

Landscape and Visual Appraisal for a Proposed Agricultural Anaerobic Digester at Yeld Farm, Lyonshall, Hereford, HR5 3LY



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1. LANDSCAPE AND VISUAL APPRAISAL

1.1. Introduction

Landscape and Visual Appraisal has been undertaken by ADAS UK Ltd for the proposed development of an agricultural Anaerobic Digester (AD) Plant (which consists of a digester, digestate storage tank, buffer tank, fuel preparation area and silage clamps and combined heat and power system) at Yeld Farm. The assessment contained in this report is based on field observation undertaken during settled, but partially overcast weather, on August 14th 2013. ADAS UK has completed a Landscape and Visual Impact Assessment (LVIA) on an adjacent site for the planning application of poultry units in 2010. As well as the poultry unit LVIA document, use has been made of O.S. Explorer Map 189 (1:25,000 scale), ArcGIS, aerial images from Google Earth, and information obtained from the Hereford Records Office.

In addition to considering the potential landscape and visual effects of the proposed development, because of the locally significant historic status of the site, a Historic Landscape Appraisal which was completed for the poultry application has also been included in Section 4.5 of this report.

1.2. Legislation and Planning Policy Context

The site is not located within an Area of Outstanding Natural Beauty (AONB) or any other Designated Area of national significance. It does, however, fall within the Unregistered Parkland of Moor Court. This is a parkland of local importance and is afforded protection under the Herefordshire Unitary Development Plan (UDP) Policy LA4: Protection of Historic Parks and Gardens (see below).

Relevant Strategic and Local Planning Policy, in so far as there may be particular landscape issues which will have a bearing on the proposed development, are considered below. Relevant Landscape Character Assessment Guidelines are considered in Section 4.1, 'The existing landscape character'.

1.2.1. National Planning Context - National Planning Policy Framework

The National Planning Policy Framework (NPPF) (Ref. 1.1) aims to deliver sustainable development. Of particular relevance are Section 10: Meeting the Challenge of Climate Change, Flooding and Coastal Change and Section (paragraphs 93 – 108) 11: Conserving and Enhancing the Natural Environment paragraphs 109 - 125.

Specifically Section 10 refers to supporting the delivery of renewable and low carbon energy and associated infrastructure and states that planning authorities should *ensure "that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts"* and should also *"recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions"*.

Section 11 of the framework draws attention to *"conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty"*. However, it is also recognised that all valued landscapes should be protected and enhanced and not just those which are designated.

1.2.2. Herefordshire Unitary Development Plan (UDP)

The Herefordshire UDP was adopted on March 23rd 2007 and will guide development within the County until adoption of the Local Plan Core Strategy (Ref. 1.2). The draft Core Strategy was published in March 2013 but has not yet been adopted.

The UDP has the status of a Development Plan Document. It is operative as part of the Local Development Framework and most of its policies has now been 'saved' until they are superseded by other emerging Development Plan Documents in the Local Plan.

The UDP has been informed by a systematic assessment of Landscape Character, namely the Countywide Landscape Character Assessment undertaken by the County Council, which is adopted as Supplementary Planning Guidance (Ref. 1.3).

This assessment identifies 22 distinctive Landscape Types within the County, each with its own design guidelines and management issues in order to maintain the distinctiveness of individual Landscape Types (see Section 3.1.). UDP Policy LA2 seeks to retain and enhance Landscape Character and minimise the impact of landscape change, and states that *“proposals should demonstrate that Landscape Character has influenced their design, scale, nature and site selection”*.

LA4 Protection of Historic Parks and Gardens specifically considered Registered Parks and Gardens. The policy states that development would not be permitted if it *“would destroy, damage or otherwise adversely affect the historic structure, character, appearance, features or setting”*. Any development which would affect historic parks and gardens should be accompanied by an historic landscape appraisal report. *“Unregistered parks and gardens recognised and identified by the Council as currently of local importance will be afforded similar protection”*.

Other relevant landscape policies include:

- Policy LA5 (Protection of Trees, Woodland and Hedgerows) – which in particular, requires *“the retention of those trees and hedgerows considered important to local amenity, together with measures to ensure their protection during development”*.
- Policy E13 (Agricultural and Forestry Development), which states that development will be permitted where:
 - there is regard to the functional relationship with other buildings and services;
 - where development is sited sensitively into the landscape, avoiding isolated or skyline locations;
 - *“proposal's are well related to existing development and the landscape in terms of scale, design, colour and materials.”*

Biodiversity policies within the UDP include Policy NC1 (Biodiversity and Development), which seeks to retain existing semi-natural habitat and wildlife corridors.

