreted at Minera. Less is known about coal-mining, ironworking or the agricultural past."</i>	
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Table 2: Cultural Landscape Aspect Areas*Geological Landscape*

- 4.15 The entire Site is encompassed within Geological Landscape Aspect Area (GLAA) Brymbo. Key information from the LANDMAP survey records for this Aspect Area is set out in Table 3 below:

Aspect Area Code/Name	Aspect Area Classification	LANDMAP Summary Description:	LANDMAP Evaluation
WRXHMGL110 Brymbo	Man-made/Man-made/Engineered features and reclaimed / infilled land (Level 3)	<i>"Hill top platform, significantly modified by industrial development including coal mining and now extensively "restored". Includes settlements (SIC) also. Bedrock is "Coal Measures " (Upper Carboniferous)."</i>	High

Table 3: Geological Landscape Aspect Areas*Historic Landscape*

- 4.16 The Site is entirely encompassed within Historic Landscape Aspect Area (HLAA) Brymbo. HLAA Windy Hill abuts the south-western boundary of the Site. Key information from the LANDMAP survey records for these Aspect Areas is set out in Table 4 below:

Aspect Area Code/Name	Aspect Area Classification	LANDMAP Summary Description:	LANDMAP Evaluation
WRXHMHL009 Brymbo	Built environment/Settlement/Other Settlement (Level 3)	<i>"The combined industrial settlements of Brymbo, Mount Sion, Tanyfron, New Broughton, Brynteg, Pentre Broughton and Moss and their associated industrial remains and reclaimed areas of former industry... The individual villages are characterised by 18th and 19th century local stone and brick buildings at their core (with 20th century expansions) and are interconnected by the lines of roads and disused tramways and industrial railways... An area formerly dominated by the major Brymbo iron and steel works and collieries at Brymbo, Broughton, Vron, Lodge, Black Lane and Plas</i>	High

		<i>Power as well as a number of quarries and manufacturing and processing sites. An isolated, and now somewhat incongruous, Iron Age hillfort (just) surviving at the centre of a Pentre Broughton council estate and the remains of a Bronze Age burial at Brymbo hint at a now largely destroyed pre-industrial archaeology. The area is crossed from north to south by Offa's Dyke."</i>	
WRXHML008 Windy Hill	Rural environment/Agricultural/Irregular Fieldscapes (Level 3)	<i>"Swath of mixed irregular predominantly hedged fields occupying the Gwenfro and Moss valleys to the west and east of Brymbo and its former industrial areas... The area is characterised by isolated post medieval farmsteads and a wide variety of mines, collieries, brick and tile works and other industrial remains. It also contains the minor settlement of Berse Drelincourt and an isolated moated site at Lower Berse, and a small area of very degraded parkland at Gwersyllt. The south of the area is crossed by Offa's Dyke and it is bounded on its north by the line of the Roman road from Caer Gai to Chester."</i>	High

Table 4: Historic Landscape Aspect Areas*Landscape Habitats*

- 4.17 The eastern part of the Site is located in Landscape Habitat Aspect Area (LHAA) Brymbo Industrial and Urban Area, while the western part is encompassed within LHAA Talwrn Grassland. Key information from the LANDMAP survey records for these Aspect Areas is set out in Table 5 below:

Aspect Area Code/Name	Aspect Area Classification	LANDMAP Summary Description:	LANDMAP Evaluation
WRXHMLH039 Brymbo Industrial and Urban area	Dry (Relatively) Terrestrial Habitats/Built Up Areas/Residential/Green Space (Level 3)	<i>"This is a large urban area, including residential and industrial sites, and a large limestone quarry. Apart from generally small urban gardens there are few other habitats apart from some small areas of broadleaved woodland, one of which is a local wildlife site. Part of the quarry is being restored and re-vegetated."</i>	Low

WRXHMLH031 Talwrn Grassland	Dry (Relatively) Terrestrial Habitats/Mosaic/Mosaic (Level 3)	<i>"A very large area of mixed agriculture, mainly grassland but with some arable cropping. Fields are small to medium sized with hedges, and scattered trees, with some small woodlands. The area borders on Ruabon mountain SSSI to the west, and contains a number of SSSI's itself, and a PSAC (Stryt Las A'r Hafod), as well as a number of local wildlife sites, including woodland, wetlands, rivers and water bodies."</i>	High
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Table 5: Landscape Habitats Aspect Areas*Visual and Sensory*

- 4.18 The eastern part of the Site is located in VSAA Former Brymbo Steelworks, while the western part is encompassed within VSAA West Wrexham Hill Slopes. Key information from the LANDMAP survey records for these Aspect Areas is set out in Table 6 below:

Aspect Area Code/Name	Aspect Area Classification	LANDMAP Summary Description:	LANDMAP Evaluation
WRXHMVS076 Former Brymbo Steelworks	Development/Developed Unbuilt Land/Derelict/Waste Ground (Level 3)	<i>"This aspect area is based upon the former industrial area of Brymbo Steelworks and as such still dominates the surrounding area with strong associations remaining evident in terms of adjacent settlement pattern and type and "industrial scarring" of the immediate environs. The area comprises extensive areas of bare ground many areas having been cleared of their industrial structures, areas of spoil, and regenerated scrub and marginal vegetation. There are a number of steep and precipitous banks looming over the road between Southsea/Tanyfron and Brymbo, and unsightly fencing surrounds the site perimeter. The area is currently under redevelopment with new housing and open spaces developing on the slopes. Other areas are undergoing decontamination and preparation for redevelopment. There are poorly reclaimed slopes for woodland/ public open space will take many years to naturalise. The area is highly visible from areas around as the steelworks occupied a valley floor position with Brymbo itself on higher</i>	Low

		<i>ground to the north and east which directly abuts the area, to the south the aspect is more open and rural with a higher proportion of field boundaries and small wooded copses amongst ribbon development outlying settlements. Sensory perceptions for parts include open, exposed, wasteland with little visually to attract the viewer, although the area is gradually being improved."</i>	
WRXHMVS017 West Wrexham Hill Slopes	Upland/Hills, Lower Plateau & Scarp Slopes/Hillside & Scarp Slopes Grazing (Level 3)	<i>"A broad aspect area lying on a upland plateau area bounded by the River Clywedog to the north and the rising upland slopes of Ruabon Mountain and Minera to the west. The area has a strong physical and visual link in terms of the setting for a number of small to medium sized settlements across the area - Brymbo, Minera, Tanyafron and Pentre Broughton. The area is typified by a network of small to medium sized fields following the underlying topography and well defined by managed hedgerows and small wooded copses. Materials within the area tend to be traditional red brick and stone in older properties with modern development being a relatively homogenous red brick with little defining characteristic. The area is historically a mining area and still bears evidence of this in mine workings and areas of disturbed tips and former working. There is a feeling of height as good clear views are available from [SIC] the upper reaches of the area looking over the adjacent valleys and lower lying land to the east. Much disturbed area, with mining remains, but agriculture is now main land use. Visually degraded by pylons, but some attractive pockets. Offa's dyke crosses plateau."</i>	Moderate

Table 6: Visual and Sensory Aspect Areas – Direct Effects

- 4.19 In addition to the aforementioned VSAs which encompass the Site, the following VSAs are considered to have the potential to experience indirect effects as a result of intervisibility with the Proposed Development, as demonstrated by the ZTV incorporated within **Figure 7: LANDMAP Visual and Sensory Aspect Areas.**

Aspect Area Code/Name	Aspect Area Classification	LANDMAP Evaluation
WRXHMVS074 Brymbo, Tanyfron & Pentre Broughton	Development/Built Land/Urban (Level 3)	Low
WRXHMVS073 West Wrexham Lower Slopes	Upland/Hills, Lower Plateau & Scarp Slopes/Hill & Lower Plateau Grazing (Level 3)	Low
WRXHMVS018 Coedpoeth	Development/Built Land/Urban (Level 3)	Moderate
WRXHMVS010 Slopes to the East of Ruabon mountain	Upland/Hills, Lower Plateau & Scarp Slopes/Hillside & Scarp Slopes Grazing (Level 3)	High
WRXHMVS011 Minera Limestone Scarp	Upland/Hills, Lower Plateau & Scarp Slopes/Hillside & Scarp Slopes Grazing (Level 3)	High
WRXHMVS014 Mining & Quarrying Communities	Development/Built Land/Village (Level 3)	Moderate
FLNTVS074 Llanfynydd narrow valley	Lowland/Lowland Valleys/Wooded Lowland Valleys (Level 3)	High
WRXHMVS075 Moss Valley & Ffrwd	Lowland/Lowland Valleys/Wooded Lowland Valleys (Level 3)	Moderate
FLNTVS088 Cymau Traditional farmland	Lowland/Rolling Lowland/Mosaic Rolling Lowland (Level 3)	Moderate
FLNTVS087 Caergwrle slopes	Upland/Hills, Lower Plateau & Scarp Slopes/Hillside & Scarp Slopes Mosaic (Level 3)	High
WRXHMVS007 Ruabon & Esclusham Mountain	Upland/Exposed Upland/Plateau/Upland Moorland (Level 3)	High
WRXHMVS065 A483 Mold Road Corridor	Lowland/Rolling Lowland/Open Rolling Lowland (Level 3)	Moderate
WRXHMVS057 Terrace North & East of Wrexham	Lowland/Rolling Lowland/Open Rolling Lowland (Level 3)	Moderate
WRXHMVS082 Plas Power Park	Lowland/Rolling Lowland/Open Rolling Lowland (Level 3)	Moderate
WRXHMVS060 Wrexham	Development/Built Land/Urban (Level 3)	Moderate
WRXHMVS070 Wilderness & Llay tips	Development/Developed Unbuilt Land/Derelict/Waste Ground (Level 3)	Low
WRXHMVS071 Gwersyllt, Bradley, Llay & Sydalit	Development/Built Land/Urban (Level 3)	Low

Table 7: Visual and Sensory Aspect Areas – Indirect Effects

National Landscape Character Areas (Wales) (refer to Figure 4: Landscape Character Plan)

- 4.20 National Landscape Character Areas (NLCAs) are defined at a broad landscape scale throughout Wales. The descriptive profiles for the 48 individual character areas highlight what distinguishes one landscape from another, with reference to their regionally distinct natural, cultural and perceptual characteristics.
- 4.21 The majority of the Site is located within NLCA12: Clwydian Range, with a relatively small area in the eastern extent of the Site encompassed within NLCA 13: Deeside and Wrexham.

NLCA12: Clwydian Range (March 2013)

- 4.22 The following key characteristics are identified for Clwydian Range NLCA12:

- ***"Rounded, heather clad open hills in two main groups, a northern chain rising to Model Farnau (554m), a southern chain rising to Moel y Gamelin (577m). Formed by sandstones and argillaceous rocks and shales;***
- ***Narrow, minor river valleys dissect the hills - draining into the Vales of Clwyd or Llangollen;***
- ***A gentle intervening vale - the River Alyn flows north, at times incised, then east;***
- ***Well defined western and southern edges – with adjacent deep valleys;***
- ***Carboniferous Limestone to the east - with classic scenery of clints, grykes, crags and scarp slopes, use of stone in field boundaries and buildings, large quarries, and in places an exposed appearance. Gentler slopes towards Deeside;***
- ***A series of minor rivers - have their sources in the hills, draining west into the Clwyd in the Vale of Clwyd;***
- ***Heaths - in the Halkyn Mountain area;***
- ***Hedgerows and numerous hedgerow trees - improved hill sheep grazing and lowland;***
- ***Quarries and mining heritage – a number of large limestone quarries in the east and slate quarries in the south near Horseshoe Pass. Extensive evidence of old mineral workings on Halkyn Mountain;***
- ***Archaeology - a relatively high density of prehistoric ritual and funerary monuments, including round barrows, and later, Iron Age hill forts indicate the area's past strategic importance;***
- ***Historic parks - A number of historic parks and gardens occur within the area, notably Bryngwyn and Penbedw;***
- ***Culturally a divide - the area reflects the historical divide between English influences to the east and Welsh influences to the west. Parts of the area are designated as an AONB; and***
- ***Sparse level of settlement - confined to compact, nucleated hamlets and isolated farmsteads. Crossed by a number of***

arterial 'A' roads, the presence of the A55 Expressway across the northern part of the area is the most apparent".

NLCA12: Clwydian Range (March 2013)

4.23 The following key characteristics are identified for NLCA 13: Deeside and Wrexham:

- ***"Lowland, foothills and levels - sloping down to the lower Dee and Dee Estuary;***
- ***Carboniferous Coal Measures interspersed with outcrops of Millstone Grit, Holywell shales and Cefn-y-Fedw sandstones. Glacial till, fluvio-glacial and river terrace drift overlay in parts of the valley floor, giving rise to localised gentle land form variation;***
- ***A single large river, the Dee, traverses the area. The Dee opens out into a broad estuary with tidal sand and mud flats. A number of minor rivers dissect the landscape, for example, the Alyn and Eitha, and associated streams;***
- ***A broad flat flood plain adjacent to the Dee Estuary – with wide open views to Wirral Narrow, incised, wooded tributary valleys – many running down from the west;***
- ***Mixed pasture and some arable - and farm woodland cover.***
- ***Archaeology - variety of historic sites indicate the former strategic importance of the coastal route and the turbulent history of the Marchlands, including Offa's Dyke and Wat's Dyke. Late Medieval parklands and ecclesiastical / funerary sites;***
- ***Urban settlements - a strongly settled character is apparent in the central and southern parts of the area, with the relatively large, almost linked settlements of Holywell-Connah's Quay-Mold-Wrexham-Ruabon;***
- ***An industrial character - evident in the line of coalesced settlements at Connah's Quay and Holywell, associated both with the Chester to Holyhead railway line, mining and large scale power generation and industrial plants. Include landmark scale structures such as Broughton aircraft factory, Shotton Steel works and Connah's Quay power station;***
- ***Industry tends to dwarf historic settlement and features e.g. Flint and it's (SIC) castle.***
- ***Small settlements – outside urban areas, compact villages associated with landed estates and isolated farmsteads, or coalesced ribbon developments and encroachment upon commons, which are the legacy of the former coal and lead mining industries; and***
- ***Culturally many connections to Chester and Merseyside".***

4.24 Whilst NLCAs provide useful background to the landscape character of the study area, particularly reinforcing the transitional nature of the Site, being located on the boundary between two contrasting NLCAs, the areas encompassed are extensive in comparison to the Site. For this reason, it is considered highly unlikely that the Proposed Development would lead to substantial effects on the landscape character of either NLCA, and they are therefore excluded from the scope of this assessment.

Local Landscape Character Areas (refer to Figure 4: Landscape Character Plan)

- 4.25 The Wrexham LANDMAP Supplementary Planning Guidance (SPG) was adopted in March 2017. The Site is located within LCA 7d: West Wrexham Ridges and Valleys. The key characteristics of the area with relevance to landscape and visual matters include the following:
- ***"Mixed rural and urban village character;***
 - ***Strong NW-SE orientation, with alternating ridges and valleys;***
 - ***Hilltop villages separated by woodland, former industrial land and farmland;***
 - ***Changing landscape as post mining restoration and regeneration continue;***
 - ***Visually varied and complex, including lowland, valleys and hill and scarp areas;***
 - ***Characteristic undulating hill slopes with wooded valleys;***
 - ***Views towards Wrexham and the lowlands*** ***Urban villages and Wrexham linked by roads crossing open lowland farmland area;***
 - ***Scattered groups of buildings in local Cefn sandstone and stone-built village cores, individuality in later additions but much standardised modern housing development...;***
 - ***The complex landform is related to geological faults, with alternating series of resistant sandstone ridges, and Coal Measure valleys of Carboniferous age...;***
 - ***Many artificial landforms including the former Brymbo steelworks site; and***
 - ***Countryside has remnants of ridge and furrow, regular and irregular fields, but much land has been disturbed".***
- 4.26 In terms of landscape sensitivity, the LCA: ***"Continues to accommodate profound changes, but is vulnerable to further loss of local distinctiveness, and coalescence of villages because of continuing development pressure. The small scale of the ridges and valleys means they are sensitive to large scale development, masts and power lines, and inappropriate engineered landforms"***. The character area is described as having an overall management strategy of ***"Conservation"***.
- 4.27 In addition to the published Landscape Character Assessment, Barton Willmore has carried out an appraisal of the character of the Site and its immediate locality. The findings of this appraisal concur with the key characteristics identified with respect to LCA 7d, most notably the ***"Mixed rural and urban village character"***. Furthermore, the Site itself is considered to demonstrate some of the identified characteristics, including ***"Hilltop villages separated by woodland, former industrial land and farmland"*** and ***"Many artificial landforms including the former Brymbo steelworks site"***.

Landscape Management Guidelines

4.28 The following landscape management guidelines are set out in the published landscape character assessment and LANDMAP documents for LCAs and VSAs that encompass the Site:

LCA 7d: West Wrexham Ridges and Valleys

- ***"Promote urban forestry, strengthen, restore and enhance wooded valleys;***
- ***Keep settlements separate and maintain green barrier between villages and Wrexham town (...);***
- ***Maintain and develop green corridors for wildlife and people, linking rural and urban green spaces;***
- ***Encourage hedgerow retention and management and new hedgerow and tree planting along the urban fringe (...); and***
- ***Manage and extend woodlands to improve structure and wildlife value".***

VSAA WRXHMVS076: Former Brymbo Steelworks

- ***"Conserve links into surrounding settlements and countryside;***
- ***Enhance integrated green space and habitats amongst housing development;***
- ***Ensure landform is more sympathetic with existing surrounding landform and greater ratio of green space to development;***
- ***Retain and conserve older relicts of Steelworks site where possible to provide information to future inhabitants and potential focus and identity for the new housing;***
- ***Enhance Green links and integrate new development with existing settlement; and***
- ***Ensure restoration and habitat creation plans are in place as an integral part of redevelopment proposals".***

VSAA WRXHMVS017: West Wrexham Hill Slopes

- ***"Conserve open rural marginal land on the fringes of settlements;***
- ***Enhance Quality, species diversity and habitat value of wooded and hedgerow vegetation cover;***
- ***Reduce degradation of aspect boundaries through over extension of adjacent settlement/inappropriate development;***
- ***Conserve Open and marginal land on settlement edge with sensitive restoration of mining heritage where appropriate.***
- ***Enhance Species mix and age range of woodland, hedgerow boundaries and field margins;***
- ***Change Inappropriate /overly extensive development on settlement edge; and***

- ***Enhance existing vegetation cover, improve species diversity and habitats, reduce impact of overhead powerlines and integrate settlement edge”.***

5.0 SITE APPRAISAL

- 5.1 The character and physical features of the Site are shown on **Figure 9: Site Appraisal Plan** and described below with reference to **Site Appraisal Photographs (SAPs) A-F** which demonstrate the characteristics and features on the Site itself. The photographs are included in **Appendix 2** and the locations of photographic viewpoints are shown on **Figure 9**.
- 5.2 The Site can be described in three distinct parcels, as shown on **Figure 9**, with differing characteristics and relationships with the surrounding landscape, primarily influenced by the overriding landform. These are Area 1: Main Steelworks Site on the lower eastern part of the Site, Area 2: Connecting Parcel which encompasses the bank that separates areas 1 and 2 and Area 3: Ty Cerrig, the uppermost area forming the western part of the Site. The physical features, landscape components and overall character of the Site are described below with reference to these three areas.
- 5.3 Area 1: Main Steelworks Site encompasses a broad, flat and level area of derelict ground at approximately 200m AOD. The artificial profiling of the landform, resulting from former industrial uses is distinct and conspicuous as illustrated by **SAP A, B and C**. The eastern boundary of Area 1 is defined by the edge of this artificial plateau, with levels subsequently falling away into the adjacent valley. Due to the dramatic change in landform at the eastern boundary, open, long-distance views to the south-east over the adjacent valley towards Wrexham are possible, as illustrated by **SAP B**.
- 5.4 The western boundary of Area 1 is defined by Phoenix Drive, which runs north-south through the Site, with associated lighting columns bounding the road, forming strong vertical built features within a wider, post-industrial landscape.
- 5.5 The southern extents of the aforementioned plateau landform are occupied by recently constructed housing, accommodated on two tiered platforms adjacent to the Site. Existing built form in these areas exerts a strong urbanising influence on Area 1, and also emphasises the artificial landform owing to its uniform and regular massing and orientation, as shown in **SAP C**.
- 5.6 Existing built form in Brymbo and Pentre Broughton is strongly perceptible from this part of the Site, with the former occupying land on the east facing slopes of the rising landform to the north-west of the Site, and the latter forming a settled ridgeline seen against the skyline to the east of the Site. The remaining structures of the Brymbo Steelworks also have a strong influence on this part of the Site, forming a legible heritage focal point, albeit with a derelict industrial character.

- 5.7 In contrast, Area 3: Ty Cerrig comprises a broad dome of open agricultural land rising from 220m to 250m AOD on the western side of the Site, shown in **SAPs D, E, F, G and H**. This part of the Site is composed of four medium scale pastoral fields (Fields 1, 2, 3 and 4) delineated by a robust network of hedgerows and tree belts and enclosed by robust belts of vegetation.
- 5.8 The eastern boundary of Area 3 is strongly contained by a substantial tree belt on the east-facing slopes of the Ty Cerrig landform, providing physical separation between the Site and existing housing to the south-east. This vegetative structure forms part of a horseshoe shaped area of woodland that wraps around Area 3 from the south-east to the north-east and then to the north-west, creating a strong sense of enclosure experienced on lower areas of ground, as demonstrated by **SAP F and H**.
- 5.9 In contrast, the southern boundary of Area 3 (Field 1) is defined by a hedgerow extending along Brymbo Road, with a resultant heightened sense of openness and visual exposure to the wider agricultural landscape.
- 5.10 Notwithstanding the aforementioned sense of enclosure, expansive views out of the Site are possible over intervening vegetation from limited elevated parts of Area 3. These include open, south-westerly views towards Esclusham Mountain from Field 1 (**SAP D**), and expansive views west to the Cheshire Plain from Fields 2 and 3 (**SAPs E & G**). There is also a glimpsed view of Esclusham Mountain through a gap in vegetation from the higher ground in Field 4, as evidenced by **SAP F**.
- 5.11 However, existing built form is evident in the majority of these views, with the strongly developed Cheshire Plain and the settled ridgeline of Pentre Broughton visible in views to the east, and the electricity substation and elevated transmission lines forming prominent features in the landscape to the south-west, seen in the context of the settlement of Coedpoeth.
- 5.12 Existing housing in Mount Zion is visible from parts of Fields 3 and 4, leading to an urbanising influence on the character of this part of the Site. Metal palisade security fencing, a relic of the former industrial use of the Site, is a detracting landscape feature, evident extending along PRoW BRY/0 in **SAPs G and H**.
- 5.13 Area 2, identified on Figure 9, forms the interconnecting parcel between Areas 1 and 3 and comprises steeply sloping ground with an easterly aspect, strongly vegetated with semi-mature woodland and scrub. The tree cover in Area 2 is evident, forming part of the strongly vegetated backdrop of the former steelworks buildings in **SAP A**, together with the wider belt of extensively wooded sloping ground which adjoins Area 3: Ty Cerrig.

- 5.14 The value and susceptibility, and resultant sensitivity of the Site and its component landscape features including landscape character, together with the predicted magnitude of effect (change) and significance of effect are considered in detail in **Appendix 3: Landscape Effects Table.**

6.0 VISUAL APPRAISAL

- 6.1 Comprehensive field surveys of the Site and the surrounding area including photographic surveys were carried out in May and October 2018, and in February 2019 in order to identify and document the visual baseline and characteristics of the Site in its context within the wider landscape. Surveys were conducted at different times of year and to understand the visibility of the site from representative viewpoints at the worst time of year i.e. with no foliage on the trees in accordance with best industry practise. Subsequently, a series of **Site Context Photographs (SCPs)** have been selected as representative views to provide a balanced and robust basis for the assessment of the visual effects resulting from the Proposed Development. The ZTV was prepared to inform the site visits to guide where there are potential views of the Site.
- 6.2 The visibility of the Site in views from vantage points in the wider landscape is considered below with reference to **SCPs 1-13**, presented separately on annotated photographic sheets in **Appendix 4**. The locations of photographic viewpoints are shown on **Figure 10: Visual Appraisal Plan** in the context of the ZTV.

Short Range Views

- 6.3 At a local scale, the eastern parts of the Site (Area 1: Main Steelworks Site and Area 2: Connecting Parcel) are clearly visible in open, close-range views from Phoenix Drive as demonstrated by **SCP 1**. Similar views are likely to be available from immediately adjacent or overlooking houses within recently constructed residential areas to the south of the Site, and from the retained structures of the former steelworks to the west of the Site. However, Area 3: Ty Cerrig is not visible from these locations due to intervening landform and vegetation. Further to the south in the vicinity of Tanyfron, the Site is not visible due to a combination of intervening vegetation and built form.
- 6.4 Similarly, open, close-range views of Area 3 are possible, albeit partially screened by intervening hedgerow, from PRow 0 and from Brymbo Road as demonstrated by **SCP 2**, with the remainder of the Site not visible due to the prevailing landform and intervening vegetation. Furthermore, where views of this part of the Site are possible, they are predominantly curtailed by hedgerows and tree belts within the interior of the Site such as TB1 and H1-H5 as identified on Figure 9 and annotated on the SAP and SCPs, such that in the majority of views, only one field in Area 3 is visible at a time.
- 6.5 In views from the existing settlement of Brymbo to the north, the Site is substantially screened by intervening trees as demonstrated by **SCP 3**. However, a limited number

of houses in the Mount Zion area of Brymbo are likely to have framed views of part of Area 3: Ty Cerrig from first floor windows, as demonstrated by Site Appraisal Photograph F. Elsewhere in Brymbo, there are occasional glimpsed views across and over Area 1 as demonstrated by **SCP 4**, or filtered views up towards the eastern edge of Area 1 as demonstrated by **SCP 5**.

- 6.6 The Site is more clearly visible from the eastern extents of Brymbo, with framed views available between houses on Clayton Road as demonstrated by **SCP 6**. The easternmost fields of Area 3, the entirety of Area 2 and the northern extents of Area 1 are visible in this view, with the remainder of the Site screened. Existing housing in Mount Zion and electricity pylons are prominent ridgeline features in these views, with Ty Cerrig forming an area of ridgeline notably devoid of built form.
- 6.7 Further south along the settled ridgeline of Pentre Broughton, there are limited locations where views towards the Site are possible due to the screening provided by intervening vegetation and built form. However, where views to the west are possible, the Site can be seen on the east facing slopes of the adjacent valley, with views strongly influenced by existing houses to the north and south of the Site as seen in **SCP 7**, including built-form seen against the skyline in Tanyfron and Mount Zion.
- 6.8 **SCP 8** demonstrates the view further west in the valley bottom on Kent road where the majority of the Site is screened from view behind the prominent edge of the plateau landform that forms the eastern boundary of the former steelworks Site. The artificial profile of the landform is conspicuous in the landscape in these views. Existing housing to the south of the Site strongly emphasises this abrupt topography by way of its regular orientation, scale and form.

Long Range Views

- 6.9 In long range views there are limited locations where the Site is visible as a result of the sharply undulating topography and strongly vegetated landscape. Views of the Site from the north-west of the study area are precluded by rising landform to the west of Brymbo and Mount Zion. To the east, the settled ridgeline of Pentre Broughton provides a substantial visual barrier, such that the Site is screened in views from the eastern extents of the study area.
- 6.10 Although the ZTV indicates potential visibility of the Site from a wide area within the settlement of Wrexham, no publicly accessible vantage points with clear views of the Site were recorded during the site visits. Due to the largely flat topography of Wrexham, views to the surrounding landscape are substantially screened by a combination of trees and existing built form as demonstrated by **SCP 9**.

- 6.11 There are glimpse views of the southern field of Area 3: Ty Cerrig from a limited area within Coedpoeth, as demonstrated by **SCP 10**, with the remainder of the Site screened from view by a combination of intervening woodland and landform. The electricity sub-station is noticeable, and pylons form prominent features of existing built form on the otherwise undeveloped skyline in these views. Elsewhere in Coedpoeth the Site is screened from view.
- 6.12 From the north, the Site is visible in glimpsed views from isolated locations on rising land to the north of the settlement of Cymau, at a distance of over 2.2km as demonstrated by **SCP 11**. These views are only possible where breaks in the vegetation cover allow, and the Site is seen in the context of existing built form in Brymbo and Moss/Pentre Broughton situated on rising land and seen against the skyline. The main steelworks site is notable in these views, with the artificial plateau landform spanning the valley between the higher ground to the east and west. Recently constructed housing can also be seen, its reinforcement of the landform apparent in the view. Further north on Hope Mountain, the visibility of the Site is highly limited due to a lack of publicly accessible vantage points with views to the south.
- 6.13 Conversely, in views from the eastern slopes of Esclusham Mountain to the south-west within the Clwydian Range AONB, Field 1 of Area 3: Ty Cerrig is visible, with a small part of Field 4 also apparent. However, Areas 1 and 2 of the Site are out of sight behind the rising landform.
- 6.14 Although seen at a considerable distance of approximately 3.2km, the open fields of Area 3: Ty Cerrig form part of a legible sequence of low hills leading down from Hope Mountain as demonstrated by **SCP 12**. The lack of built-form along this ridgeline is notable, with settlements predominantly occupying the lower ground in the intervening landscape, including Coedpoeth. Similar views are available further north within the AONB as demonstrated by **SCP 13**.
- 6.15 Section 8 of this LVIA presents an assessment of the visual effects of the Proposed Development. In accordance with the GLVIA, the assessment of visual effects focuses on the identification of transient and fixed visual receptors i.e. groups of people who are likely to experience views of the Proposed Development as they travel, work, or reside in the landscape. The receptors are grouped according to their activity and location, and are listed below:
- *Road users travelling on Phoenix Drive;*
 - *Residents of recently constructed housing to the south of the Site;*
 - *People travelling along Brymbo Road;*

- *Residents and people at their places of work in Brymbo;*
- *People travelling on the road network within Brymbo;*
- *Residents of Tanyfron;*
- *Residents of the settled ridgeline of Pentre Broughton;*
- *Road users travelling on Long Lane;*
- *People travelling along Kent Road/Broughton Road;*
- *Residents and people at their places of work in Wrexham;*
- *Residents and people at their places of work in Coedpoeth;*
- *Residents of Cymau;*
- *People travelling on the road/PRoW network to the north of Cymau;*
- *People using the PRoW network/ Open Access land in the Clwydian Range AONB;*
- *Visitors to and People working at the retained structures of the Brymbo steelworks;*
- *Users of PRoW BRY/38 and BRY/40 within the Site; and*
- *Users of PRoW BRY/0 adjacent to the western area of the Site.*

6.16 The value and susceptibility, and resultant sensitivity of the Site and its surrounding component visual features are considered in **Appendix 5: Visual Effects Table**.

7.0 NIGHT-TIME APPRAISAL

- 7.1 A night-time appraisal of the Site and its surroundings was undertaken in order to demonstrate the existing night-time baseline of the Site and surrounding landscape in relation to light sources and perception of the night sky, and to provide an appraisal of the potential impacts of the Proposed Development on the character of the night sky and the landscape.
- 7.2 A night-time survey was carried out in February 2019, with photographs captured from a selection of the SCP viewpoints identified on Figure 10. The photographs have been selected to present a balanced and robust appraisal of the potential night-time impact of the Proposed Development. These Night-time Photographs (NP's N1, N7, N11-N13 which cross refer to the same daytime photographic locations on Figure 10) are presented separately in **Appendix 6: Night-time Photographs**. The locations of NPs are shown on **Figure 11: Night-Time Appraisal Plan** which also demonstrates existing light sources by way of Black Marble¹ night-time satellite photography.

Relevant Policy

- 7.3 Planning Policy Wales (PPW) Paragraph 6.8.1 states that:

"There is a need to balance the provision of lighting to enhance safety and security to help in the prevention of crime and to allow activities like sport and recreation to take place with the need to:

- ***protect the natural and historic environment including wildlife and features of the natural environment such as tranquillity;***
- ***retain dark skies where appropriate;***
- ***prevent glare and respect the amenity of neighbouring land uses..."***

Night-Time Baseline

- 7.4 As demonstrated by Figure 11, the Site sits within a transitional night-time landscape from well-lit areas corresponding with the settlement of Wrexham (the most notable source of light in the study area) and the Cheshire Plain, to the intrinsically dark landscapes of the Clwydian Range to the west. This overriding pattern of decreasing

¹ Earthobservatory.nasa.gov. (2019). *Night Lights 2012 - The Black Marble*. [online] Available at: <https://earthobservatory.nasa.gov/images/79803/night-lights-2012-the-black-marble> [Accessed 11 Mar. 2019].

artificial light from east to west within the study area is not absolute, with Coedpoeth providing a notable cluster of artificial light in the western extent of the study area.

- 7.5 Radiating from Wrexham are two major road corridors, namely Mold Road / Wrexham Road (A541) and the A483; these introduce linear sources of high light intensity to the study area. Each corridor will introduce transient / intermittent sources of light spill, glare and light clutter (visible in NP N12).
- 7.6 Other areas of lit settlement within the study area can be identified on **Figure 11**. West of Wrexham, Gwersyllt, Pentre Broughton, New Broughton Coedpoeth and Brymbo all register on the Artificial Light Intensity Scale, albeit with a lower intensity than Wrexham and industrial centres. With the exception of Coedpoeth, these settlements combine to present a contiguous area of artificial light sources. It is of note that the Site is located within this area of prevalent artificial light.
- 7.7 Industrial uses introduce large point source / clusters of point sources of light to the study area. Industrial uses can be identified primarily in the eastern extents of the study area, around Wrexham and neighbouring settlements, including the Rhosddu Industrial Estate (Also known as Old Rhosrobin) west of the A483. Of further note are Gresford Industrial Park to the north of Wrexham and the A483 and Llay Industrial Estate further north in the study area. As demonstrated by **Figure 11**, these contribute to notable areas of high intensity artificial light.
- 7.8 As described below, the night-time photographs demonstrate the sky glow emanating from the aforementioned settlements, and further identify notable point sources / clusters of point sources that contribute to light intensity.
- 7.9 **NP N1** presents the view from Phoenix Drive, immediately to the south of the Site. The view contains numerous point sources of light, predominantly street lighting and light emanating from residential buildings, but there is also perceived sky glow above the horizon line from distant settlements to the north of the study area within the Cheshire Plain, with the sky glow having a strong influence on the character of the night sky.
- 7.10 The sky glow combines with the clusters of street lights on Phoenix Drive in part of the view to provide a strong perception of artificial light. The cluster of street lights (point sources) on Phoenix Drive introduce a high intensity of artificial light to the foreground of the view; the light spill onto the Site (Area 1) is notable, extending 10-15m eastwards from the road.

- 7.11 Dwellings on Kent Road / Broughton Road are clearly visible in **NP N1**. The higher ground west of Phoenix Drive, and adjacent to the Site (Area 3), is marked by the point sources of light (streets lights) on Lamberton Drive, to the left of the view.
- 7.12 **NP N7** illustrates how the distribution of artificial light sources corresponds with settlement of the upland plateau of Brymbo, broadly following the horizon line in the view. The recently constructed housing on part of the former Brymbo Steelworks combines with numerous small point sources of light associated with highways and dwellings on the horizon line, albeit they are relatively sporadic and of low intensity.
- 7.13 Clusters of point source lights are also visible at Coedpoeth to the left of the view, associated with highways and dwellings. The cluster is more intense, in terms of the output of artificial light, than from other settlements on the horizon line. The Brymbo Sports and Social Complex introduces a notable source of light clutter and spill to the left of the view.
- 7.14 The view west from Brynteg across the valley and towards the Site, includes extensive areas of intrinsic darkness owing to the unsettled agricultural land that lies between Brynteg and Brymbo. There is no perception of artificial sky glow in the view, however, when the moon is clearly visible as it is in the photograph, it introduces some natural sky glow to a relatively dark scene.
- 7.15 Gwersyllt, Moss / Pentre Broughton and Wrexham are all identifiable in **NP N11**. Wrexham introduces the most intense cluster of point sources to the left of the view. Sky glow is perceived on the horizon emanating from Wrexham and surrounding settlements, dissipating away from the settlement to the right of the view. However, sky glow remains faintly perceptible behind the settled ridge of Moss, Pentre Broughton, Brymbo and Mount Zion. The ridge is characterised by single point sources and small clusters of point sources associated with settlements, from highways and dwellings, with the Site being viewed in the context of these settlements.
- 7.16 From Cymau, the view south towards the Site includes extensive areas of intrinsic darkness, across the open agricultural land that lies between Cymau and Brymbo where there are virtually no sources of light. However, the street lights in Cymau introduce a small number of point sources of artificial light to the foreground of the view.
- 7.17 **NP N12 and N13** offer panoramic views from Esclusham Mountain. In both views, sky glow is strongly perceptible on the horizon, emanating from Wrexham, Gresford and Llay as well as the settled Cheshire Plain further to the north-east. The influence of sky glow on the character of the night sky reduces to the left of the view in **N12** but remains strong in **N13**.

- 7.18 Large clusters of point source lighting relating to the settlements of Wrexham, Gresford and Llay dominate the view of the night-time landscape on the horizon. The commercial centres of the settlements are identifiable by the higher intensity of light and number of point sources clustered together. Three aviation warning lights are identifiable in the centre of Wrexham.
- 7.19 Additional clusters of point source lighting are visible relating to Rhosddu Industrial Estate (Old Rhosrobin), Gresford Industrial Park and Llay Industrial Estate; the land uses are identifiable by clusters of primarily white light sources and associated light spill.
- 7.20 To the centre of the view is the largely unsettled Hope Mountain, which comprises an area of intrinsic darkness with very few point sources. This combines with a similar area of intrinsic darkness on the agricultural land west of the Site in **NP N12** such that the foreground of the view is substantially dark.
- 7.21 In the middle ground of **NP N12**, a belt-like cluster of point source, associated with Coedpoeth is prominent in the view. The belt includes notable clusters of white light associated with commercial uses, including Five Crosses Industrial Estate, north of Coedpoeth.

Night-time Receptors

- 7.22 In accordance with the Night-time Assessment Methodology included in Appendix 3, a number of Night-time Receptors have been defined in order to assess the impacts of lighting resulting from the Proposed Development. Night-time Receptors are defined as geographical zones within the study area, where there is a broadly consistent character in relation to the perception of light and dark within the night sky and landscape. In relation to this assessment, the following Night-time Receptors have been identified:
- *Wrexham;*
 - *Settlements of Brymbo, Pentre Broughton and New Broughton;*
 - *Esclusham Mountain and the Clwydian Range AONB;*
 - *The agricultural landscape north-west of the Site; and*
 - *The agricultural landscape north of the Site, including Cymau.*

8.0 DEVELOPMENT PROPOSALS AND LANDSCAPE PRINCIPLES

The Proposed Development

- 8.1 The Proposed Development is an outline planning permission for up to 450 dwellings (Class C3 use), provision of a primary school (2-form entry), small district centre comprising up to 1,395sqm of Class A1 Retail, up to 372sqm of Class A3 Restaurant/Public House, up to 465sqm of Class D1 use, multi-functional green infrastructure, including children's play areas and informal open space, surface water attenuation, vehicle accesses, car parking, engineering works, public footpaths and hard and soft landscaping, underground services, and all ancillary and enabling works, with all matters reserved except for vehicular access from Brymbo Road.
- 8.2 The various elements of the design of the Proposed Development, including the approach to access and movement, land use, existing and proposed vegetation, frontages and building heights are set out in the Design and Access Statement (DAS) prepared by Barton Willmore.

Development Principles

- 8.3 Based on the robust landscape baseline analysis, it is considered that sensitively and sympathetically located residential development can be accommodated successfully on the Site. As shown on **Figure 12: Landscape Opportunities and Constraints Plan**, a series of landscape design principles have been identified to enable development to respond to its context, and to minimise potential adverse effects on landscape character and visual amenity resulting from the Proposed Development.
- 8.4 The distribution of existing trees and hedgerow across the Site, together with their condition, is set out in the Arboricultural Constraints & Opportunities Report produced by Wardell-Armstrong (December 2018). It is noted that areas of existing tree planting within and adjacent to the Site are protected by Tree Preservation Orders as shown on Figure 9. It is also of note that none of the trees on the Site are identified as Category A, with the majority being Category C trees (i.e. ***"trees offering low or only temporary/transient landscape benefits"***²).

² Trees in relation to design, demolition and construction – Recommendations. (2012). 4th ed. BSI Standards Limited 2012.

- 8.5 The approach to the longer-term management and maintenance of existing and proposed landscape features including open space is set out within the Barton Willmore's holistic Landscape and Biodiversity Management Strategy Report (including Plan) (LBMS), included separately at **Appendix 7**.

Existing Vegetation

- 8.6 As set out in the Site Appraisal, existing vegetation on the Site is primarily concentrated within Areas 2 and 3; vegetation in Area 1 is limited to patches of scrub and ruderal species. Semi-mature tree planting in Area 2 forms part of a wider network of existing structural planting which extends through the study area, following the prevailing landform. Furthermore, the framework of hedgerows and tree belts in Area 3: Ty Cerrig sits within a network of vegetation in the wider agricultural landscape comprising hedgerow field boundaries, tree belts and linear woodland blocks. As set out in the Visual Appraisal, this structure of planting within the Site also provides substantial screening of views such that from most vantage points, only partial views of the Site are possible. These field boundary hedgerows and tree belts are identified on Figure 9 and annotated in the SCPs and SAPs for reference.
- 8.7 In recognition of the important contribution existing vegetation makes to the landscape and visual characteristics of the landscape, it is the intention that the majority of existing trees and hedges would be retained, with only limited sections of hedgerows removed where required to create access to or allow internal connectivity within the Proposed Development. Furthermore, the retained hedgerows and tree belts would be reinforced through locally characteristic native planting.
- 8.8 The approach to the retention of existing vegetation is demonstrated spatially by Figures 9 and 10 of the DAS. As shown, the majority of existing trees and hedgerows would be retained as part of the Proposed Development, with a section of hedgerow H1 along Brymbo Road removed to provide the required visibility splays for the new access route.

Development Focal Point

- 8.9 The retained structures of the former steelworks represent an opportunity to provide a strong sense of place and natural focal point to the Proposed Development. The layout has therefore been designed to respond to this context of industrial heritage, creating an opportunity to enhance the setting of the Brymbo Steelworks Scheduled Monument.

Proposed Structural Planting

- 8.10 The Illustrative Masterplan (DAS Page 19) demonstrates the outline strategy for landscape planting, including the retention of existing trees and the provision of new planting.
- 8.11 As set out previously, existing semi-mature tree planting within Area 2: Connecting Parcel forms a strong structural element in the local landscape which is reflective of the character of the wider area, with belts of woodland and trees extending along valley sides.
- 8.12 A core structural planting route through the Site has therefore been identified to reinforce the existing planting and integrate the Proposed Development into the vegetative structure of the wider landscape. This strategic structural planting would also break up and assimilate new built form. In order to enhance the rural character of the western area, new structural planting will be introduced within the developable areas to break up the built elements from views from the south, as well as to integrate new planting with the existing robust boundary vegetation.
- 8.13 As set out in the Visual Appraisal there are framed partial views of Field 4 in Area 3: Ty Cerrig from Esclusham Mountain and the Clwydian Range AONB. For this reason, a block of native woodland is proposed in the western extent of the field. This woodland block would, on establishment, lead to the full visual enclosure of Field 4 in these views, and also provide physical containment of the Proposed Development from the west, thereby creating a buffer between proposed houses and the existing electricity sub-station adjacent to Ty Cerrig.

Proposed Canopy Trees

- 8.14 Within Area 3: Ty Cerrig, the provision of canopy trees/clumps of canopy trees along the northern flank of Ty Cerrig will help to assimilate and soften built-form in views from the north, tying into the prevailing character of existing ridgelines in the vicinity. Canopy tree planting along the eastern edge of Area 1: Main Steelworks Site will frame views out to the valley and soften, screen and filter views of new built-form from the valley to the south, and from the settled ridgeline to the east of the site. Use of planting patterns that reduce the prominence of artificial landform in views from the valley will also contribute to this development principle.