Other policies relate to sites of local, regional or national importance, although it is understood that the site falls outside any such designation.

1.2.3. Compliance with Policy

UDP Policy LA2 seeks to retain and enhance Landscape Character and minimise the impact of landscape change. This proposal has considered the design and location of the proposed development with the intent to minimise the impact on landscape character. An established woodland block is in close proximity to the proposed development and offers complete screening in views from the north-west. The woodland block acts as a backdrop in views to the proposed development from the south and south-east; this provides a sense of scale to the proposal and it will therefore appear less intrusive in the landscape as opposed to clear views to the proposal if it were located in an open elevated position in the landscape.

The proposal complies with Policy LA4 Protection of Historic Parks and Gardens. The proposed development is within the boundary of the Unregistered Parkland of Moor Court and an historic appraisal is presented in this report (see Section 4.5). The unregistered parkland has undergone a considerable amount of landscape change as a result of human intervention since the original formal landscape was created, seen on the OS map dated 1832 (OS 1" map).

The proposal is in accordance with Policy LA5 Protection of trees, woodlands and hedgerows. No removal of vegetation will be required to accommodate the AD plant or the access track to the site.

Landscape mitigation will have a beneficial impact on the landscape character as a significant amount of tree and shrub planting will be proposed to enrich the landscape and heritage value associated with the local landscape character and lessen the impact of the proposed development in views where it would be visible.

Policy E13 states that new development should be sited near existing groups of buildings and should have a functional relationship with the buildings it serves. The proposed AD plant is located in close proximity to existing poultry units and part of its function would be to use the poultry litter in the Anaerobic Digester to create renewable energy. In terms of scale, design, colour and materials, the proposed development has an appropriate scale in relation to the local undulating landscape character, existing woodland and hedgerow vegetation that provide a sense of scale and the colour and design is sensitive to its surroundings.

2. DEVELOPMENT PROPOSALS

The proposed development is an agricultural AD plant with ancillary development. The AD plant will generate electricity and heat, using poultry litter from the farm and energy crops. The proposed layout of the development is shown on Figure 1.4 Landscape Strategy.

The main components of the development are:

- Digester (24.9m x 12.5 m [10.4 m from ground level]);
- Buffer Tank (9.1m x 4m);
- Digestate Storage (24.7m x 7.1m)
- Combined heat and power (CHP) plant (14m x 2.5m);
- Silage Clamps (3no. 54m x 35m); and
- Fuel Preparation Area (35m x 18m x 11m).

The digester itself will comprise a circular tank, partly covered by a flexible double membrane, which provides gas storage capacity. The digester will be covered in insulation and profile metal sheet. All other structures, such as the CHP unit will be covered in profile metal sheet.

The main outputs of the process are renewable energy and digestate. The renewable electricity will be used for the poultry houses, with the remaining electricity sold back to the grid. Digestate will be used as fertiliser, whilst the heat generated will be used in the digester to increase the efficiency of the process.

The development will be contained by a 2m stockproof fence and the entrance to the proposal will be from an existing track leading to the application field though Yeld Farm.

3. METHODOLOGY

This Landscape and Visual Appraisal has been prepared to the level required for an informal appraisal and the methodology used is based on recommendations given in 'Guidelines for Landscape and Visual Impact Assessment' (Third Edition) as produced jointly by the Landscape Institute and The Institute of Environmental Management and Assessment (Ref. 1.4). Terminology used throughout is that used within the Guidelines.

Following-on from the review of relevant Planning Policies in the preceding Chapter, the assessment of Baseline Conditions in Sections 4.1 - 4.2 and Section 5 considers the existing Landscape Resource (with particular reference to relevant Landscape Character Assessments), and also identifies and assesses the principal, potential Visual Receptors of the proposed development.

The development is assessed in terms of both Landscape and Visual Effects in Section 4 and Section 5, Mitigation Measures are proposed in Section 6 and any Residual Effects are considered in Sections 4.4 and 5.6. A historic landscape appraisal is carried out in Section 4.5 and cumulative visual effects are considered in Section 5.6.

4. LANDSCAPE APPRAISAL

4.1. The Existing Landscape Character

The starting point in the consideration of the Landscape Context of the site is the specific Landscape Character of the locality within which it is situated. The Countryside Agency 'Landscape Character Assessment Guidance for England (Ref. 1.5), identifies the site as being within National Landscape Character Area 100 ('Herefordshire Lowlands').

Key features of this Landscape Character Area are:

- wide river valleys;
- intensive arable farming with low hedges;
- undulating valley sides;
- steep wooded hills;
- frequent orchards and hop yards;
- historic parks; and
- large farmsteads and frequent hamlets.