Strategic Public Open Space

- 8.15 As identified in the Visual Appraisal, the southern part of Area 3: Ty Cerrig (Field 1) is the most sensitive in terms of views to and from the surrounding landscape. Therefore, this part of the Site has been set aside as strategic open space, thereby addressing open views from Esclusham Mountain within the Clwydian Range AONB. This will also provide an opportunity for high quality public amenity green space on the edge of the Proposed Development, for the benefit of existing and future residents in the area.
- 8.16 Within Area 1: Main Steelworks Site, an additional strategic open space will be provided for benefit of residents and to alleviate dominance of built form, which is strongly perceived in the recently constructed housing to the south of the Site. Public open space at the heart of the Proposed Development would also help to create a strong sense of place for the scheme within close proximity to the retained heritage and scientific focal point of the Former Steelworks and Brymbo Fossil Forest SSSI.

Pedestrian Connectivity

- 8.17 The existing network of PRow within the Site would be retained as part of the layout of the Proposed Development, linked with new pedestrian and cycling routes. Existing unsightly security fencing would be removed, thereby enhancing the setting of pedestrian routes. The Proposed Development would also enhance existing wider recreational routes, including providing better access to the dismantled railway for cyclists/walkers and provide new, sustainable transport routes to better connect the Site with the existing settlement of Brymbo.

Development Frontages

- 8.18 The approach to the proposed frontages of new built-form focuses on enhancing the sense of place and maximising the amenity value of the Proposed Development. Key interfaces between developable areas and open space, landscape planting and SuDS features have been identified to allow new elements of built form to interact positively with existing and proposed landscape features. This includes creating areas of set-back development in two strategic locations, specifically near Offa's Dyke on the western boundary of Area 3 and along the edge of the plateau landform on the eastern boundary of Area 1.
- 8.19 The area of development near Offa's Dyke should provide positive frontages of built-form in this area to respect the heritage setting and incorporate footpaths into the development frontage. In terms of the eastern boundary the development should provide variations in set-back to avoid dominating built-form appearance on the skyline

when seen from the valley and the east of the Site. Along with canopy tree planting, there is also the opportunity to frame views into and out of the site from the edge of the landform and to avoid patterns of built-form that emphasise artificial landform.

Building Heights

- 8.20 In order to minimise the impact on views from the AONB to the south-west, proposed built form on the most elevated part of Area 3: Ty Cerrig is limited in height to 1.5 storeys (as set out in Figure 12 of the DAS).
- 8.21 Furthermore, the variation of proposed building heights on Area 1: Main Steelworks Site from two to three storeys will introduce a less regular profile of rooflines in comparison with recently constructed built form to the south of the Site. The 'stepping up' of new built form on the former steelworks site will reduce the prominence of the artificial landform and assist with the assimilation of the Proposed Development in the context of development rising up the hillsides.

9.0 SUMMARY OF EFFECTS

- 9.1 This section includes a summary of the landscape and visual effects of the Proposed Development at Year 1 and Year 15 after completion, the latter taking into account the substantive establishment of the planting proposals.
- 9.2 It is acknowledged that the construction phase will also result in a number of alterations to landscape character and visual amenity through the loss of landscape components and the addition of large-scale plant and machinery. In this regard the effects that will occur during construction will typically be adverse in nature, fluctuating in intensity due to the different operations occurring on the Site, and generally of a higher significance than those effects outlined in this section, albeit they will be temporary in nature.
- 9.3 Full details and commentary relating to the anticipated landscape and visual effects resulting from the Proposed Development are set out in **Appendix 4: Landscape Effects Table** and **Appendix 5: Visual Effects Table**. This includes for the value and susceptibility judgements informing the overall sensitivity of receptors and the magnitude of effects. The summary below includes overall significance of effects together with key commentary from the effects tables.

Landscape Effects - The Site and Its Landscape Features

- 9.4 The Proposed Development would lead to beneficial effects on the landscape features of Area 1: Main Steelworks Site due to the introduction of sensitively designed new built form, substantial areas of public open space, a new local centre and a school on an area of derelict post-industrial land. There would also be adverse effects resulting from the loss of open grassland and limited sections of existing hedgerows and tree belts in order to facilitate access through the development. These adverse effects are limited by the retention of substantial areas Area 3 as strategic open space. On balance the overall effect on the physical features of the Site would be **Neutral** significance at Year 1. At Year 15, following establishment of substantial numbers of trees and enhanced management of existing features, the overall effect would be **Minor Beneficial**.

Landscape Effects – LANDMAP Aspect Areas

- 9.5 In general, the most substantial landscape effects would be experienced by Aspect Areas that encompass the Site. Most notable of these is *VSAA WRXHMVS076 Former Brymbo Steelworks* which would be subject to direct effects that are **Moderate Beneficial** at Year 1 and **Major Beneficial** at Year 15. These effects are as a result of the provision of a sensitively designed and locally characteristic residential led mixed-

use development on an area of post-industrial derelict land, including substantial areas of new public open space, leading to enhancements of the perceptual qualities of the VSAA. These beneficial effects would increase in significance following the establishment of proposed tree planting, further enhancing the visual and sensory characteristics of the Aspect Area.

- 9.6 *CLAA WRXHMCL005 Brymbo-Gwersyllt* would be subject to direct landscape effects that are **Moderate Beneficial** at Year 1 and Year 15, due to the complete removal of a key negative characteristic noted in the Aspect Area description, i.e. the void in the area left by the closure of the steelworks. This would be replaced by a positively designed new mixed-use residential neighbourhood with a strong sense of place respecting and enhancing the cultural heritage setting.
- 9.7 In relation to *LHAA WRXHMLH039 Brymbo Industrial and Urban Area* there would be **Minor Beneficial** and **Moderate Beneficial** effects at Year 1 and Year 15 respectively. These effects are as a result of the introduction of informal public open space, landscape planting and substantial numbers of trees on an area with little or no habitat interest.
- 9.8 Other LANDMAP Aspect Areas that would be subject to direct effects are *CLAA WRXHMCL017 Mynydd Rhiwabon Esclusham* (**Minor Adverse** at Year 1 and Year 15) due to the introduction of new built form on Area 1: Ty Cerrig in an Aspect Area largely characterised by agricultural land, and *HLAA WRXHMLH009 Brymbo* (**Minor Beneficial** at Year 1 and Year 15) due to the sensitive design of the Proposed Development in relation to the heritage context of the Site.
- 9.9 *LHAA WRXHMLH031 Talwrn Grassland* would be subject to **Minor Adverse** effects at Year 1 reducing to **Negligible Adverse** effects at Year 15. These adverse effects are on the basis of the loss of limited characteristic features, namely grassland, from a small part of the Aspect Area, and its replacement with new built form on Area 3. Effects on this receptor are also limited by the substantial areas of the Site set aside as open space and enhanced management of existing landscape features as set out in the LBMS.
- 9.10 In relation to *VSAA WRXHMSV007 Ruabon & Esclusham Mountain* **Minor Adverse** effects at Year 1 reducing to **Neutral** effects at Year 15 would be experienced due to the introduction of built form on Area 3: Ty Cerrig. These effects would be indirect, only impacting on the setting of the VSAA, and perceived at a distance of over 3.5km. Following establishment of proposed planting, new built form would be virtually imperceptible in the wider setting of the Aspect Area.

Landscape Effects – Landscape Character Areas

- 9.11 In relation to *LCA 7d: West Wrexham Ridges and Valleys*, the Proposed Development would result in direct beneficial effects on Area 1: Main Steelworks Site due to the introduction of sensitively designed and locally characteristic built form, including substantial areas of open space and landscape planting on an area of derelict, post-industrial land. However, adverse effects would also occur as a result of the loss of a limited extent of the agricultural hinterland of existing settlements within the LCA. On balance, the LCA would be subject to a **Negligible Beneficial** effect at Year 1, increasing to **Minor Beneficial** at Year 15 following establishment of trees and assimilation of the Proposed Development within the LCA.
- 9.12 The following landscape features would experience effects that are either **Neutral** or **Negligible** (and adverse or beneficial) at Year 1 and Year 15:
- *GLAA WRXHMGL110 Brymbo;*
 - *VSAA WRXHMVS070 Wilderness & Llay Tips;*
 - *VSAA WRXHMVS075 Moss Valley & Ffrwd;*
 - *VSAA FLNTVS074 Llanfynydd narrow valley;*
 - *VSAA FLNTVS088 Cymau Traditional farmland;*
 - *VSAA WRXHMVS057 Terrace North & East of Wrexham;*
 - *VSAA WRXHMVS065 A483 Mold Road Corridor;*
 - *VSAA WRXHMVS082 Plas Power Park;*
 - *VSAA WRXHMVS073 West Wrexham Lower Slopes;*
 - *VSAA WRXHMVS007 Ruabon & Esclusham Mountain;*
 - *VSAA WRXHMVS011 Minera Limestone Scarp;*
 - *VSAA WRXHMVS010 Slopes to the East of Ruabon mountain;*
 - *VSAA FLNTVS087 Caergwrle slopes;*
 - *VSAA WRXHMVS074 Brymbo, Tanyfron & Pentre Broughton;*
 - *VSAA WRXHMVS060 Wrexham;*
 - *VSAA WRXHMVS018 Coedpoeth; and*
 - *VSAA WRXHMVS014 Mining & Quarrying Communities.*
- 9.13 In relation to GLAA WRXHMGL110 Brymbo, the effects are limited as there would be no perceptible impacts on the characteristic features of the area would be limited to the re-use of derelict post-industrial land which would not be out of character in the wider context.
- 9.14 In relation to the 16 VSAAAs listed above, indirect effects on the setting of these areas are limited by a combination of distance, and intervening vegetation or landform.

Visual Effects

- 9.15 The judgements in this assessment are based on site visits carried out during the winter months and therefore represent a worst-case scenario for visibility of the Proposed Development. In summer months, the adverse change in views resulting from proposed built form, and any consequent adverse effects, would generally be lessened.
- 9.16 The most substantial visual effects resulting from the Proposed Development would be experienced by visual receptors in close range to Area 1: Main Steelworks Site, including:
- *Road users travelling on Phoenix Drive;*
 - *Residents of recently constructed housing to the south of the Site;*
 - *Visitors to and People working at the retained structures of the Brymbo steelworks; and*
 - *Users of PRow BRY/38 and BRY/40 within the Site.*
- 9.17 The visual receptors listed above would all experience effects that are **Moderate Beneficial** at Year 1 and **Major Beneficial** at Year 15 as a result of open, close range views of Area 1. These visual receptors would experience a noticeable enhancement in the composition of views from that of derelict, post-industrial land, to that of high quality residential and mixed-use development, sensitively designed to reinforce local character, respect the local heritage setting and create a strong sense of place. The introduction of a substantial number of trees within proposed areas of public space would lead to a pronounced enhancement once established.
- 9.18 *Residents and people at their places of work in Brymbo* would experience a **Minor Beneficial** effect at Year 1, increasing in significance to **Moderate Beneficial** at Year 15. These effects are beneficial for the same reasons set out in paragraph 8.13 above, but are limited in their significance due to the limited number of receptors who would obtain these views. The overall beneficial effect is also lessened by limited deterioration of views experienced by the very small number of residents who have views of Area 3: Ty Cerrig.
- 9.19 A **Minor Adverse** effect at Year 1 would be experienced *by People travelling along Kent Road/Broughton Road* due to the prominent appearance of new built form on the eastern edge of Area 1, which would be perceived on the skyline, with the rest of the Proposed Development screened from view by intervening landform. However, at Year 15 this would become **Negligible Adverse** due to the establishment of substantial tree planting, which would be seen to assimilate and filter proposed built form.

- 9.20 *Residents of the settled ridgeline of Pentre Broughton* would be subject to **Moderate Adverse** effects at Year 1 due to the introduction of built form which would be visible on Area 1, curtailing existing views of the retained steelworks structures, and on Area 3, increasing the perception of built form seen on the skyline. Effects are limited by the locally characteristic and sensitive design of the Proposed Development, including limited development heights on the most elevated part of the Site and the presence of existing built form on the skyline, including housing in Mount Zion and electricity transmission infrastructure on the Site. As a result of the enhanced assimilation and filtering of views provided by established planting at Year 15, the residual effect would be **Minor Adverse**.
- 9.21 *Users of PROW BRY/0 adjacent to the western area of the Site* would experience a **Moderate Adverse** effect at Year 1 on the basis of open views across Area 3: Ty Cerrig. These visual receptors would experience a sequence of medium and close-range views of new built form on an area of agricultural land. These adverse effects are limited by the sensitive design of the Proposed Development, including substantial public open space and reduced ridgeline height on the most elevated parts of the Site, and the retention of the majority of field boundary hedgerows and tree belts such that only partial views would be possible. The enhanced assimilation and screening of built form provided by established tree planting would result in a reduction in significance to **Minor Adverse** at Year 15.
- 9.22 *Road users travelling on Long Lane* would experience a **Minor Adverse** effect at Year 1 and Year 15 resulting from the introduction of built form on Ty Cerrig which would be relatively conspicuous and seen against the skyline. These effects are limited by the sensitive design of the Proposed Development, including limited development height on the most elevated parts of the Site, and the presence of existing built form on the skyline, including residential housing in Mount Zion and electricity transmission infrastructure on the Site itself.
- 9.23 Open close-range views of Area 3: Ty Cerrig are available for *People travelling along Brymbo Road*. However, the impact of new housing would be limited by the retention of Field 1 as open space, the reduced ridgeline development height on the most elevated parts of the Site and the retention of the majority of hedgerows/tree belts within the Site. Nonetheless, a **Minor Adverse** effect would result from the introduction of the new access and junction on the road, together with the removal of a section of hedgerow on the southern boundary of the Site to facilitate visibility splays. Following establishment of substantial numbers of new trees together with reinforcement and enhancement of existing vegetation the significance of the adverse effect would reduce to **Negligible Adverse**.

- 9.24 *People using the PRow network/ Open Access land in the Clwydian Range AONB*, would experience **Minor Adverse** effects at Year 1 due to limited visibility of new built form in Ty Cerrig. These effects are limited by the substantial distance to the Site, the retention of the most exposed parts of the Site as open space, the incorporation of the majority of existing landscape structure and the limited development height on the most elevated parts of the Site. At year 15, due to the establishment of proposed trees, including a substantial woodland block in the western extents of the Site the Proposed Development would be virtually imperceptible, leading to effects which are **Neutral**.
- 9.25 The following visual receptors would experience effects that are either **Neutral** or **Negligible** (and adverse or beneficial) at Year 1 and Year 15:
- *People travelling on the road network within Brymbo;*
 - *Residents of Tanyfron;*
 - *Residents and people at their places of work in Wrexham;*
 - *Residents and people at their places of work in Coedpoeth;*
 - *Residents of Cymau; and*
 - *People travelling on the road/PRow network to the north of Cymau.*
- 9.26 Visual effects on these receptors are highly limited by distance from the Site and the screening provided by intervening landform and existing vegetation.

Night-time Assessment

Wrexham

- 9.27 Wrexham is a large urban settlement. As a night-time receptor, it comprises an extensive area of high artificial light intensity that is strongest at its urban core, reducing towards the edges of the settlement, as shown on **Figure 11**.
- 9.28 Owing to the receptor's high artificial light intensity, it is judged to be of **Low** value, where it comprises an un-designated area within which the experience of the night sky is not perceived as tranquil or remote.
- 9.29 Furthermore, the receptor is considered to be of **Low** susceptibility to the type of development proposed. The addition of point light sources, light spills and other light clutter associated with residential development is unlikely to lead to substantial consequences on the overall baseline. Where new light sources are perceived they would be in the context of an existing strongly settled landscape. Consequently, the night-time receptor's overall sensitivity is judged to be **Low**.

- 9.30 Primary mitigation, inherent in the design of the Proposed Development, includes extensive areas of open space, limited height of proposed built form, and careful location of more intense land uses such as commercial activities, on less elevated landform in Area 1. This will further minimise the influence of light spill, light clusters and more intense point sources of artificial light on the receptor.
- 9.31 At Year 1, there would be a **Very Small** magnitude of effect, with only a slight change to the existing night-time receptor, affecting only a limited area - namely the western fringes of the urban area and small settlements that are located within the urban fringe west of Wrexham. This will likely result in barely perceptible additional sky glow and distant additional point sources, albeit unlikely to be noticeable in the wider context.
- 9.32 When the magnitude of effect and sensitivity of the receptor are considered together it is judged that there will be a **Negligible Adverse** significance of effect, where alterations will result in a very slight deterioration of the existing night-time receptor, not uncharacteristic within the receiving landscape – which is predominantly strongly settled.
- 9.33 At year 15 it is judged that the magnitude of effect will remain **Very Small**, maintaining a **Negligible Adverse** effect significance.

Settlements of Brymbo, Pentre Broughton and New Broughton

- 9.34 The settlements of Brymbo, Pentre Broughton and New Broughton occupy a transitional landscape between the strongly settled and intensely lit townscape of Wrexham to the east and the less settled, more intrinsically dark, agricultural landscape to the west. Notwithstanding that the settlements of Brymbo, Pentre Broughton and New Broughton begin to coalesce in places and comprise large areas of artificial light associated with street lights and dwellings there are also large areas of open space. The open spaces lower the intensity of the artificial light baseline in comparison to Wrexham. This includes the large tract of vacant land of the Site.
- 9.35 The night-time receptor is considered to be of **Low** value: it is an un-designated landscape area and lacks any perception of tranquillity or remoteness owing to it being strongly settled and containing numerous street and dwelling lights as demonstrated in **NP N1** and **NP N7**.
- 9.36 The receptor is strongly influenced by existing sources of artificial light on the basis of the area primarily comprising settlement, albeit with limited areas of relatively unsettled landscape. The receptor is likely to be able to accommodate residential development with little or no consequences upon its overall night-time baseline, and therefore

identified as having **Low** susceptibility. Consequently, the night-time receptor's sensitivity is judged to be **Low**.

- 9.37 At Year 1, there would be a limited change to the existing night-time receptor, owing to the existing prevalence of artificial light. When the zone is considered as a whole, the Proposed Development will affect a relatively limited area, however it will result in perceptible additional point sources, light spill and the potentials for light clutter, albeit not uncharacteristic for residential development. The Proposed Development is considered unlikely to lead to perceptible additional sky glow.
- 9.38 The Proposed Development includes extensive areas of open space, limited ridgeline height and carefully considered siting of land uses associated with clusters of light, such as commercial activities, on less elevated areas of the Site. This will further minimise the influence of light spill, light clusters and more intense point sources of artificial light on the receptor. On this basis, the receptor would be subject to a **Small** magnitude of change, resulting in a **Negligible Adverse**.
- 9.39 At Year 15, the level of perceived additional lighting would be broadly the same, resulting in the **Negligible Adverse** effect being maintained.

Esclusham Mountain and the Clwydian Range AONB

- 9.40 This receptor comprises an inherently dark landscape and night-sky, with few notable clusters of point sources of light, light clutter or light spill within the area. This is strongly demonstrated by **Figure 11** where it has the lowest light intensity possible on the scale. Sky glow and numerous clusters of point sources of light and light clutter can be perceived emanating from Coedpoeth and interrupting the receptor's inherent darkness as shown in **NP N12** and **NP N13**.
- 9.41 There is also strong sky glow and lighting on the horizon perceived further eastwards and northwards emanating from the settlements of Wrexham, Gresford and Llay and the Cheshire plain beyond, as well as the settled areas of Pentre Broughton and Brymbo. Correspondingly, the night-time landscape is heavily influenced by this well-lit, distant landscape of point sources clusters of light, glare and light spill in the distance (approximately 5km), as shown in **Figure 11** and **NP 12** and **13**.
- 9.42 The night-time receptor is considered to be of **High** value: It comprises a landscape area of nationally recognised, and designated, value where the experience of the landscape and night sky is perceived as relatively tranquil and remote.

- 9.43 The susceptibility of the landscape is judged to be **High**, where the receptor is likely to have little scope to accommodate the type of development proposed without undue consequences upon the overall night-time baseline. The introduction of residential development to the receptor would harm its intrinsic night sky and night-time landscape character. Consequently, the night-time receptor's overall sensitivity is judged to be **High**.
- 9.44 In addition to the above, the design of the Proposed Development includes the retention of Field 1 as open space, the retention of the majority of existing vegetation, the limited height of proposed built form and the siting of more intense land uses on Area 1 commercial activities to lower development points of the Site. This will further minimise the influence of light spill, light clusters and more intense point sources of artificial light on the receptor.
- 9.45 At Year 1, it is considered that there would be a **Very Small** magnitude of effect as it is anticipated that there would only be a very slight change to the existing night-time receptor, affecting a limited area and resulting in barely perceptible additional sky glow, point light sources, light spills or light clutter.
- 9.46 When the magnitude of change and sensitivity of the receptor are considered together it is judged that there will be a **Negligible Adverse** significance of effect, where alterations will result in a very slight deterioration of the night-time receptor.
- 9.47 At year 15 it is judged that the magnitude of effect will remain **Very Small**, maintaining a **Negligible Adverse** significance of effect.

The Agricultural Landscape North-West of the Site

- 9.48 The night-time character of the receptor is predominantly one of intrinsic darkness in the landscape with strong perception of the night sky. The intrinsic darkness within the landscape stems from its dominant agricultural land use, with limited existing point sources, clusters or spill lighting.
- 9.49 The value of the night time receptor is judged to be **Medium** where the experience of the night sky is perceived as moderately tranquil and remote, owing to its relative distance from more strongly settled landscapes; notwithstanding that the receptor is not designated for its landscape quality.
- 9.50 The susceptibility of the landscape to lighting associated with the type of development proposed is considered to be **High**, owing to the intrinsic darkness of the landscape and night sky and distance from more strongly settled landscapes. Consequently, the

receptor is likely to have only limited scope to accommodate the type of development proposed without undue consequences upon the overall night-time baseline. Consequently, the night-time receptor's overall sensitivity is judged to be **Medium**.

- 9.51 At Year 1, there would be a **Very Small** magnitude of effect, owing to the distance of the receptor from the Site and relatively small scale of the Site in relation to the receptor.
- 9.52 When the magnitude of change and sensitivity of the receptor are considered together it is judged that there will be a **Negligible Adverse** significance of effect, where alterations will result in a very slight deterioration of the night-time receptor, not uncharacteristic within the receiving landscape – which is predominantly strongly settled.
- 9.53 At year 15 it is judged that the magnitude of change will remain **Very Small**, maintaining a **Negligible Adverse** significance of effect.

The Agricultural Landscape North of The Site, Including Cymau

- 9.54 The character of the receptor is predominantly one of intrinsic darkness in the landscape and enhanced perception of the night sky, as shown in **Figure 11** and **NP N11**. The intrinsic darkness within the landscape stems from its dominant agricultural land use, with few sources of point, cluster or spill lighting. The relative distance from strongly settled landscapes reduces the influence of sky glow.
- 9.55 This notwithstanding, point, cluster and spill lighting is apparent in distant landscape areas and these have some influence on the character of the receptor's night sky and night-time landscape.
- 9.56 The value of the night time receptor is judged to be **Medium** where the experience of the night sky is perceived as moderately tranquil and remote, owing to its relative distance from more strongly settled landscapes; notwithstanding that the receptor is not designated for its landscape quality.
- 9.57 The susceptibility of the landscape to lighting associated with the type of development proposed is considered to be **High**, owing to the intrinsic darkness of the landscape and night sky. Consequently, the receptor is likely to have only limited scope to accommodate the type of development proposed without undue consequences upon the overall night-time baseline. Consequently, the night-time receptor's sensitivity is judged to be **High**.

- 9.58 It is considered that due to the screening of intervening landform and, there are unlikely to be any views of new lighting within the Proposed Development. Although there is the potential for additional sky glow resulting from the introduction of lighting on the Site, this would not be perceptible in the context of existing glow emanating from the wider settlements of Brymbo, Pentre Broughton, Wrexham and the Cheshire Plain. Therefore, the magnitude of effect at Year 1 and Year 15 will be **None**, resulting in **Neutral** effects.

10.0 SUMMARY AND CONCLUSION

Summary

- 10.1 Barton Willmore Landscape Planning and Design were commissioned by Brymbo Developments Ltd in April 2018 to undertake a Landscape and Visual Impact Assessment of land at the Brymbo Former Steelworks, Wrexham.
- 10.2 The Site is located to the north-west of Wrexham in a landscape strongly influenced by settlements including Coedpoeth and Gwersylt, Brymbo to the north and New Broughton, Brynteg and Pentre Broughton to the east.
- 10.3 The Site covers an area of approximately 32.59 hectares of former industrial land which has been remediated and regraded, formed of two distinct areas separated by a steeply sloping bank. It is located immediately to the south of the existing settlement of Brymbo and the remaining structures of the former Brymbo Steelworks, and approximately 700m to the north of Tanyfron.
- 10.4 At a wider scale, the Site is located in a transitional landscape between the strongly settled areas of Wrexham, and a predominantly agricultural landscape, albeit scattered with small settlements and farmsteads, extending to the north and west, and with areas of upland heaths to the south-west.
- 10.5 The Site is within a transitional topographical landscape between the broad vale of the Cheshire Plain to the east, and the mountainous landform of the Clwydian Range to the west. At a local level, the Site is situated on the east facing slopes of a broad foothill flanked by a valley and ridgeline to the east. To the north, levels fall to the valley of the River Cegidog, before rising again to Hope Mountain.
- 10.6 The rural landscape in the study area is characterised by a network of field boundary hedgerows with numerous canopy trees. Strong linear belts of woodland extend along valley floors, enclosing river corridors and flanking ridgelines.
- 10.7 The local area has been subject to extensive historic development as a result of the growth of settlements around substantial industrial and mineral extraction facilities, followed by subsequent dramatic changes as a result of the closure of those industries.

- 10.8 Key designations within the Site and the local area include:
- Offa's Dyke Scheduled Monument within the western part of the Site;
 - Brymbo Fossil Forest SSSI and remaining structures of Brymbo Steelworks, subject to Scheduled Monument and Listed Building status, to the north; and
 - The Clwydian Range AONB encompassing Esclusham Mountain to the south-west.
- 10.9 A thorough desk study including all relevant landscape planning policy, published landscape character assessment and LANDMAP Aspect Areas, has been carried out to inform the strategic design principles of the Proposed Development.
- 10.10 The eastern part of the Site is characterised by a broad and level artificial plateau of open, derelict post-industrial land with panoramic views out to the local landscape and beyond to the Cheshire Plain.
- 10.11 The rising landform of Ty Cerrig, comprising fields of open, restored agricultural land has a more rural character, greater enclosure resulting from robust field boundary vegetation, but also expansive views to the south and east.
- 10.12 At a local scale, the Site is visible from close range vantage points on surrounding roads and PRoW, limited parts of Brymbo, the west facing slopes of the ridgeline to the east and isolated areas within the valley to the south. It is seen in the context of existing built-form on adjacent higher ground and in filtered and glimpsed views between intervening built-form and vegetation.
- 10.13 In long range views, the site is partially visible from the southern slopes of Hope Mountain. The artificial landform of the steelworks site is apparent and the north facing slopes of Ty Cerrig are also visible in the context of existing built form on the skyline. The southern part of Ty Cerrig is visible from Esclusham Mountain to the south-west.
- 10.14 The Site sits within a transitional night-time landscape between the well-lit areas of Wrexham and the Cheshire Plain in the east of the study area, to the intrinsically dark rural landscape to the west, albeit still under strong influences of artificial light emanating from the aforementioned areas of settlement. The area local to the Site is characterised by numerous light sources associated with residential and commercial land uses and street lighting in and around settlements.
- 10.15 As a result of the Landscape and Visual Appraisal, a series of development principles have been established in order to reduce or avoid adverse effects on landscape character and visual amenity resulting from the proposed development. These have informed the layout and design of the Proposed Development through an iterative

design process strongly founded on an understanding of context, character and visual amenity.

- 10.16 The Proposed Development would lead to a number of beneficial effects on landscape and visual receptors due to the introduction of new, sensitively designed built form on the eastern part of the Site, replacing existing derelict land with locally characteristic built form, open space and substantial tree planting.
- 10.17 There would also be adverse effects on landscape and visual receptors relating to the introduction of new built form on the western part of the Site due to its existing, principally agricultural character. However, these negative effects are mitigated, to an extent, by the strategic design principles that have strongly influenced the design of the Proposed Development and the existing context and character of the Site and its landscape/townscape context.
- 10.18 It is notable that out of the full range of identified receptors for landscape, visual and night-time effects, eight would be subject to beneficial effects that are either Major or Moderate significance. Conversely, only two receptors would be subject to Major or Moderate effects that are adverse. The remainder of the receptors would experience effects (beneficial or adverse) that are Minor, Negligible or Neutral in significance.
- 10.19 As a result, the balance of these pronounced beneficial and limited adverse effects is such that the overall impact of the Proposed Development would be beneficial.

Conclusion

- 10.20 The Proposed Development would introduce a new, residential led, mixed-use neighbourhood on an area of post-industrial land, part restored and part derelict. It would tie together existing detached communities and provide positive enhancements to adjacent cultural heritage features, creating a strong sense of place for a landscape scarred by the closure of industrial activities, and it would reinforce local character through sensitive design based on a thorough understanding of context.
- 10.21 On Ty Cerrig, the Proposed Development would lead to the loss of some characteristic landscape features including open fields and limited existing vegetation, however these impacts would be perceived in the context of a landscape strongly influenced by built form including electricity transmission infrastructure and housing on adjacent elevated landform in Mount Zion. Furthermore, the adverse impact on receptors is reduced by the extensive and considered use of strategic open space and structural planting, the distribution and height of proposed built form, the extensive planting of new canopy

trees, including native species, and the enhanced management of existing and proposed landscape features as set out in the Landscape and Biodiversity Management Strategy.

- 10.22 It is therefore considered that the Proposed Development can be accommodated on the Site without undue adverse effects on landscape character and visual amenity.

Brymbo Former Steelworks, Wrexham: Appendix 1: LVIA and Night-Time Assessment Methodology

Prepared on behalf of Brymbo Developments Ltd

March 2019

A.1 LVIA METHODOLOGY

Introduction

A.1.1 The Landscape Institute and the Institute of Environmental Management & Assessment's Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA 3), 2013, notes in Chapter 1 that Landscape and Visual Impact Assessment (LVIA) relates to:

"... 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"

A.1.2 The methodology employed in carrying out the LVIA of the proposed development on land at the Brymbo Former Steelworks, Wrexham (the 'Proposed Development') has been drawn from the guidance set out in the GLVIA 3.

A.1.3 LVIAs are undertaken by professionals who are also typically involved in the design of the landscape and the preparation of subsequent management proposals. This can allow the assessment to proceed as an integral part of the overall scheme design. Judgements are based on training and experience, and supported by clear evidence and reasoned argument.

A.1.4 The purpose of LVIAs is to identify the potential for, and assess the likely effects of, change resulting from development. Landscape and visual assessments are separate, although linked, procedures. A distinction is made between:

- landscape - landscape character and the elements and features that contribute to it (landscape receptors); and
- visual - people who experience views within the landscape (visual receptors).

A.1.5 There are typically four key stages to LVIA, as follows:

- Baseline Studies;
- Design;
- Assessment of Landscape and Visual Effects; and
- Cumulative Assessment (should this be required).

Baseline Studies

A.1.6 The purpose of baseline studies is to record the existing landscape features, characteristics, the way the landscape is experienced and potential visual receptors. The following are typically undertaken as part of the baseline studies:

- Identification of the extents of the study area. The extent of this is based on professional judgement and may vary depending on the type of development proposed and its specific location;
- A desktop study of patterns and scale of landform, land use and built development, relevant current planning policy (including landscape designations) and landscape character publications; and
- Site/context landscape and visual appraisal visit.

Design and Mitigation

A.1.7 LVIAs are undertaken by professionals who are also often involved in the design of the landscape, site design, and the preparation of subsequent management proposals. The design and assessment stages are iterative, with stages overlapping in part.

A.1.8 Mitigation measures are embedded within the design of the Proposed Development as a result of the desk based study and field work. These measures, such as new planting (assumed 1m growth every 3 years) and the siting of specific built elements, are termed 'Primary Mitigation'. Effective Primary Mitigation strategies avoid or reduce adverse effects by ensuring the key principles of the design of the development, as noted above, are sympathetic with the existing baseline.

A.1.9 Additional recommended measures to reduce adverse effects are termed 'Secondary Mitigation.' These may be illustrated in material accompanying the proposal, including a Design and Access Statement.

A.1.10 Typical Secondary Mitigation strategies can include:

- Additional design detail including building materials or landscape design approaches, including indicative species;
- A Landscape and Biodiversity Management Strategy to secure ongoing enhancement of landscape features;
- A Construction Environmental Management Plan to minimise effects arising during the construction process, typically including tree protection; and
- A programme of appropriate monitoring, agreed with the regulatory authority, so that compliance and effectiveness can be readily monitored and evaluated.

Assessment of Landscape Effects

A.1.11 GLVIA 3 Paragraph 5.1 states that:

"An assessment of landscape effects deals with the effects of change and development on landscape as a resource".

A.1.12 The significance of landscape effects is derived from a combination of assessments of the **sensitivity** of the landscape receptor and the **magnitude** of effect (change) experienced as a result of the Proposed Development.

Sensitivity of Landscape Receptors

A.1.13 The sensitivity of a landscape receptor is a combination of the **value** of the landscape receptor and the **susceptibility** of the landscape receptor to the type of change proposed, using professional judgement.

Landscape Value

A.1.14 The assessment of value is based on a combination of the importance of landscape-related planning designations and the following attributes:

- Landscape quality (condition): the measure of the physical state of the landscape. It may include the extent to which typical landscape character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
- Scenic quality: the extent that the landscape receptor appeals to the visual senses;
- Perceptual aspects: the extent that the landscape receptor is recognised for its perceptual qualities (e.g. remoteness or tranquillity);
- Rarity: the presence of unusual elements or features;
- Representativeness: the presence of particularly characteristic features;
- Recreation: the extent that recreational activities contribute to the landscape receptor; and
- Association: the extent that cultural or historical associations contribute to the landscape receptor.

A.1.15 Landscapes, including their character and features, may be designated for their landscape and visual qualities at a range of levels (national, county and local level).

A.1.16 The overall value for each landscape receptor is categorised as either High, Medium or Low.

Table 1.1: Landscape Value

Level	Criteria
High	Landscape area of distinctive components and characteristics that may also be nationally designated for scenic beauty. A landscape feature that makes a strong positive contribution to landscape character e.g. a mature tree or woodland.
Medium	Landscape area of common components and characteristics that may be designated at county or borough level for its landscape and visual qualities. A landscape feature that makes some positive contribution to landscape character.
Low	Landscape area/feature of inconsequential components and characteristics, undesignated and with little or no wider recognition of value, although potentially of importance to the local community.

Landscape Susceptibility

A.1.17 The susceptibility of the landscape is a measure of its vulnerability to the type of development proposed, without undue consequences for the maintenance of the baseline situation. Landscape character/features of low susceptibility would have a high capacity to accommodate change, and landscape character/features of high susceptibility would have a low capacity to accommodate change. The following criteria are taken into consideration in the assessment of the susceptibility of landscape character, although not all criteria are equally applicable or important within a given landscape / type of development proposed:

- Landform;
- Pattern/Complexity;
- Composition;
- Landcover;
- Relationship of a given landscape area to existing settlements or developments; and
- Potential for appropriate mitigation within the context of existing character and guidelines.

A.1.18 With regard to landscape features, susceptibility relates to the potential for loss/retention of the relevant features in relation to the type of development proposed; and the ease with which such elements may be replaced, where appropriate.

A.1.19 Susceptibility of landscape character/ features is categorised as High, Medium or Low, as set out in Table 1.2.

Table 1.2: Landscape Susceptibility

Susceptibility	Criteria
High	The receptor is likely to have little scope to accommodate the type of development proposed without undue consequences upon its overall integrity.
Medium	The receptor is likely to have some scope to accommodate the type of development proposed without undue consequences upon its overall integrity.
Low	The receptor is likely to be able to accommodate the type of development proposed with little or no consequences upon its overall integrity.

A.1.20 Based on the combination of value and susceptibility, an assessment of landscape sensitivity is reached, defined as High, Medium or Low. Typically a high value and high susceptibility receptor would result in a receptor of high sensitivity; and a low value and low susceptibility receptor would result in a receptor of low sensitivity.

Landscape Magnitude of Effect

A.1.21 The landscape magnitude of effect is informed by judgements about the precise nature of the change brought about by the Proposed Development both in terms of the existing landscape character and landscape elements / features and the addition of new landscape elements / features, and its duration and reversibility, as set out in Table 1.3.

Table 1.3: Landscape Magnitude of Effect

Magnitude	Criteria
Large	Pronounced change to the existing landscape receptor that may affect an extensive area. The change may be long-term or may be irreversible.
Medium	Partial change to the existing landscape receptor that may affect a relatively extensive area. The change may be medium-term or may be irreversible.
Small	Limited change to the existing landscape receptor that may affect a relatively limited area. The change may be short-term or reversible.
Very Small	Very slight change to the existing landscape receptor that may affect a limited area. The alteration may be short-term or reversible.
None	No change to the existing landscape receptor.

Assessment of Visual Effects

A.1.22 GLVIA 3 Paragraph 6.1 states that:

"An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity".

A.1.23 The significance of visual effects is derived from a combination of assessments of the **sensitivity** of the visual receptor and the **magnitude** of effect experienced as a result of the Proposed Development.

Viewpoint Selection

A.1.24 In order to assess the effects on visual receptors, a selection of publicly accessible viewpoints is made. This could include representative viewpoints (e.g. representing views of users of a particular footpath) and specific viewpoints (e.g. a key view from a specific visitor attraction).

A.1.25 Views may be categorised as either near distance, medium distance or long distance with the relevant distances dependant on the size and nature of the development, based on professional judgement.

A.1.26 The type of view is typically described as transient (i.e. experienced when moving) or fixed (i.e. from a static location). It is also described in terms of the degree of screening or openness (e.g. open or uninterrupted; filtered (including where partially screened) by vegetation or other structures; or curtailed by intervening land form, built form or vegetation) and the angle of view (e.g. frontal or oblique).

Sensitivity of Visual Receptors

A.1.27 The sensitivity of a visual receptor is a consideration of the **value** of the view and the **susceptibility** of the visual receptor, the latter being primarily based on consideration of the extent to which a visual receptor is focused on appreciation of the landscape. Professional judgement is used to determine these factors, based on considerations set out in Table 1.4 and Table 1.5.

Table 1.4: Value of Views

Value	Criteria
High	View of/from a location that is likely to be of national importance, either designated or with national cultural associations.
Medium	View of/from a location that is likely to be of local importance, either designated or with local cultural associations.
Low	View of/from a location that is not designated, with minimal or no cultural associations.

Table 1.5: Susceptibility of Visual Receptor

Susceptibility	Criteria
High	• People at their place of residence; • People engaged in outdoor recreation, including users of Public Rights of Way (PRoW), whose attention is likely to be focused on the landscape; and • People travelling along recognised scenic routes or where their appreciation of the view contributes to the amenity experience of their journey.
Medium	• People engaged in outdoor sport and recreation, where their appreciation of their surroundings is incidental to their enjoyment; and • People travelling on secondary roads or country lanes, rail or other transport routes.
Low	• People travelling on major roads; and • People at their place of work.

A.1.28 The sensitivity of a visual receptor results from the combination of value and susceptibility and is rated as high, medium or low. Typically a high value and high susceptibility receptor would result in a receptor of high sensitivity; and a low value and low susceptibility receptor would result in a receptor of low sensitivity.

Visual Magnitude of Effect

A.1.29 In the evaluation of the effects on views and the visual amenity of the identified receptors, the magnitude of visual effect is typically described with reference to:

- The scale of change in the view with respect to the loss or addition of features in the view and changes in its composition. Factors contributing to this include:
- The angle of view in relation to the main activity of the receptor;
- The distance of the viewer from the Proposed Development;
- The extent of the area over which the changes would be visible;
- Whether or not the view is experienced in fixed or transient views and, in the latter, whether it is intermittent/glimpsed or continuous; and

- The duration of the change, whether temporary or permanent.

A.1.30 The criteria for the magnitude of visual effects is set out in Table 1.6.

Table 1.6: Visual Magnitude of Effect

Magnitude	Criteria
Large	The proposals will cause a pronounced change to the existing view, resulting in the loss or addition of features that will substantially alter the composition of the view. The change may be long-term or may be irreversible.
Medium	The proposals will cause a noticeable change in the view, resulting from the loss or addition of features in the view and will noticeably alter the composition of the view. The change may be medium-term or may be irreversible.
Small	The proposals will cause a limited change in the view, which would not materially alter the composition of the view. The change may be short-term or reversible.
Very Small	The proposals will cause a barely perceptible change in the view. The change may be short-term or reversible.
None	No change discernible in the view.

Night-Time Assessment Methodology

A.1.31 The methodology for the assessment of the landscape and visual effects resulting from the Proposed Development is based on established principles of good practice drawn from the following documents:

- Lighting in the Countryside: Towards Good Practice¹ (Now withdrawn but still represents good practice);
- Guidance Notes for the Reduction of Obtrusive Light²;
- International Dark-Sky Association Website³; and
- Planning Practice Guidance: Light Pollution⁴.

A.1.32 This methodology has been prepared to guide the assessment of lighting associated with a development proposal in landscape and visual terms, focusing on potential effects on the character of the landscape and the night sky, and also effects on specific visual receptors where appropriate. Lighting Impact Assessments, including the assessment of light pollution

¹ Department for Communities and Local Government (1997) Lighting in the Countryside: Towards Good Practice [accessed at <https://webarchive.nationalarchives.gov.uk/20120920012017/http://www.communities.gov.uk/documents/planningandbuilding/pdf/158352.pdf>]

² The Institution of Lighting Professionals (2011) Guidance Notes for the Reduction of Obtrusive Light [accessed at <https://www.theilp.org.uk/documents/obtrusive-light/>]

³ International Dark Sky Association. 2019. International Dark Sky Association. [ONLINE] Available at: <https://www.darksky.org/>. [Accessed 18 February 2019]

⁴ Department for Communities and Local Government (2015) Planning Practice Guidance [accessed at <http://planningguidance.planningportal.gov.uk>]

as a statutory nuisance on public health and the environment, are beyond the scope of this assessment methodology.

Night-Time Baseline

A.1.33 In addition to the information gathered as part of the desktop study for the landscape and visual appraisal, the baseline conditions of the study area at night have been identified through desk study, mapping and night-time Site visits. The night-time baseline is primarily determined by the existing distribution of artificial and natural light sources perceived in the landscape, on the horizon and in the sky.

A.1.34 Light sources can be categorised in a number of ways, including specific point sources or clusters of point sources; light spill/trespass; glare; sky-glow perceived above lit areas; light clutter; and transient or intermittent sources such as aircraft, moving vehicles, trains and aviation warning lights.

A.1.35 The night-time baseline is also strongly influenced by the intrinsic darkness of the landscape or night sky wherein natural light sources in the sky, including celestial objects and natural phenomena, can be perceived to a greater or lesser extent.

A.1.36 The night-time baseline provides a descriptive benchmark for determining the overall sensitivity to lighting of the character of, or specific visual receptors in, the study area, and the capacity of the landscape to accommodate new lighting, as well as informing the design of the development and where possible avoiding or mitigating adverse effects.

Night-Time Receptors

A.1.37 In order to provide a robust assessment of the potential effects of the Proposed Development on the night-time baseline, a series of Night-Time Receptors are identified. Night-Time Receptors are defined as a geographical zone within the study area where there is a broadly consistent character in relation to the perception of light and dark within the night sky and the landscape. The night-time characteristics of these areas may be demonstrated graphically by night time photography and night-time satellite imagery.

A.1.38 Where appropriate, the identification of specific night-time visual receptors may also be used to describe the effects resulting from the Proposed Development on the night-time visual amenity of receptors who are likely to be focused on the night-time landscape and night sky. This may be appropriate where there is a night-time view that is readily obtained, likely to be experienced by people at night and recognised for its specific visual qualities at night, for example a known stargazing location or a campsite in an area of dark skies.

Sensitivity of Night-Time Receptors

A.1.39 The sensitivity of a Night-Time Receptor results from the combination of the **value** of the receptor and the **susceptibility** of that receptor to lighting that would typically be included with development of the type proposed, using professional judgement.