Amongst the changes to the landscape noted are:

- removal or reduction of hedges due to intensification of agriculture;
- neglected parkland; and
- unmanaged woodland.

The Herefordshire County Landscape Assessment, referred to in Section 1.4, which constitutes Supplementary Planning Guidance, shows the site to be within the 'Principal Timbered Farmlands' Landscape Character Type, identifying similar attributes to the Countryside Agency's Character Area description, above. The full description is given as follows:

"Principal Timbered Farmlands are rolling lowland landscapes with occasional steep sided hills and low escarpments. They have a small scale, wooded, agricultural appearance characterised by filtered views through densely

scattered hedgerow trees. These are complex, in places intimate, landscapes made up of a mosaic of small to medium sized fields, irregularly shaped woodlands and winding lanes. The key element of these landscapes is the strong unifying presence of tree cover in the guise of Woodlands, hedgerow trees, and linear tree cover associated with streams and watercourses. The combined presence of these tree cover components creates the fundamental sense of scale and enclosure, together with the filtered views that are distinctive in this landscape.

The woodlands are of ancient semi-natural character, comprising mixed native broadleaved species, with Oak being dominant. Lines of mature Oak are a particular feature of the hedgerows, which are visually very dominant. They are usually species rich, complex habitats supporting a wide range of flora and fauna as well as the numerous hedgerow trees. The scale and shape of the woodlands is also important, ranging in size from small field corner copses to those of a size exceeding that of the surrounding fields. The irregular outline of many of the Woodlands, together with the pattern of hedgerows and winding lanes, contributes to the overall organic character of this landscape. A densely dispersed pattern of farmsteads and wayside cottages is typical with a notable number of buildings constructed out of brick and timber.

The deterioration of the distinctive character of these landscapes is very evident and continuing. This is due primarily to the decline and fragmentation of the tree cover elements, particularly the hedgerow trees. The age distribution of hedgerow Oak is markedly unbalanced, with the majority of specimens being mature and little new stock or natural regeneration being encouraged to replenish them. The distribution of Woodlands is uneven throughout these landscapes and the streamside cover is also often fragmented. A gradual increase in arable land use is resulting in loss of function of many hedgerows and this in turn will lead to a gradual demise of the hedgerow structure through inappropriate management. Development pressure has resulted in new dwellings which do not respect the characteristic settlement pattern.

The hedgerow Oaks are the most crucial element of the landscape character and hedgerow tree planting initiatives must be supported if the character of the Principal Timbered Farmlands is to be perpetuated. Opportunities for additional small woods should also be pursued. The overall management strategy should therefore be one of conservation, restoration and enhancement of the existing tree cover and hedgerow patterns.”

The Map of Landscape Management Objectives shows Yeld Farm to be in a borderline location between two Management Objective areas:

- (1) ‘Conservation / Restoration / Enhancement’; and
- (2) ‘Conservation / Enhancement’.

4.2. The Site and its Context

The application site is located in an arable field to the south-east of the existing poultry units at Yeld Farm. The poultry units are in reasonably close proximity to the proposed AD plant, the nearest poultry unit is approximately 30m from the application boundary of the proposed development. This poultry unit is adjacent to a bund which is planted and partly screens the poultry unit which is approximately 6m in height.

The site, which has a mean elevation of 140m AOD, has shallow gradients, with no topographical features and is partially occupied by a temporary bund of recently excavated soil. To the north of the site the land slopes up towards the A44 whilst, south of the site, gradients fall away more steeply towards the Curl Brook, approximately 150m away from the site.

To the immediate north-west of the site, a woodland is demarcated by a fence. A farm access track and Public Right of Way (PRoW) no. PM46 run adjacent to the woodland boundary, which is 10m distance from the site boundary. The woodland (which appears to have been unmanaged for a considerable period) comprises a mix of mature and over-mature conifers, including Scots Pine, Firs, and Larch, together with Oak and Ash, and an under-storey dominated by Hazel, with Sycamore seedlings becoming established.

PRoW PM46 joins the PM43 to the south-west of the application site. The PM46 continues past the site, across the parkland to the north whereas the PM43 continues towards Moorcot.

The Moor Court parkland displays scattered trees and a tree lined avenue, along with what remains of the original orchard. The parkland has undergone considerable change with lost landscape features and change in land use. The original parkland boundary hedge has been lost in places, as well as hedgerow patterns within the parkland boundary. The parkland is used as an agricultural farm with residential dwellings and outhouses.