Night-Time Receptor Value

A.1.40 Landscapes, including their character and features, may be designated for their landscape and visual qualities at a range of levels (national, county and local level). The overall value for each landscape receptor is categorised as either High, Medium or Low, in general accordance with Table 1.7 below.

Table 1.7: Value of Night-Time Receptors

Level	Criteria
High	Landscape area of nationally recognised value and/or within which the experience of the landscape and night sky is perceived as tranquil and remote. Typically designated at international or national level, such as National Parks, IDA Dark Sky Park/Island/Reserve and AONB.
Medium	Landscape area of locally-recognised value and/or within which the experience of the night sky is perceived as moderately tranquil and remote. Typically designated at local level such as Conservation Areas, Registered Parks and Gardens etc.
Low	Un-designated landscape area and/or area within which the experience of the night sky is not perceived as tranquil or remote.

Night-Time Receptor Susceptibility

A.1.41 The susceptibility of the night-time landscape is a measure of its vulnerability to the type of development proposed, without undue consequences for the maintenance of the baseline situation. Susceptibility may be influenced by the perceived tranquillity of the night sky or remoteness of the landscape. Night-Time Receptors of low susceptibility would have a high capacity to accommodate change, and Night-Time Receptors of high susceptibility would have a low capacity to accommodate change. The following criteria are taken into consideration in the assessment of the susceptibility of night-time landscape receptors:

- Landform;
- Landcover;
- Rarity of the night-time landscape characteristics across a wider area;
- Relationship of a given landscape area to existing artificial light sources;
- Inherent darkness of the night sky as perceived in an area; and

- Typical night-time exterior lighting required for development of the type proposed.

A.1.42 The susceptibility of night-time receptors is categorised as High, Medium or Low, as set out in Table 1.8.

Table 1.8: Night-Time Receptor Susceptibility

Susceptibility	Criteria
High	The receptor is likely to have little scope to accommodate the type of development proposed without undue consequences upon the overall night-time baseline.
Medium	The receptor is likely to have some scope to accommodate the type of development proposed without undue consequences upon the overall night-time baseline.
Low	The receptor is likely to be able to accommodate the type of development proposed with little or no consequences upon its overall night-time baseline.

A.1.43 Based on the combination of value and susceptibility, an assessment of night-time receptor sensitivity is reached, defined as High, Medium or Low. Typically a high value and high susceptibility receptor would result in a receptor of high sensitivity; and a low value and low susceptibility receptor would result in a receptor of low sensitivity.

A.1.44 Where specific night-time visual receptors are identified, the standard LVIA methodology is used to establish their sensitivity. i.e. the value of the view for these receptors and their susceptibility to changes in view. Typically, as these viewpoints are chosen for their value as places to experience night-time views, the views are likely to be of high value. As the viewer is there to experience the view and their attention is focused on the landscape and the night sky, they will also typically have a high susceptibility to development proposals that lead to a deterioration in the night-time view.

Magnitude of Night-Time Effects

A.1.45 The magnitude of night-time effects is informed by judgements about the precise nature of the change brought about by the Proposed Development both in terms of the existing night-time baseline and the addition of new sources of light, and the extent to which they are perceived within the landscape.

Table 1.9: Night-Time Magnitude of Effect

Magnitude	Criteria
Large	Pronounced change to the existing night-time receptor that may affect an extensive area, resulting in substantial additional sky glow/point light sources/light spills/light clutter.
Medium	Partial change to the existing night-time receptor that may affect a relatively extensive area, resulting in noticeable additional sky glow/point light sources/light spills/light clutter.
Small	Limited change to the existing night-time receptor that may affect a relatively limited area resulting in perceptible additional sky glow/point light sources/light spills/light clutter.
Very Small	Very slight change to the existing night-time receptor that may affect a limited area, resulting in barely perceptible additional sky glow/point light sources/light spills/light clutter.
None	No change to the existing night-time receptor.

A.1.46 In order to draw conclusions about the significance of night-time effects, the combination of the sensitivity of the receptors and the magnitude of effect are considered together with the use of professional judgement.

Glossary of Terms

Sky Glow – General illumination of the night sky above conurbations and any areas where there is substantial artificial light. It comprises aspects of reflected light from illuminated surfaces, direct upward light from lighting installations and intrusion light, which is light that falls outside the specific area to be lit.

Glare – The brightness of a light source when viewed against a dark background. Most often occurring when the light source itself is directly visible and not shielded.

Light Intrusion (or ‘trespass’) – Light that falls on areas beyond those that are intended to be lit by a particular source.

Light Clutter – bright, confusing and excessive groupings of light sources.

Aviation Warning Lights – Red intermittent flashing lights typically positioned on radio masts and wind turbines.

Significance of Effects

- A.1.47 In order to draw conclusions about the significance of landscape, visual and night-time effects, the combination of the sensitivity of the receptors and the magnitude of effect are considered for the Proposed Development at Year 1 of the operational phase (once the Proposed Development has been completed) and at Year 15.
- A.1.48 The significance of effects are rated on a scale of Neutral to Major. The assessment of significance of effects is subject to professional judgement but in broad terms, where a receptor of High sensitivity experiences a Large magnitude of effect as a result of the Proposed Development, the significance of effect is likely to be Major. Conversely, where a receptor of Low sensitivity experiences a Very Small magnitude of effect as a result of the Proposed Development, the significance of effect is likely to be Negligible.

Figure 1.1: Significance of Effects

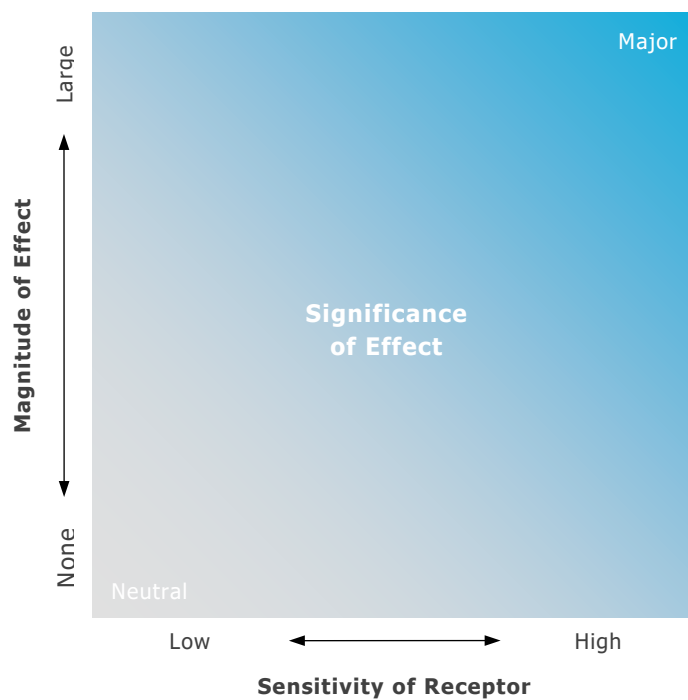
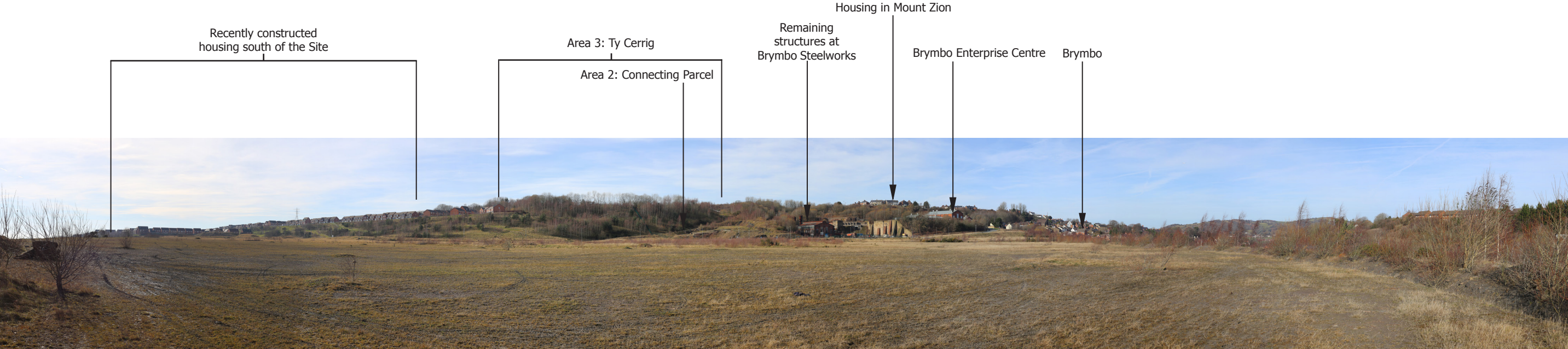


Table 1.10: Significance of Landscape Effects – Criteria

Significance of Landscape Effect	Criteria
Major Beneficial	Alterations that result in a pronounced improvement of the existing landscape resource. Valued characteristic features would be restored or reintroduced as part of the Proposed Development.
Moderate Beneficial	Alterations that result in a partial improvement of the existing landscape resource. Valued characteristic features would be partially restored or reintroduced.
Minor Beneficial	Alterations that result in a limited improvement of the existing landscape resource. Characteristic features would be restored to a limited degree.
Negligible Beneficial	Alterations that result in a very slight improvement to the existing landscape resource, not uncharacteristic within the receiving landscape.
Neutral	Neither beneficial nor adverse effects on the existing landscape resource.
Negligible Adverse	Alterations that result in a very slight deterioration to the existing landscape resource, not uncharacteristic within the receiving landscape.
Minor Adverse	Alterations that result in a limited deterioration of the existing landscape resource. Characteristic features would be lost to a limited degree.
Moderate Adverse	Alterations that result in a partial deterioration of the existing landscape resource. Valued characteristic features would be partially lost.
Major Adverse	Alterations that result in a pronounced deterioration of the existing landscape resource. Valued characteristic features would be wholly lost.

Table 1.11: Significance of Visual Effects – Criteria

Significance of Visual Effect	Criteria
Major Beneficial	Alterations that typically result in a pronounced improvement in the existing view.
Moderate Beneficial	Alterations that typically result in a noticeable improvement in the existing view.
Minor Beneficial	Alterations that typically result in a limited improvement in the existing view.
Negligible Beneficial	Alterations that typically result in a barely perceptible improvement in the existing view.
Neutral	Neither beneficial nor adverse effects on the existing view.
Negligible Adverse	Alterations that typically result in a barely perceptible deterioration in the existing view.
Minor Adverse	Alterations that typically result in a limited deterioration in the existing view.
Moderate Adverse	Alterations that typically result in a noticeable deterioration in the existing view.
Major Adverse	Alterations that typically result in a pronounced deterioration in the existing view.



SITE APPRAISAL PHOTOGRAPH A: VIEW SOUTH-WEST FROM FORMER BRYMBO STEELWORKS SITE



SITE APPRAISAL PHOTOGRAPH B: VIEW SOUTH-EAST FROM FORMER BRYMBO STEELWORKS SITE



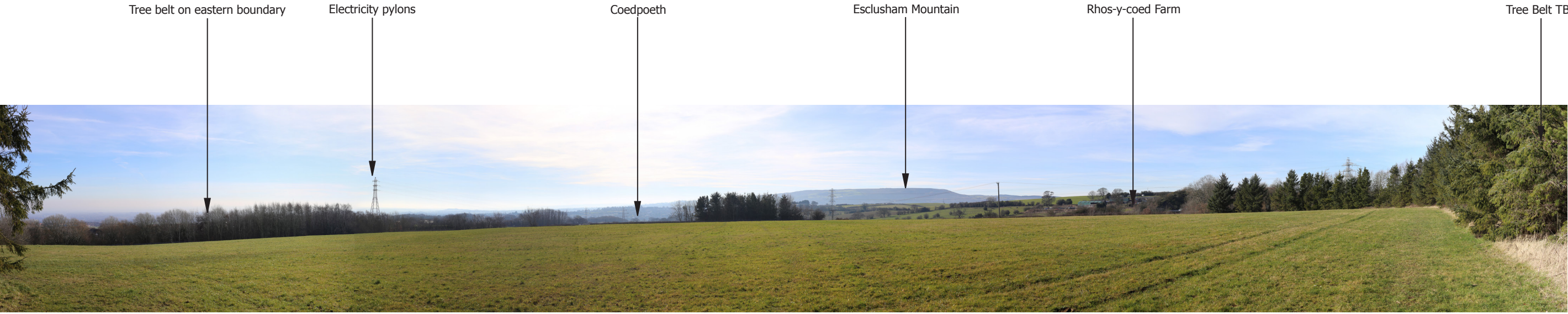
SITE APPRAISAL PHOTOGRAPH C: VIEW NORTH-EAST FROM PHOENIX DRIVE ADJACENT TO BRYMBO STEELWORKS RETAINED STRUCTURES

BRYMBO, FORMER STEELWORKS

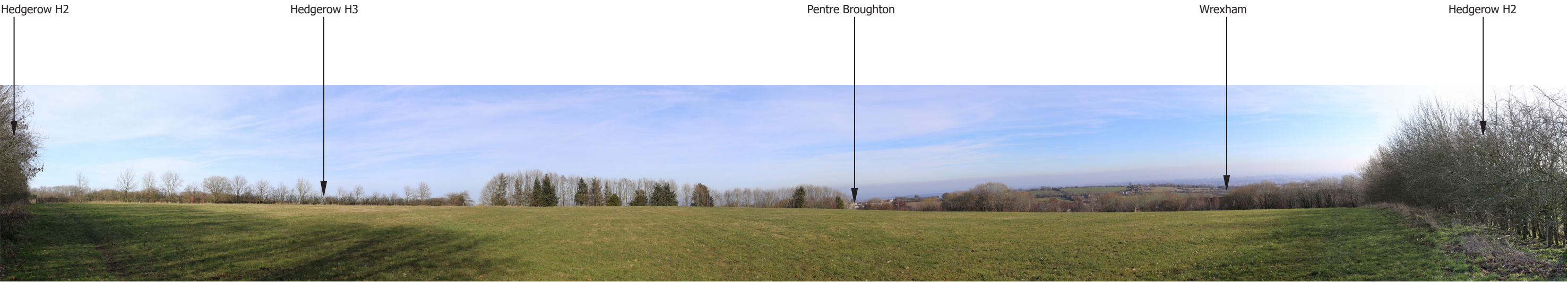
**SITE APPRAISAL
PHOTOGRAPHS: A - C**

**DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968**

**BARTON
WILLMORE**



SITE APPRAISAL PHOTOGRAPH D: VIEW SOUTH-WEST FROM TY CERRIG



SITE APPRAISAL PHOTOGRAPH E: VIEW NORTH-EAST FROM TY CERRIG



SITE APPRAISAL PHOTOGRAPH F: VIEW WEST FROM TY CERRIG

BRYMBO, FORMER STEELWORKS

SITE APPRAISAL
PHOTOGRAPHS: D - F
DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968





SITE APPRAISAL PHOTOGRAPH G: VIEW EAST FROM TY CERRIG



SITE APPRAISAL PHOTOGRAPH H: VIEW SOUTH FROM TY CERRIG

BRYMBO, FORMER STEELWORKS

SITE APPRAISAL
PHOTOGRAPHS: G - H
DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968



Appendix 3: Landscape Effects

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
The Site and Its Physical Features	Medium Sensitivity The Site is not designated and includes relatively common components and characteristics. Area 1: Main Steelworks Site is of low landscape condition and scenic qualities, albeit with strong cultural and historical associations. The remainder of the Site exhibits relatively high scenic and perceptual aspects, which together with recreational use of the existing footpath network, raises the overall value of the Site to Medium. Area 1 is considered to have low susceptibility on account of its strong relationship with existing settlement and derelict current landcover. Area 3: Ty Cerrig is deemed as having a higher susceptibility as a result of its elevated landform, tempered by its visual relationship with existing settlement, for example at Mount Zion. On balance the Site is considered to have Medium susceptibility.	Large	Neutral	Large	Minor Beneficial	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on the Site. In Area 1: Main Steelworks Site, this would lead to the introduction of sensitively designed new built form on a derelict site that currently forms a void in the surrounding landscape, that character of which is already strongly influenced by surrounding residential areas. The Proposed Development would also introduce new areas of high quality public open space, including substantial numbers of new trees, in an area largely devoid of vegetation, and furthermore would establish a strong sense of place by way of the sensitive approach to placemaking strongly related to the designated heritage/scientific features adjacent to the Site. This part of the Proposed Development would lead to substantial beneficial effects on the character of the site and its vicinity. Introduction of development on the rising agricultural fields of Ty Cerrig would lead to some adverse impacts on account of the loss of open grassland and limited sections of hedgerow. However, these adverse effects are limited by the retention of substantial areas of Area 3: Ty Cerrig as open space, the introduction of substantial tree planting including native trees and better physical containment of the existing sub-station; a tangible landscape detractor. Furthermore, the character of Ty Cerrig is already influenced by residential built form at Mount Zion, together with significant landscape detractors including electricity pylons and dilapidated security palisade fencing. On balance, whilst the magnitude of effect is considered to be large, the overall significance would be neutral. Year 15 Following establishment of substantial tree and hedgerow planting throughout the Site, enhanced management of existing landscape features, including ecological mitigation principles as set out in the LBMS, together with the assimilation of new built form within the townscape, the overall effect would be of greater beneficial significance.
LANDMAP Aspect Areas						
CLAA WRXHMCL005 Brymbo-Gwersylt	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area is principally defined by existing areas of residential settlement, thereby having a strong existing relationship with development of the type proposed. It is therefore judged to have Low susceptibility.	Medium	Moderate Beneficial	Medium	Moderate Beneficial	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on an area of post-industrial waste ground. As a result, the 'void' from the closure of the steelworks, as described in the Aspect Area key characteristics, would be replaced by high quality residential housing, a school and public open space, sensitively designed to respond to the context of the Site, and provide a strong sense of place through sensitive response to the cultural/heritage setting. Furthermore, the introduction of new built form would not be an incongruous feature in the context of a widely settled area. Year 15 Following establishment of proposed planting and enhanced management of existing features as set out in the LBMS, the Proposed Development would be further assimilated within the surrounding landscape/townscape. However, the overall effect would remain unchanged.

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
CLAA WRXHMCL017 Mynydd Rhiwabon Esclusham (lower slopes)	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area is principally characterised by agricultural land-uses or mining activities, with very little settlement. However, the Aspect Area also has a strong visual and physical relationship with adjacent settled areas, including Wrexham, Brymbo and Coedpoeth. On balance the susceptibility of the Aspect Area is judged to be Medium.	Small	Minor Adverse	Medium	Minor Adverse	Year 1 The Proposed Development would lead to direct impacts to a limited extent of the Aspect Area resulting from the introduction of new built form on an area of restored post-industrial land, now agricultural land. Agricultural land would be replaced by high quality residential housing sensitively designed to respond to the context of the Site. Proposed open space / orchard would retain / reinforce the existing landscape framework of canopy trees and field boundaries. The substantial provision of open space included within Area 3: Ty Cerrig further limits the effect, such that the receptor would only be subject to a limited change. Nevertheless, the Proposed Development would lead to the loss of some characteristic features. Year 15 Following establishment of proposed planting and enhanced management of existing features as set out in the LBMS, the Proposed Development would be further assimilated within the surrounding landscape/townscape. However, the effect would remain unchanged.
GLAA WRXHMGL110 Brymbo	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area is principally defined by existing areas of residential settlement, thereby having a strong existing relationship with development of the type proposed. It is therefore judged to have Low susceptibility.	Very Small	Neutral	Very Small	Neutral	Year 1 The Proposed Development would lead to direct impacts to a relatively small part of the Aspect Area resulting from the introduction of new built form on an area of post-industrial land. However, the impact on the characteristic features of the area would be limited to the re-use of derelict post-industrial land which would not be out of character in the wider context. Furthermore, the impact on geological or geomorphological features would be no greater than where there is existing development in surrounding areas. Year 15 The effect would remain unchanged at Year 15.
HLAA WRXHMLH009 Brymbo	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area is principally defined by existing areas of residential settlement, also encompassing wider areas of the wider rural hinterland to the west of Brymbo. It therefore has a strong existing relationship with development of the type proposed. It is therefore judged to have Low susceptibility.	Small	Minor Beneficial	Small	Minor Beneficial	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on an area of post-industrial / part restored agricultural land. With impacts limited to a relatively small part of the Aspect Area. Existing derelict and agricultural land would be replaced by high quality residential housing, a school and public open space, sensitively designed to respond to the context of the Site, including the setting of heritage features through offsets of development and the positive placemaking principles as set out in the DAS including the 'Heritage Hub'. Year 15 Following establishment of proposed planting and enhanced management of existing features as set out in the LBMS, the Proposed Development would be further assimilated within the surrounding landscape/townscape. However, the effect on the HLAA would remain unchanged.
LHAA WRXHMLH039 Brymbo Industrial and Urban area	Low Sensitivity The overall value identified in the LANDMAP Aspect Area record is low, equating to a Low value for this assessment. The Aspect Area is entirely defined by existing areas of residential settlement. It therefore has a strong existing relationship with development of the type proposed, and is therefore judged to have Low susceptibility.	Small	Minor Beneficial	Medium	Moderate Beneficial	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on an area of post-industrial waste ground with little habitat value beyond extant residential gardens and consequently few natural habitats. Existing vacant land would be replaced by high quality residential housing with extensive new public open space, substantial numbers of new canopy trees including native species, new ornamental planting within residential areas. This would lead to substantial increases in potential habitat areas of the Site, albeit on a relatively small extent of the Aspect Area. Year 15 Following establishment of proposed planting including substantial numbers of new trees and enhanced management as set out in the LBMS, the habitat potential of this part of the Site would be further increased, with greater habitat links provided to surrounding areas as part of the overall Green Infrastructure strategy.

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
LHAA WRXHMLH031 Talwrn Grassland	High Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area encompasses large areas of principally agricultural land, largely devoid of existing settlement. Furthermore, grassland habitat would by its nature be replaced by development of the type proposed. Therefore, the Aspect Area is considered to have High susceptibility to development of the type proposed.	Small	Minor Adverse	Small	Negligible Adverse	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on Area 3: Ty Cerrig; post-industrial land restored to agricultural use. This would inevitably result in the loss of some characteristic features i.e. grassland field in agricultural use. However, as set out in the Preliminary Ecological Appraisal (PEA) by Wardell-Armstrong, the “<i>habitat is common and widespread and of low ecological value. It does not pose a constraint to development</i>”. Furthermore, the impacts would be limited to a relatively small part of the overall Aspect Area, and the retention of large parts of the Site as open space. Nonetheless, adverse effects would result from the loss of characteristic features. Year 15 Following establishment of proposed planting including substantial numbers of new trees, enhanced management of existing features as set out in the LBMS, and ecological enhancements as set out in the PEA, the Proposed Development would lead to improvements to retained areas of grassland habitats, leading to a reduction in the adverse effect significance.
LANDMAP Visual and Sensory Aspect Areas						
VSAA WRXHMSV070 Wilderness & Llay Tips	Low Sensitivity The overall value identified in the LANDMAP Aspect Area record is low, equating to a Low for this assessment. The Aspect Area is principally defined by largely derelict and neglected areas of former mining land use, with strong physical and visual relationships with Llay and Llay Industrial Estate. It is therefore judged to have Low susceptibility to development of the type proposed.	None	Neutral	None	Neutral	Year 1 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.
VSAA WRXHMSV076 Former Brymbo Steelworks	Low Sensitivity The overall value identified in the LANDMAP Aspect Area record is low, equating to a Low value for this assessment. The Aspect Area is principally defined by areas of existing residential settlement or post-industrial wasteland. It is therefore judged to have Low susceptibility to development of the type proposed.	Large	Moderate Beneficial	Large	Major Beneficial	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on an area of post-industrial land noted as having few positive visual and sensory qualities: 'Unattractive...Noisy...Exposed...Threatening', owing to 'Disturbed' topography and lack of diversity, seasonal interest and 'generally inappropriate' construction materials; views are often unattractive and of wasteland/ open development plots. Existing land uses would be replaced by high quality residential housing, reinforcing local vernacular and public open space including substantial landscape improvements. The Aspect Area is relatively small, such that an extensive part of it would be substantially changed. Year 15 Following establishment of proposed planting including substantial numbers of new trees the Proposed Development would lead to a pronounced additional improvement to the Visual and Sensory characteristics of the Aspect Area.
VSAA WRXHMSV075 Moss Valley & Ffrwd	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Medium value for this assessment. The Aspect Area is narrow and linear, and is principally defined by wooded valleys, although in places it also has a strong physical and visual relationship with adjacent settlement. It is therefore judged to have a Medium susceptibility to development of the type proposed.	None	Neutral	None	Neutral	Year 1 Due to the combination of tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
VSAA FLNTVS074 Llanfynydd Narrow Valley	High Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area is narrow and linear and is principally defined by wooded valley albeit with sporadic settlement including Ffrith. It is therefore judged to have a High susceptibility to development of the type proposed.	None	Neutral	None	Neutral	Year 1 Due to the combination of tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.
VSAA FLNTVS088 Cymau Traditional Farmland	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Medium value for this assessment. The Aspect Area is principally defined by agricultural land enclosed by woodland with the settlement of Cymau located centrally within the area. The area has a relatively strong visual relationship with other existing settlements, including Brymbo and Gwersylt. It is therefore judged to have a Medium susceptibility to development of the type proposed.	Very Small	Negligible adverse	Very Small	Neutral	Year 1 The Proposed Development would lead to indirect impacts on the setting of the Aspect Area resulting from the introduction of new built form perceived in the context of the wider settled landscape. The Proposed Development would not be an incongruous feature albeit it would lead to a very slight change in the setting of the Aspect Area. Year 15 Following establishment of proposed planting and assimilation of the Proposed Development, effects on the setting of the Aspect Area would be largely imperceptible.
VSAA WRXHMVS057 Terrace North & East of Wrexham	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Medium for this assessment. The Aspect Area is principally defined by rolling agricultural land and field patterns, albeit with a physical and visual relationship with settled areas, including Llay and Llay Industrial Estate. It is therefore judged to have Low susceptibility to development of the type proposed.	None	Neutral	None	Neutral	Year 1 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.
VSAA WRXHMVS065 A483 Mold Road Corridor	Low Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Medium for this assessment. The large Aspect Area is principally defined by agricultural land with sporadic small settlement and farmsteads. Its setting is heavily influenced by adjacent settlements including Gwersylt and Pentre Broughton, as well as the A283 transport route. It is therefore judged to have Low susceptibility to development of the type proposed.	Very Small	Neutral	Very small	Neutral	Year 1 The Proposed Development would lead to very small indirect effects on the setting of the Aspect Area that would be virtually imperceptible as a result of the introduction of new built form in the wider landscape. Year 15 The Proposed Development would lead to virtually imperceptible indirect effects on the setting of the Aspect Area.
VSAA WRXHMVS082 Plas Power Park	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Medium for this assessment. The Aspect Area principally comprises lowland agricultural land with sporadic small-scale settlement, which is physically separated from Wrexham by the A483. It is therefore judged to have High susceptibility to development of the type proposed.	None	Neutral	None	Neutral	Year 1 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
VSAA WRXHMVS007 Ruabon & Esclusham Mountain	High Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a medium for this assessment. However, owing to it being sited within the AONB the value is adjusted to a High . The Aspect Area is principally defined by areas of unenclosed upland heather moorland and agricultural field pattern at lower levels with some scarring related to mining. The Aspect Area has a visual relationship with settled areas, which are perceived in the valleys below. It is therefore judged to have High susceptibility to development of the type proposed.	Very Small	Negligible Adverse	Very Small	Neutral	Year 1 The Proposed Development would lead to indirect impacts resulting from the introduction of new built form on an area of restored post-industrial land, now in agricultural use, over 3.5km away. The setting of the Aspect Area would be subject to a very slight change due to the presence of new built form which would be perceptible on Field 4 of Ty Cerrig. The magnitude of the effect is reduced by the retention of Field 1 as strategic open space the retention and reinforcement of the existing landscape structure, and the limited ridgeline height of proposed built form on the highest parts of the Site. The landscape setting of existing settlement perceived in the valleys, with ridges largely free of built form would be virtually maintained. Year 15 Following establishment of proposed planting including substantial woodland planting on the western extents of the Site, the Proposed Development would be further assimilated within the surrounding landscape such that it would be virtually imperceptible and would neither deteriorate nor enhance the setting of the Aspect Area, resulting in Neutral effects.
VSAA WRXHMVS073 West Wrexham Lower Slopes	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is low, equating to a Medium value for this assessment. The Aspect Area is principally defined by agricultural land albeit adjacent to residential development where there is a strong visual and physical relationship with adjacent settled areas, including New Broughton and Pentre Broughton. It is therefore judged to have a Medium susceptibility to development of the type proposed.	Very Small	Neutral	Very Small	Negligible Beneficial	Year 1 The Proposed Development would lead to indirect impacts on the setting of the Aspect Area due to intervisibility, albeit only perceptible over very limited extents relative to the size of the Aspect Area. The Proposed Development would lead to a very slight increase in the influence of built form on the character of this chiefly unsettled landscape area. However, the change would be barely perceptible in the context of existing settled areas and would be also be perceived to reinforce locally characteristic built form. Year 15 Following establishment of substantial proposed planting the Proposed Development would be further assimilated within the landscape such that its impact on the setting of the Aspect Area would be less adverse. Furthermore, the establishment of new planting on the eastern edge of Area 1: Main Steelworks Site would diminish, to an extent, the influence of artificial landform on the setting of the area, thereby leading to very slight enhancement of the baseline.
VSAA WRXHMVS017 West Wrexham Hill Slopes	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Low value for this assessment. The Aspect Area is principally defined by agricultural, including restored post-industrial to agricultural, land. It is therefore judged to have Medium susceptibility to development of the type proposed.	Small	Minor Adverse	Small	Minor Adverse	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form in an area note as having " <i>a strong physical and visual link in terms of the setting for a number of small to medium sized settlements across the area - Brymbo, Minera, Tanyfron and Pentre Broughton</i> ". Impacts are limited by the extensive size of the Aspect Area in comparison to the areas directly affected, although the setting of the wider Aspect Area would also be indirectly affected by the appearance of new built form, albeit not an incongruous feature and heavily screened by existing vegetation. Nonetheless, due to the limited loss of some characteristic features, i.e. small-to-medium size fields on the Site, and their replacement with housing, the Aspect Area would be subject to adverse effects. Year 15 Following establishment of proposed planting and the enhanced management of existing features as set out in the LBMS, the Proposed Development would be increasingly screened and assimilated within the landscape, reducing the impact on the setting of the wider Aspect Area. This would also diminish, to a degree, the adverse direct impacts resulting from the introduction of new built form.

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
VSAA WRXHMVS011 Minera Limestone Scarp	High Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a medium value for this assessment. However, owing to it being partly sited within the AONB the value is adjusted to a High . The Aspect Area principally comprises agricultural land with sporadic settlement and farmsteads. It has a strong visual relationship with adjacent settled areas, including Coedpoeth and Minera. On this basis it is judged to have a Medium susceptibility to development of the type proposed.	Very Small	Negligible adverse	Very Small	Neutral	Year 1 The Proposed Development would lead to indirect impacts on the setting of the Aspect Area resulting from the introduction of new built form on an area of post-industrial land, over 2.5km away, within a well settled landscape. The changes would be almost imperceptible and partly mitigated by the retention of Field 1 as strategic open space. Nonetheless, a very slight increase in the presence of built form on the setting of the Aspect Area would result. Year 15 Following establishment of proposed planting and assimilation of built form within the landscape, effects on setting of the Aspect Area would be imperceptible.
VSAA WRXHMVS010 Slopes to the East of Ruabon mountain	High Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a medium value for this assessment. However, owing to it being partly sited within the AONB the value is adjusted to a High . The Aspect Area is principally defined by agricultural land, albeit with a visual relationship with adjacent settled areas, including Coedpoeth. It is therefore judged to have a Medium susceptibility to development of the type proposed.	Very Small	Negligible Adverse	Very Small	Neutral	Year 1 The Proposed Development would lead to indirect impacts resulting from the introduction of new built form in the wider setting of the Aspect Area. The changes would be almost imperceptible and partly mitigated by the retention of Field 1 as strategic open space. Nonetheless, a very slight increase in the presence of built form on the setting of the Aspect Area would result. Year 15 Following establishment of proposed planting and assimilation of built form within the landscape, effects on setting of the Aspect Area would be imperceptible.
VSAA FLNTVS087 Caergwrle Slopes	High Sensitivity The overall value identified in the LANDMAP Aspect Area record is high, equating to a Medium value for this assessment. The Aspect Area comprises upland agricultural land partly enclosed by woodland belts with very little settlement, albeit with a visual relationship with settled areas, including Brymbo and Pentre Broughton which are perceived within valleys. On this basis the Aspect Area is judged to have a High susceptibility to development of the type proposed.	Very Small	Negligible Adverse	Very Small	Negligible Adverse	Year 1 The Proposed Development would lead to indirect impacts on the setting of the Aspect Area resulting from the introduction of new built form perceived in the context of the wider settled landscape. The Proposed Development would not be an incongruous feature albeit it would lead to a very slight change in the setting of Aspect Area. Year 15 Following establishment of proposed planting and assimilation of the Proposed Development, effects on the setting of the Aspect Area would be reduced, albeit the change would still be perceptible to an extent.
VSAA WRXHMVS074 Brymbo, Tanyfron & Pentre Broughton	Low Sensitivity The overall value identified in the LANDMAP Aspect Area record is low, equating to a Low value for this assessment. The Aspect Area comprises areas of settlement including predominantly residential housing, distributed along ridgelines and on rising valley sides. It is therefore considered to have Low susceptibility.	Very Small	Neutral	Very Small	Neutral	Year 1 The Proposed Development would lead to indirect impacts on the setting of the Aspect Area resulting from the introduction of new built. However, the changes would only be perceptible from very limited extents of the area and would not perceptibly alter its fundamental characteristics. Furthermore, as a result of the sensitive design of the Proposed Development it would not be an incongruous feature in the wider settled landscape. The significance of effects is considered to be balanced between adverse and beneficial. Year 15 Following establishment of proposed planting and assimilation of the Proposed Development, the balance of adverse effects on the setting of the Aspect Area would be reduced, albeit the change would still be perceptible to a very limited extent.
VSAA WRXHMVS060 Wrexham	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is Moderate, equating to a Medium value for this assessment. The Aspect Area encompasses a major settlement comprising extensive areas of residential housing, offices and retail facilities set within a landscape of major transport routes. It is therefore considered to have Low susceptibility.	None	Neutral	None	Neutral	Year 1 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.

Landscape Receptor		Landscape Effects				
Feature / Area / Type	Sensitivity	Year 1		Residual (Year 15)		Notes
		Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
VSAA WRXHMVS018 Coedpoeth	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a Medium value for this assessment. The Aspect Area comprises an area of settlement including predominantly residential housing, sitting within a valley setting in a wider agricultural landscape It is therefore considered to have Low susceptibility.	None	Neutral	Very Small	Negligible Beneficial	Year 1 Due to the limited extents over which there would be indirect effects on the setting of the Aspect Area, together with the retention of Field 1 of Ty Cerrig as strategic open space, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Once established, a small area of proposed tree planting is likely to be perceived on the Site, leading to a barely perceptible increase in the wooded character of the ridgeline seen to the north of Coedpoeth resulting in a very slight improvement in the setting of the VSAA.
VSAA WRXHMVS014 Mining & Quarrying Communities	Medium Sensitivity The overall value identified in the LANDMAP Aspect Area record is moderate, equating to a medium value for this assessment. However, owing to it being partly (village of New Brighton) sited within the AONB the value is adjusted to a High value for this assessment. The Aspect Area has a very strong relationship with surrounding villages (Coedpoeth, Minera and New Brighton). It is therefore judged to have a Low susceptibility to development of the type proposed.	None	Neutral	None	Neutral	Year 1 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area. Year 15 Due to the combination of distance, tree cover and landform, there would be no perceptible impacts on the setting of the Aspect Area.
Landscape Character Areas						
LCA 7d: West Wrexham Ridges and Valleys.	Medium Sensitivity The LCA encompasses a landscape of varying condition with some perceptual qualities as a result of scenic qualities in places. The LCA primary comprises relatively common components and characteristics and is not widely designated, although it does contain limited areas of designated land e.g. Ancient Woodland. It has a limited sense of remoteness and tranquillity as a result if the proximity to Wrexham and major transport routes. There are some historical associations in relation to former mining activities and Offa’s Dyke. On this basis, the overall value of the LCA is Medium . The LCA is strongly influenced by existing settlements as it primarily encompasses Brymbo, Coedpoeth and Pentre Broughton and their more rural hinterlands. However, as noted in the LCA key characteristics, there is some sensitivity to large scale development as a result of the ridgeline topography. On balance the LCA is considered to have some scope to accommodate development of the type proposed and therefore of Medium susceptibility.	Medium	Negligible Beneficial	Medium	Minor Beneficial	Year 1 The Proposed Development would lead to direct impacts resulting from the introduction of new built form on an area of post-industrial land, partly in agricultural use, within a well-settled landscape. The magnitude of these effects is limited by the extensive size of the LCA relative to the Site. In Area 1: Main Steelworks Site, the Proposed Development would lead to substantial beneficial effects through the re-use of an extensive area of derelict land, and the provision of new locally characteristic built form and public open space. Conversely, the introduction of built form in Area 3: Ty Cerrig would result in a limited urbanisation of the rural hinterland of Brymbo. However, these negative impacts are mitigated, to an extent by the sensitive design of this part of the Site, including the retention of existing landscape structure, large areas of strategic open space and substantial new tree planting. Furthermore, the residential housing on ridgelines is not an incongruous feature in the LCA, as demonstrated by Pentre Broughton and Mount Zion. On balance, the combination of substantial beneficial and limited adverse effects would result in a negligible beneficial effect. Year 15 Following establishment of proposed planting including substantial numbers of new trees and enhanced management of existing features as set out in the LBMS, the Proposed Development would be further assimilated within the surrounding landscape/townscape. Furthermore, the overall condition of the LCA would be tangibly enhanced, leading to effects of greater beneficial significance.

Notes:

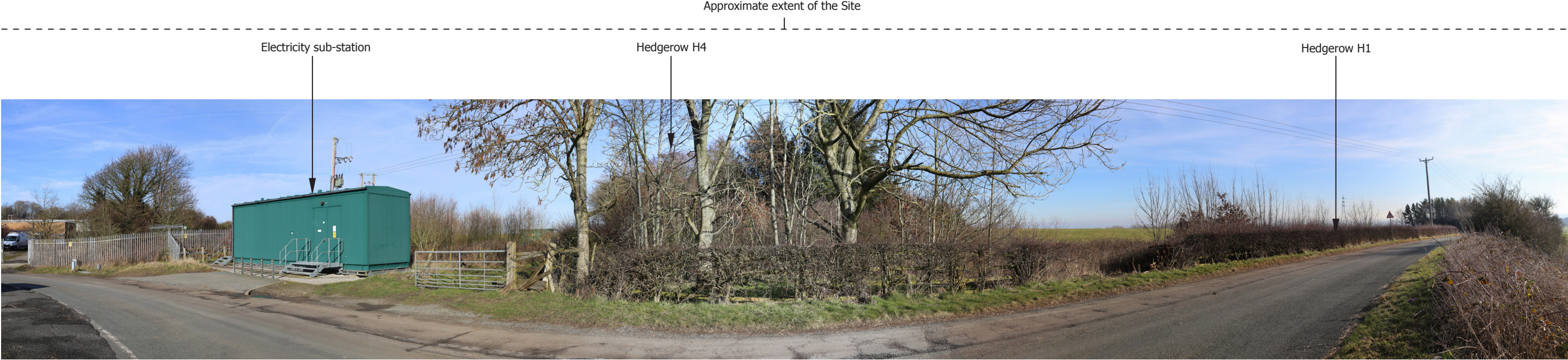
Level of sensitivity of receptor accounting for the value of the receptor and its susceptibility to the type of change proposed: High, Medium, Low

Magnitude of Effect: Large, Medium, Small, Very Small, None

Significance of Effect: Major, Moderate, Minor, Negligible or Neutral (may be Adverse or Beneficial)



SITE CONTEXT PHOTOGRAPH 1: VIEW NORTH FROM PHOENIX DRIVE
Distance: 15m / Elevation: 206m AOD



SITE CONTEXT PHOTOGRAPH 2: VIEW EAST FROM BRYMBO ROAD
Distance: 5m / Elevation: 243m AOD



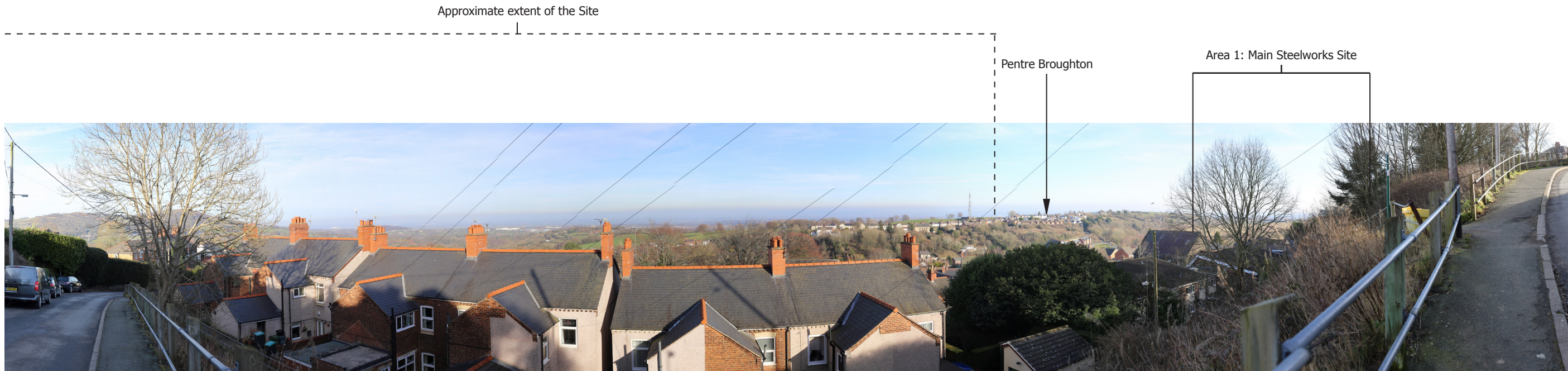
SITE CONTEXT PHOTOGRAPH 3: VIEW SOUTH FROM BLAST ROAD
Distance: 215m / Elevation: 240m AOD

BRYMBO, FORMER STEELWORKS

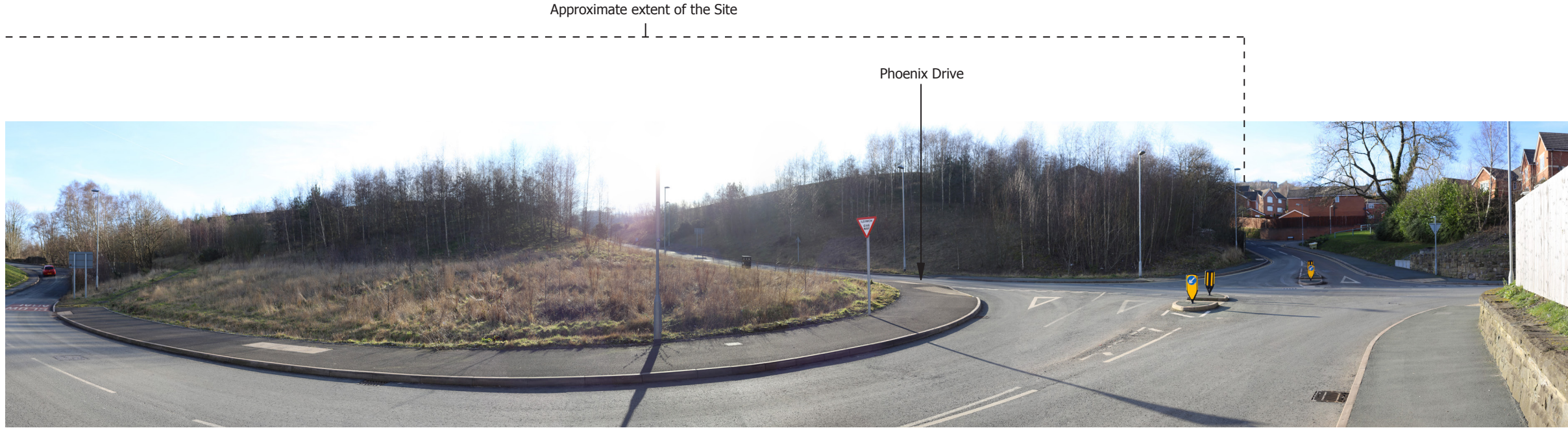
**SITE CONTEXT
PHOTOGRAPHS: 1 - 3**

**DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968**

**BARTON
WILLMORE**



SITE CONTEXT PHOTOGRAPH 4: VIEW SOUTH FROM PEN-Y-GRAIG ROAD, BRYMBO
Distance: 245m / Elevation: 225m AOD



SITE CONTEXT PHOTOGRAPH 5: VIEW SOUTH-WEST FROM RAILWAY ROAD/B5101
Distance: 100m / Elevation: 184m AOD



SITE CONTEXT PHOTOGRAPH 6: VIEW SOUTH FROM CLAYTON ROAD, BRYMBO
Distance: 295m / Elevation: 200m AOD

BRYMBO, FORMER STEELWORKS

**SITE CONTEXT
PHOTOGRAPHS: 4 - 6**
DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968

**BARTON
WILLMORE**



SITE CONTEXT PHOTOGRAPH 7: VIEW WEST FROM LONG LANE NEAR BRYNTEG
Distance: 735m / Elevation: 180m AOD



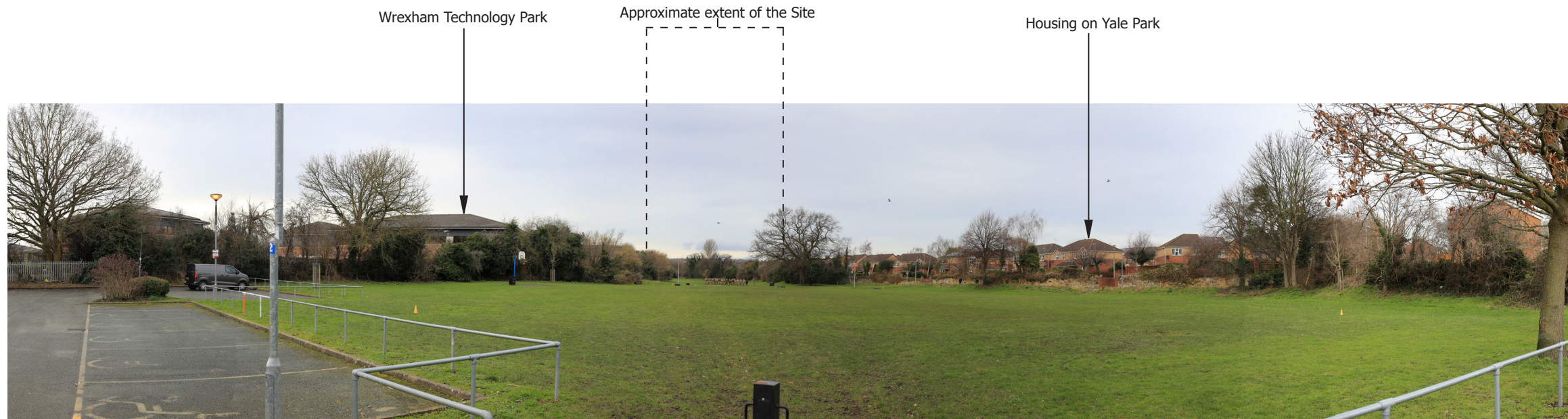
SITE CONTEXT PHOTOGRAPH 8: VIEW NORTH-WEST FROM KENT ROAD
Distance: 435m / Elevation: 153m AOD

BRYMBO, FORMER STEELWORKS

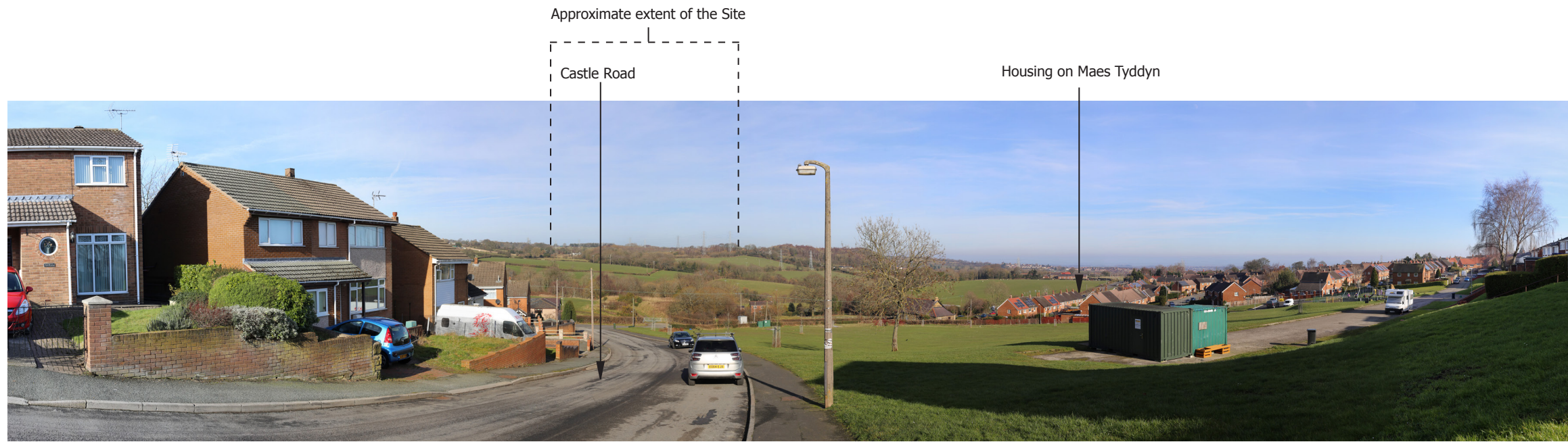
**SITE CONTEXT
PHOTOGRAPHS: 7 - 8**

**DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968**





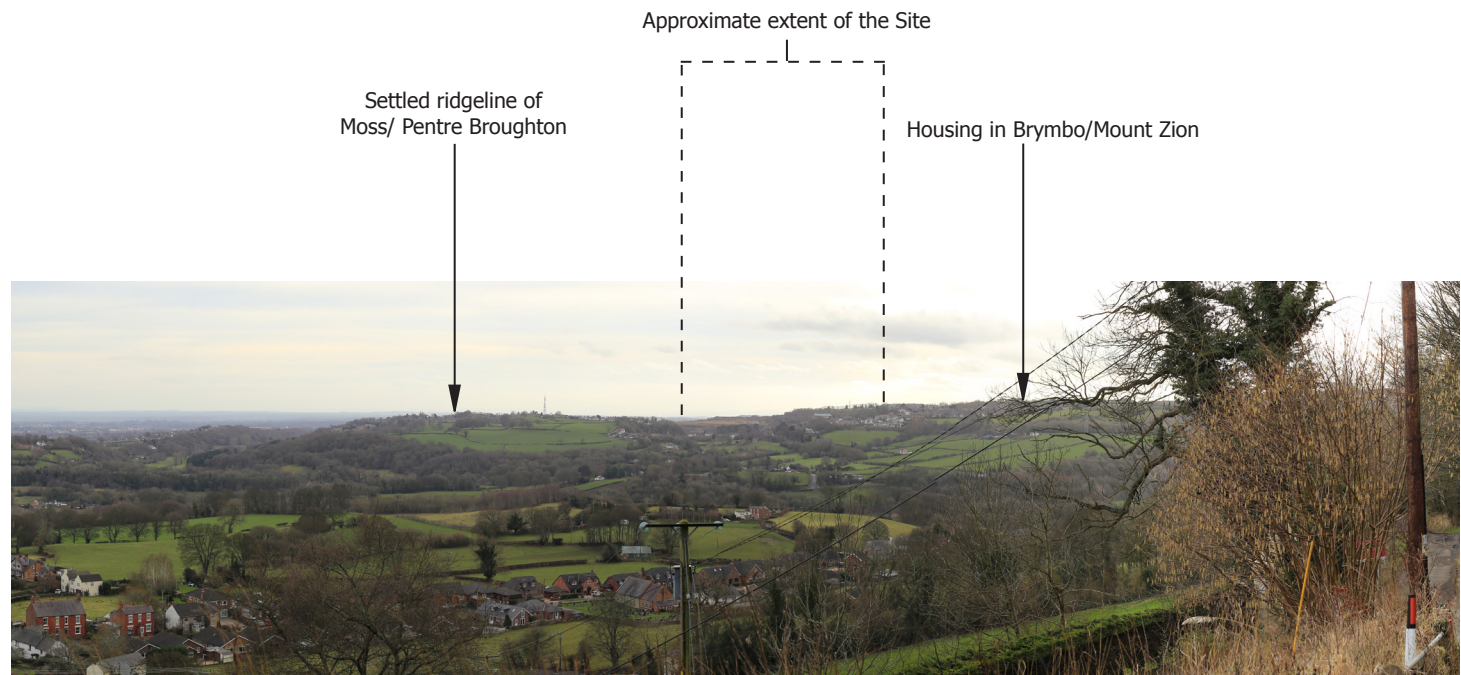
SITE CONTEXT PHOTOGRAPH 9: VIEW NORTH-WEST FROM MAESGWYN COMMUNITY CENTRE
 Distance: 3.62km / Elevation: 87m AOD



SITE CONTEXT PHOTOGRAPH 10: VIEW NORTH-EAST FROM CASTLE ROAD
 Distance: 1.61km / Elevation: 208m AOD

BRYMBO, FORMER STEELWORKS

**SITE CONTEXT
 PHOTOGRAPHS: 9 - 10**
DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968



SITE CONTEXT PHOTOGRAPH 11: VIEW SOUTH FROM CYMAU
 Distance: 2.50km / Elevation: 233m AOD

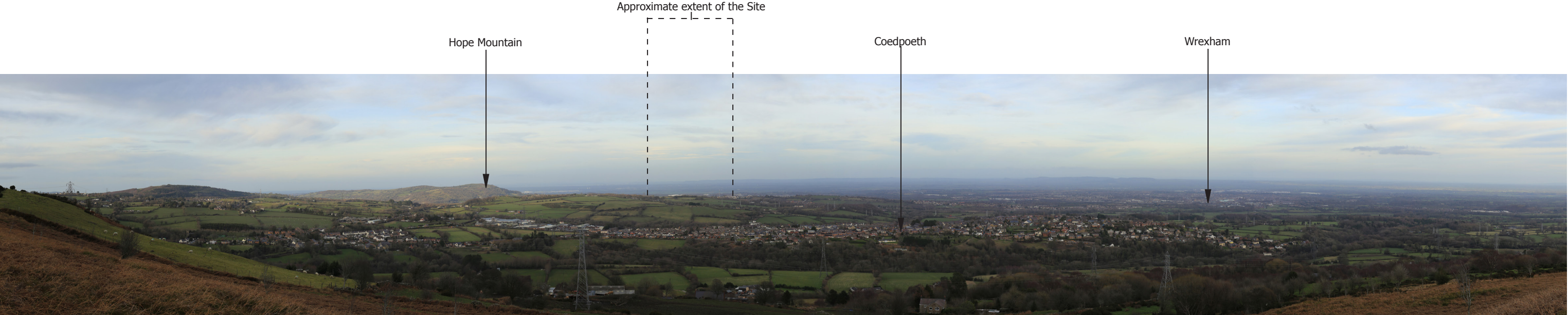


BRYMBO, FORMER STEELWORKS

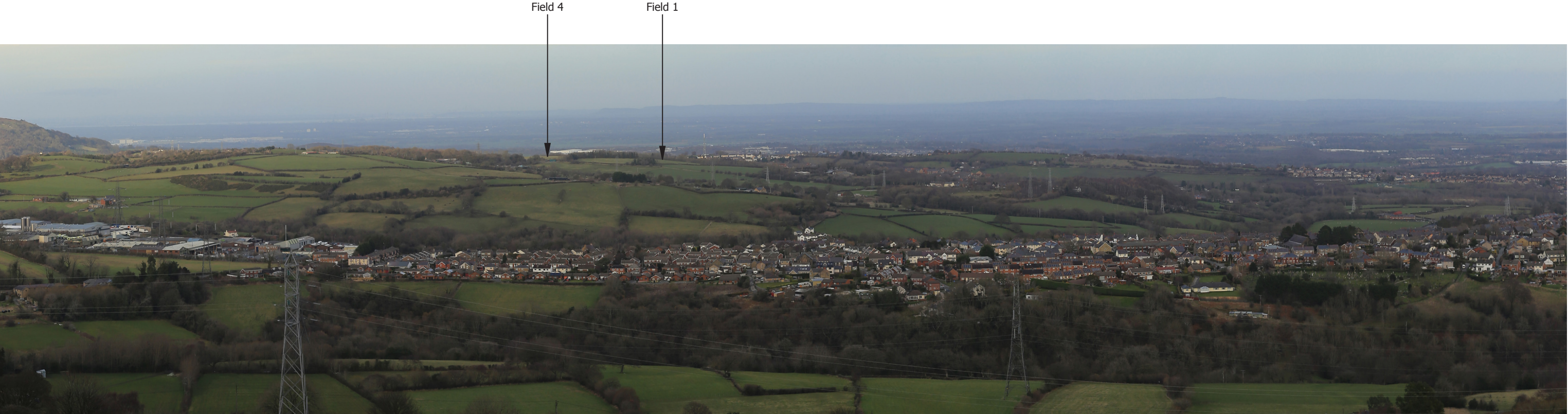
**SITE CONTEXT
 PHOTOGRAPHS: 11**

**DATE TAKEN: FEB 2019
 PROJECT NUMBER: 27968**





SITE CONTEXT PHOTOGRAPH 12: VIEW NORTH-EAST FROM PROW 31 ON ESCLUSHAM MOUNTAIN
Distance: 3.15km / Elevation: 360m AOD



BRYMBO, FORMER STEELWORKS

**SITE CONTEXT
PHOTOGRAPHS: 12**

**DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968**



SITE CONTEXT PHOTOGRAPH 13: VIEW NORTH-EAST FROM SOUTH-WEST PROW 26 (MINERA C)
Distance: 3.58km / Elevation: 366m AOD



BRYMBO, FORMER STEELWORKS

**SITE CONTEXT
PHOTOGRAPHS: 13**

**DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968**

**BARTON
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Appendix 5: Visual Effects

Visual Receptor	Representative View	Sensitivity	Year 1		Residual (Year 15)		Notes
			Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
Road users travelling on Phoenix Drive	SCP1	Medium Sensitivity Views from this location are not designated and are considered to have minimal cultural associations, resulting in a Low value. Receptors in this location are people travelling on secondary roads, resulting in a Medium susceptibility.	Large	Moderate Beneficial	Large	Major beneficial	Year 1 The Proposed Development would lead to a pronounced change in the visual experience for those travelling along Phoenix Drive. They would have open, short range views of new built form over an extensive section of the route, with built form within Area 1 and landscape elements in Area 2 clearly perceptible. Elements of the Proposed Development within Area 3: Ty Cerrig would not be visible as a result of intervening landform. The principal change in view would be from open, derelict post-industrial land to residential settlement, sensitively designed to reinforce local character, together with new public open space. Although new built form would result in increased enclosure of currently open views, the visual link with the surrounding landscape would be maintained. The Proposed Development would therefore result in a noticeable improvement of the existing view. Year 15 Following establishment of proposed planting, including substantial numbers of trees leading to enhanced assimilation of new built form in views, views from Phoenix Drive would be further enhanced.
Residents of recently constructed housing to the south of the Site	SCP1	Medium Sensitivity Views are from a location that is not designated and considered unlikely to have strong cultural associations. Therefore, they are of Low value. Receptors are people at their place of residence, resulting in a High susceptibility.	Large	Moderate Beneficial	Large	Major beneficial	Year 1 A substantial number of existing homes to the south of the Site are afforded open, close range and, for houses on the higher tier of landform, elevated views over Area 1: Main Steelworks Site. As such the introduction of the Proposed Development comprising locally characteristic new built form and substantial open space and tree planting on an area of derelict post-industrial would lead to a pronounced change, and noticeable improvement in the view. Furthermore, while there would in places be a reduced sense of openness, the Proposed Development would not interrupt the existing visual relationship of receptors in this location with the surrounding landscape on account of the overriding topography. These receptors are unlikely to have views of development in Area 3: Ty Cerrig. Year 15 Following establishment of proposed planting including substantial numbers of new trees, visual receptors would experience a pronounced improvement in the view from one of derelict, post-industrial land. At year 15, the Proposed Development would benefit from enhanced assimilation of new built form and improved composition of views brought on by the presence of established trees and other planting on the Site.
People travelling along Brymbo Road	SCP2	Medium Sensitivity Views are from a location that is not designated and is considered to have minimal cultural associations. They are therefore judged to have Low value. Receptors are people travelling on a country lane, resulting in a Medium susceptibility.	Medium	Minor Adverse	Small	Negligible Adverse	Year 1 People travelling along Brymbo Road have open, close range views over Field 1 of Ty Cerrig over a distance of approximately 340m. They would experience adverse effects as a result of the introduction of the new access junction and road to the Proposed Development. Furthermore, there are likely to be glimpsed or filtered views of new built form in Fields 2 and 3 where the existing internal field boundary tree belt will require limited removal to provide access, or of roofs of new buildings appearing above intervening vegetation. Furthermore, adverse effects will also result from the removal of a section of hedgerow adjacent to the road to facilitate visibility splays, as set out in the DAS. The visual impact is limited by the provision of Field 4 as strategic open space, the retention of the majority of existing field boundary vegetation and the limited ridgeline height of new built form on the most elevated parts of the Site. Furthermore, existing views in this location are currently under the influence of existing built form, including substantial electricity transmission infrastructure. Year 15 Following establishment of proposed planting, including substantial numbers of canopy trees and hedgerows, the reinforcement of existing tree belts, together with enhanced management of existing landscape features, leading to enhanced screening of new built form, and improvements in the appearance of Field 1, the adverse visual impact of the Proposed Development would diminish, such that it would be barely perceptible.

Visual Receptor	Representative View	Sensitivity	Year 1		Residual (Year 15)		Notes
			Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
Residents and people at their places of work in Brymbo	SCP3 SCP4 SCP5	High Sensitivity Views are from a location that is not designated, however they are considered likely to have local cultural associations, particularly in relation to views of the former steelworks site from the settlement of Brymbo. On this basis these views are considered to be of Medium value. Receptors are people at their place of residence, resulting in a High susceptibility.	Medium	Minor Beneficial	Medium	Moderate beneficial	Year 1 A number of residential properties in Brymbo/Mount Zion will have views overlooking the Site, primarily relating to Area 1: Main Steelworks Site. This visibility can be inferred from Site Appraisal Photograph A. The Proposed Development would lead to the introduction of locally characteristic new built form and public open space on an area of derelict post-industrial land. The proposals would result in a noticeable improvement in the view for number of residents. There are also a limited number of residents in the eastern parts of Brymbo who would experience partial, heavily filtered views of built form at the edge of Area 1, seen from the valley landform to the east of the Site; however, this would not be uncharacteristic in the context of views of existing built form on rising land in Brymbo. However, a very limited number of residents in Mount Zion would perceive new built form in Area 3: Ty Cerrig (inferred from Site Appraisal Photograph F, where agricultural fields would be replaced by residential housing seen partially, leading to limited adverse effects. On balance the effect of the Proposed Development would be minor beneficial. Year 15 Following establishment of proposed planting including substantial numbers of new trees throughout the Site, new built form in Area 3: Ty Cerrig would benefit from increased screening and filtering of views. Tree planting in Area 1 would add further enhancements to the composition of views experienced by local residents, acting to assimilate the proposed development and further alleviate the existing derelict, post-industrial appearance of the landscape.
People travelling on the road network within Brymbo	SCP3 SCP4 SCP5	Medium Sensitivity Views are from a location that is not designated, however they are considered likely to have local cultural associations, particularly in relation to views of the former steelworks site from the settlement of Brymbo. On this basis these views are considered to be of Medium value. Receptors are people travelling on secondary / country roads, resulting in a Medium susceptibility.	Very Small	Negligible Beneficial	Very Small	Negligible Beneficial	Year 1 As set out in the visual appraisal there are limited opportunities on the road network in Brymbo where views of the Site are possible as a result of the screening effect of intervening built form, vegetation and landform. Therefore, the Proposed Development would be largely screened. The screening of new built form on Area 3: Ty Cerrig would be complete. Where proposed built development is visible on Area 1: Main Steelworks Site, views would be partial, and glimpsed, or, as demonstrated by SCP 5, perceived as new built form near the edge of the artificial plateau of landform in views heavily filtered by existing semi-mature tree planting. Furthermore, the presence of built form would not be an incongruous feature in the context of residential settlement rising up the landform from the valley bottom. Where views of new built form are possible it would be seen to reinforce locally characteristic vernacular through sensitive design, and would replace derelict land. Year 15 Following establishment of proposed planting including substantial numbers of new trees, together with current semi-mature planting to the east of the Site reaching maturity, existing views of the Proposed Development would benefit from further screening and filtering. As a result receptors would experience a barely perceptible improvement in the overall visual experience.
Residents of Tanyfron	n/a	Medium Sensitivity Views are from a location that is not designated and with minimal cultural associations, and therefore of Low value. Receptors are people at their place of residence, resulting in a High susceptibility.	None	Neutral	None	Neutral	Year 1 The Proposed Development would be screened by a combination of intervening landform and existing built form, such that no perceptible effects would occur. Year 15 The Proposed Development would be screened by a combination of intervening landform and existing built form, such that no perceptible effects would occur.

Visual Receptor	Representative View	Sensitivity	Year 1		Residual (Year 15)		Notes
			Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
Residents of the settled ridgeline of Pentre Broughton	SCP6 SCP7	High Sensitivity Views are from a location that is not designated however, they are considered to have local cultural associations due to the presence of heritage features of the retained steelworks in the available views. The value of these views is therefore judged to be of Medium . Receptors are people at their place of residence, resulting in a High susceptibility.	Medium	Moderate Adverse	Medium	Minor Adverse	Year 1 A number of residents in Pentre Broughton and Brynteg would have views of the Proposed Development experienced at a medium distance and in the context of the existing settled landscape, including most notably, recently constructed housing to the south of the Site and, as seen in SCP 6, housing seen against the skyline in Mount Zion. New housing on Area 1: Main Steelworks Site would lead to positive impacts resulting from the introduction of sensitively designed new built form with public open space on an area of derelict land. However, it would also interrupt existing views if the retained steelworks structures. New houses in Area 3: Ty Cerrig would be seen against the skyline, increasing the influence of built form on the overall composition of the view. However, this would also be in the context of existing built form, including residential houses and electricity transmission lines/pylons perceived on the horizon, and therefore not incongruous. Nonetheless, the Proposed Development would lead to a noticeable deterioration in the view. Year 15 Following establishment of proposed tree planting, both within Area 3: Ty Cerrig and along the eastern boundary of Area 1, the Proposed Development would be assimilated and benefit from additional filtering of new built form. Nonetheless, the composition of the view would still be noticeably altered leading to a limited deterioration in the overall view.
Road users travelling on Long Lane	SCP7	Medium Sensitivity The view is from a undesignated location with minimal cultural associations, resulting in a Low value. Receptors are people travelling on secondary roads / country lanes, resulting in a Medium susceptibility.	Medium	Minor Adverse	Medium	Minor Adverse	Year 1 Proposed built form on Area 1: Main Steelworks Site would not lead to substantial impacts on views from this location due to the screening effect of landform and intervening vegetation. Furthermore, this part of the Proposed Development would be seen to continue the existing pattern of built form seen on the plateau landform to the south of the Site, albeit with an enhanced approach to layout and open space. However, proposed built form on the rising landform of Area 3: Ty Cerrig would be more conspicuous and seen against the skyline, with particular visibility of development in Field 2. However, this built form would be perceived in the context of electricity transmission infrastructure punctuating the existing skyline, and existing residential housing seen on the crest of the rising landform in Mount Zion. Furthermore, the Proposed Development would not interrupt existing long-distance views of Esclusham Mountain, which is a notable positive feature in the overall composition of the view. Nonetheless, the introduction of new built form would result in adverse effects on receptors in this location. Year 15 Following establishment of proposed planting including substantial numbers of new trees both within Area 3: Ty Cerrig and on the eastern edge of Area 1: Main Steelworks Site. As a result the Proposed Development would benefit from enhanced screening, filtering and breaking up/division of new built form perceived in the view. Whilst this would lead to a reduction in the overall significance of adverse effects, the overall residual effect would be minor adverse as a result of new built form on Area 3: Ty Cerrig.
People travelling along Kent Road/Broughton Road	SCP8	Medium Sensitivity Views from this location are not designated and are considered to have minimal cultural associations and are therefore of Low value. Receptors are people travelling on a secondary road resulting in Medium susceptibility.	Medium	Minor Adverse	Medium	Negligible Adverse	Year 1 The artificial profile of the landform is conspicuous and forms a substantial detractor in the landscape in views from the adjacent valley as demonstrated by SCP 8. Proposed Development on all but the eastern edge of Area 1 would be screened from view behind the prominent edge of the plateau landform. New built form would be visible and prominent against the sky albeit viewed in the context of existing residential housing breaking the skyline. The adverse impact from the introduction of new built form in a prominent position in the view is reduced by the sensitive design approach, including the use of locally characteristic vernacular and the varying set-back of the development line from the edge of the plateau, contrasting with the regular terracing of existing houses to the south of the Site. Year 15 Following establishment of substantial proposed tree planting, particularly on the eastern edge of the development, the prominence and emphasis on the artificial landform, which is a substantial detractor in views from the valley bottom, would be reduced and new built form would benefit from enhanced filtering and assimilation within the landscape. On this basis, views from this location would be subject to a lesser significance of effect.

Visual Receptor	Representative View	Sensitivity	Year 1		Residual (Year 15)		Notes
			Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
Residents and people at their places of work in Wrexham	SCP9	Medium Sensitivity Views are from a location that is not designated and with minimal cultural associations. Therefore, they are judged to be of Low value. Receptors include people at their place of residence, resulting in a High susceptibility.	None	Neutral	None	Neutral	Year 1 Although the ZTV indicates potential visibility of the Proposed Development from a wide area within the settlement of Wrexham, no publicly accessible vantage points with clear views of the Site were recorded during the site visits. Due to the largely flat topography of Wrexham, views to the surrounding landscape are substantially screened by a combination of vegetation and existing built form as demonstrated by SCP 10. However, it is likely that some residents will have views towards the Site from elevated north-west facing windows. Nonetheless, these views would be experienced in the context of an urban environment at a distance of at least 3km. Therefore there would be no perceptible change to the existing nature of the view. Year 15 No perceptible change from Year 1 situation.
Residents and people at their places of work in Coedpoeth	SCP10	Medium Sensitivity Views in this location are undesignated and unlikely to have any notable cultural associations and are therefore of Low value. Receptors include people at their place of residence, resulting in a High susceptibility.	None	Neutral	Very Small	Negligible Beneficial	Year 1 The Proposed Development is unlikely to be discernible in the context of the wider view, with new built form screened by a combination of intervening landform and vegetation. Year 15 It is likely that there will be views of proposed tree planting once established in Field 1, although this would be barely perceptible in the context of the wider view.
Residents of Cymau	SCP11	High Sensitivity Views are from a location that is not designated, however, they are considered likely to have local importance as a result of the scenic quality of views available from the slopes of Hope Mountain. Therefore, a Medium value is given. Receptors are people at their place of residence, resulting in a High susceptibility.	Small	Neutral	Small	Negligible Beneficial	Year 1 Proposed built form in Area 3: Ty Cerrig would be perceptible on elevated landform in views from south facing windows and vantage points, albeit at a distance of approximately 2.5km. The change would be seen in the context of existing settlement on the skyline, most notable in Mount Zion and Pentre Broughton, together with radio communications masts and electricity transmission pylons; strong vertical elements of existing built form in these views. Nonetheless, it would lead to a perceptible increase in the influence of built form in the composition of the view. However, the Proposed Development would also lead to positive impacts through the introduction of positively designed built form in Area 1: Main Steelworks Site. The variation in height and block structure in Area 1 would reduce the prominence of the artificial plateau landform that is perceptible between the higher ground of Ty Cerrig and Pentre Broughton. The adverse and beneficial impacts on these views would balance, leading to effects which are Neutral. Year 15 Following establishment of substantial tree planting, both within Area 1 and Area 3, the prominence of new built form in Area 3: Ty Cerrig would be reduced as a result of increased filtering and assimilation. Tree planting in Area 1 would also result in enhanced assimilation of built form and a further reduction in the emphasis on the artificial landform, resulting in an increase of the beneficial element of the overall effect, nonetheless perceived at considerable distance.
People travelling on the road/PRoW network to the north of Cymau	SCP11	Medium Sensitivity Views are from a location that is not designated, however, they are considered likely to have local importance as a result of the scenic quality of views available from the slopes of Hope Mountain. Therefore, a Medium value is given. Receptors are people travelling on PRoWs / secondary road network, resulting in a High overall susceptibility.	Very Small	Neutral	Very Small	Neutral	Year 1 Due to the considerable screening provided by the existing trees on the south facing slopes of Hope Mountain, there are limited locations where Proposed Development would be visible. Where new built form is perceptible, it would be seen at a substantial distance and in the context of a wider landscape with existing settlements on the ridgelines, most notably including Pentre Broughton and Mount Zion, together with radio communications masts and electricity transmission pylons. Whilst the Proposed Development would, to an extent, lead to an increased perception of built form seen on the skyline, it would also relieve the emphasis of artificial landform that is noticeable in the view. The overall effect would be neutral. Year 15 Following establishment of proposed tree planting, the Proposed Development would benefit from increased filtering and assimilation of built form. However, due to lack of available viewing opportunities, the overall effect significance would not differ from that identified at year 1.

Visual Receptor	Representative View	Sensitivity	Year 1		Residual (Year 15)		Notes
			Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
People using the PRow network/ Open Access land in the Clwydian Range AONB	SCP12 SCP13	High Sensitivity Views are from a location that is designated at a national level for its scenic qualities and therefore have a High value. Receptors in this location are people travelling on the PRow network or within open access land. On this basis, the susceptibility of visual receptors is High .	Very Small	Minor Adverse	Very Small	Neutral	Year 1 The Proposed Development would result in very limited partial views of new built form on Area 3: Ty Cerrig experienced at a distance of 3.2km in the context of a panoramic views encompassing the settled Cheshire Plain, including Wrexham, and other settlements in the intervening valleys including Coedpoeth. The retention of Field 1 as strategic open space, the retention of existing tree belts within the Site and the limited height of proposed buildings on the highest part of the Site would result in new built form being barely perceptible. Furthermore, the Proposed Development would not interrupt the existing sequence of unsettled hills leading down from Hope Mountain that is perceived in this location. Proposed built form in Areas 1 and 2 would be screened by landform. Year 15 Following establishment of new tree planting on the Site, including a substantial woodland block in Field 4 of Ty Cerrig, new built form would be virtually screened such that at a distance of 2.3km, the only perceptible change would be the increase in tree cover, which would not be incongruous in the wider landscape resulting in a neutral effect.
Visitors to and People working at the retained structures of the Brymbo steelworks.	SAP C	Medium Sensitivity Views are experienced by people at a designated heritage asset with cultural associations, resulting in a Medium value. Receptors in this location are likely to be primarily focused on their immediate vicinity, however, they are also likely to have some appreciation for the setting of the retained steelworks structures, and therefore of a Medium susceptibility.	Large	Moderate Beneficial	Large	Major Beneficial	Year 1 Receptors in this location will experience pronounced changes in available views which are currently dominated by an extensive plateau of derelict land with Phoenix Drive extending through the view. Proposed built form in Area 1 and landscape works in Area 2 will be seen in close-range views. The sensitive design of the Proposed Development including locally characteristic built form, new public open space with soft landscape improvements and substantial tree planting will be strongly perceptible in the view. Although there will also be a reduced sense of openness as a result of new built form, the visual relationship with the surrounding landscape would be maintained due to the sharply undulating landform. Furthermore, the setting of the retained structures of the steelworks will be perceived to be strongly enhanced as a result of the sensitive design of the Proposed Development including the positive approach to frontages and views set out in the DAS (Figure 11). Year 15 Following establishment of proposed planting including substantial numbers of new trees, in particular in the immediate vicinity of the retained steelworks structures, and also throughout the scheme, the significance of the effect would become major beneficial.
Users of PRow BRY/38 and BRY/40 within the Site	SAP C	High Sensitivity Views are from a location that is not designated, however due to associations with the former steelworks, and the location within close proximity to industrial heritage features, they are considered to be of Medium value. Receptors in this location are people travelling on the PRow network, resulting in a High susceptibility.	Large	Moderate Beneficial	Large	Major Beneficial	Year 1 Receptors travelling along this route will experience pronounced changes in available views which are currently dominated by an extensive plateau of derelict land with Phoenix Drive extending through the view. Proposed built form in Area 1 and landscape works in Area 2 will be seen in a sequence of close-range views as the PRow passes through the Site. The sensitive design of the Proposed Development including locally characteristic built form, new public open space with soft landscape improvements and substantial tree planting will be strongly perceptible in these views. Although, there will also be a reduced sense of openness as a result of new built form, the visual relationship with the surrounding landscape would be maintained due to the sharply undulating landform. Furthermore, the setting of the retained structures of the steelworks will be perceived to be strongly enhanced as a result of the sensitive design of the Proposed Development including the positive approach to frontages and views set out in the DAS (Figure 11). New built form in Area 3: Ty Cerrig is unlikely to form a noticeable part of the view from the majority of this route. Year 15 Following establishment of proposed planting including substantial numbers of new trees, in particular in the immediate vicinity of the retained steelworks structures, and also throughout the scheme, the significance of the effect would become major beneficial.

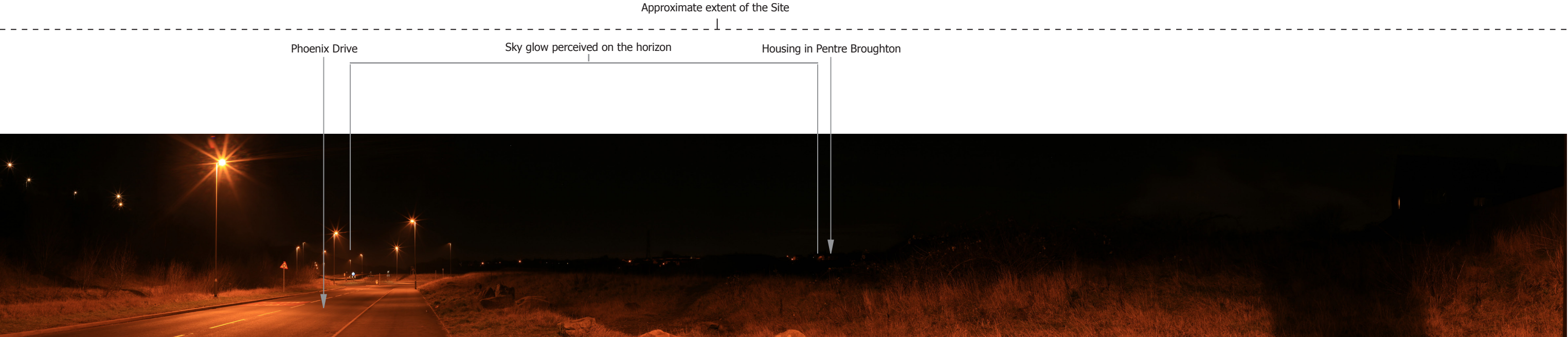
Visual Receptor	Representative View	Sensitivity	Year 1		Residual (Year 15)		Notes
			Magnitude of Effect (Change)	Significance of Effect	Magnitude of Effect (Change)	Significance of Effect	
Users of PRoW BRY/0 adjacent to the western area of the Site	SAP H	Medium Sensitivity These views are from a location that is not designated and is considered to have minimal cultural associations. They are therefore judged to have a Low value. Receptors are people travelling on PRoWs network, resulting in a High susceptibility.	Large	Moderate Adverse	Medium	Minor Adverse	Year 1 Users of PRoW BRY/0 will experience views of new built form in Fields 2, 3 and 4 of Area 3: Ty Cerrig, in places close range, but predominantly with substantial set-backs from the PRoW. Furthermore, the retention of existing landscape structure, including the majority of internal field boundary planting, will provide visual compartmentalisation of new built form such that all views are partial and framed by existing vegetation. Furthermore, the visual experience will benefit from the removal of unsympathetic security fencing. Nonetheless, the principle change will be the introduction of substantial built form in an agricultural landscape, albeit under the influence of existing houses at Mount Zion and electricity transmission infrastructure, notable features in existing views. The significance of the adverse effect is limited by the locally characteristic design of built form, the limited ridgeline height of proposed built form on the highest parts of the Site and the inclusion of substantial areas of opens space as part of the proposal. Year 15 Following establishment of proposed planting including substantial numbers of new trees set within extensive areas of open space and enhanced management of existing landscape features as set out in the LBMS, the Proposed Development would benefit from enhanced assimilation and filtering of views of new built form. The significance of the adverse effect would therefore be reduced.

Notes:

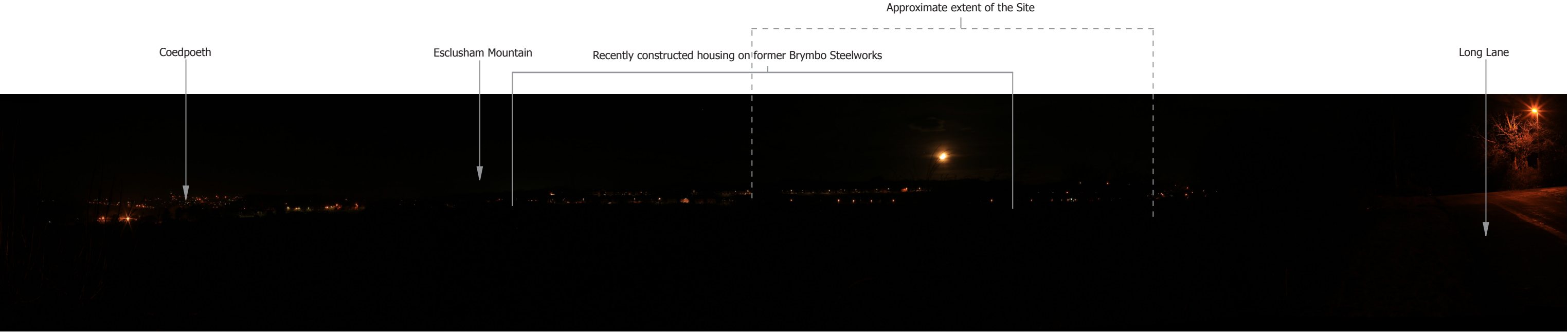
Level of sensitivity of receptor accounting for the value of the receptor and its susceptibility to the type of change proposed: High, Medium, Low

Magnitude of Effect: Large, Medium, Small, Very Small, None

Significance of Effect: Major, Moderate, Minor, Negligible or Neutral (may be Adverse or Beneficial)



NIGHT-TIME PHOTOGRAPH N1: VIEW NORTH FROM PHOENIX DRIVE
Distance: 15m / Elevation: 206m AOD



NIGHT-TIME PHOTOGRAPH N7: VIEW WEST FROM LONG LANE NEAR BRYNTEG
Distance: 735m / Elevation: 180m AOD

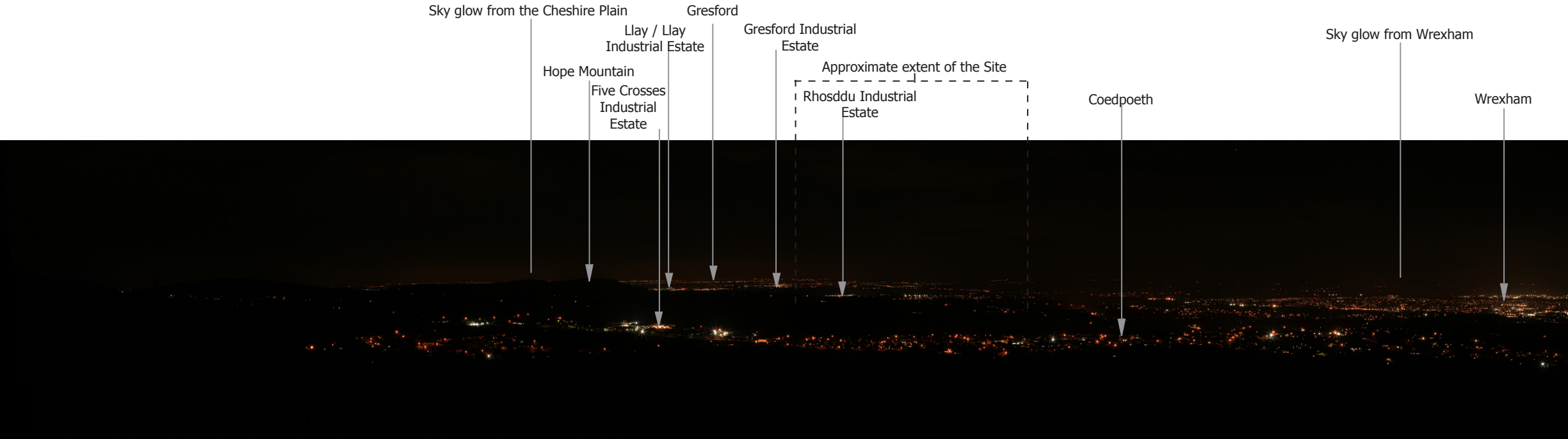
BRYMBO, FORMER STEELWORKS

**NIGHT-TIME
PHOTOGRAPHS: N1 - N7**
DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968





NIGHT-TIME PHOTOGRAPH N11: VIEW SOUTH FROM CYMAU
Distance: 2.50km / Elevation: 233m AOD



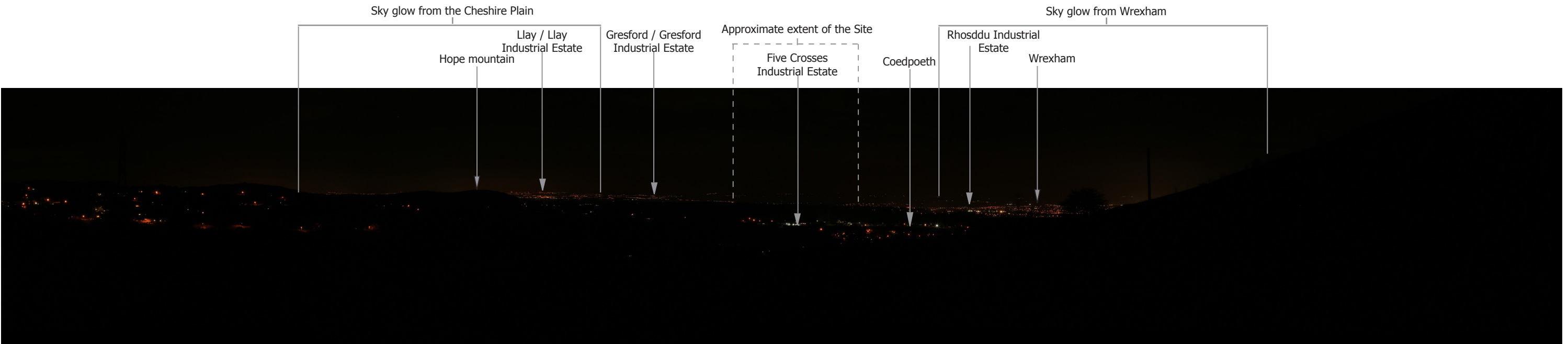
NIGHT-TIME PHOTOGRAPH N12: VIEW NORTH-EAST FROM PROW 31 ON ESCLUSHAM MOUNTAIN
Distance: 3.15km / Elevation: 360m AOD

BRYMBO, FORMER STEELWORKS

**NIGHT-TIME
PHOTOGRAPHS: N11 - N12**

**DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968**





NIGHT-TIME PHOTOGRAPH N13: VIEW NORTH-EAST FROM SOUTH-WEST PROW 26 (MINERA C)
Distance: 3.58km / Elevation: 366m AOD

BRYMBO, FORMER STEELWORKS

**NIGHT-TIME
PHOTOGRAPHS: N13**
DATE TAKEN: FEB 2019
PROJECT NUMBER: 27968