The loss of hedgerows to the south-east and south-west of the site has created a larger field in which the application site is situated in the north-east corner. The arable field containing the site is bounded by woodland to the north-west and hedgerows on other sides. The south-east corner of the field where the Curl Brook watercourse approaches the field contains scrub and medium sized trees, demarcating the small brook. To the west of this particular area are the closest affected dwellings to the application site, namely Garden House and Moor Court Estate, two two-storey houses approximately 330m and 470m (from the edge of the application site) to the north-east of the site. The client's house is located 180m from the development but there is no view to the site from this property.

Surrounding the site, the land is gently sloping and largely consists of orchards and arable land, and to a lesser extent grazing land, mostly contained by managed hedgerows with frequent hedgerow Oaks.

The application site drains towards the ditch bounding the woodland to the southeast, which discharges into a pond to the south of the existing units.

4.3. Landscape Effects

Landscape effects are either 'direct' (impact on the development site itself on the landscape resource) or 'indirect' (impact on the character of the landscape).

Construction effects on the landscape will last for a short duration and are temporary effects, therefore, the focus of this report is on operational effects. However, construction period effects, namely earth-moving and movement of construction plant and vehicles will have a minor direct impact on the landscape. The removal of soil will be necessary to accommodate the proposal and the excess soil will be kept on site and spread evenly across the adjacent field.

4.3.1. Effects on Landscape Features

Whilst it is acknowledged that a main direct landscape effect will be the location of the proposed development within Moor Court Parkland, the application site does not alter landscape features such as hedgerows or woodland, the loss or degradation of which are particularly identified as major threats in The Herefordshire County Landscape Assessment. The proposed location of the development is in part of the parkland which has undergone the most landscape change, therefore the importance of the site within the parkland is somewhat diminished. The proposed development is set against the backdrop of mature woodland to the north-west of the site with an adjacent PRoW situated between the site and the woodland. Therefore direct landscape effect is primarily on the character of the section of PRoW PM46 where this passes the site.

The view from PRoW PM46 will change from an open view across the arable field to an enclosed view where views to the south are curtailed by the proposed development. A corridor 16m in width will be created between the woodland and the proposed development which will be screened by proposed mitigation hedgerow planting.

The contained nature of the development, and restricted access during the construction phase, suggests that it is unlikely that there will be any significant adverse landscape and visual effects during the construction phase. Direct effects on landform would occur as the excavation of soil is required. Excavated soil will be spread across the adjacent field.

Landscape Effects are, therefore, 'direct' and these are summarised, after mitigation proposals are taken into account, in Section 4.4.

The AD compound will be an addition to the landscape; this built development will not alter the landscape character significantly as the development will be seen in the context of Yeld Farm poultry sheds. The site location of the proposed development is sensitive to the landscape character as it does not appear against the backdrop of the sky; the horizon line is formed by a block of woodland 20-25m tall which allow the landscape to absorb this development.

The proposed development will result in direct benefits to landscape structure due to the mitigation planting which is proposed. Also, the nature of the development also benefits the landscape as the plant will treat poultry litter from the poultry farm and use it to produce renewable energy.

4.3.2. Effects on Landscape Character

Three zones have been defined around the proposed development: within 500m, 500m – 1km and 1km – 1.5km. Effects on landscape character diminish with distance, as described below.

ZONE 1 (Under 500m)

The new development would be seen as a dominant feature within 500m of the proposed site, although it may not be completely visible due to intervening landform, or because visibility may be screened by foreground features such as trees, bunds or buildings. Viewpoints 1, 2, and 3 have been taken from within this zone (Figure 1.2)

ZONE 2 (500m – 1km)

The new development is not likely to be an incongruous element in the landscape, due to the agricultural nature of the development within an agricultural setting; however it will be prominent from certain directions due to the design of the round tanks. Viewpoints 4 and 5 have been taken from within this zone.

ZONE 3 (1 – 1.5km)

The existing and proposed developments would have considerably less impact from this distance. There are very few open views of the application site; one such view is captured by viewpoint 7. Aside from this view, only glimpses of the development are seen from other locations within zone 3, which would not be readily apparent unless specifically looked for, within the wide-ranging views towards the visual horizons. Viewpoints 6 and 7 have been taken from within this zone.

4.4. Residual Impacts

Residual landscape effects are shown in Table 1.1 below:

Table 1.1: Landscape Effects

Effect	Adverse	Beneficial	Overall
1. Topography	Cut and fill necessary	None	Minor adverse
2. Trees	None	Tree belt to be planted with understorey growth	Moderate beneficial
3. Semi-natural Habitat	None	None	No change
4. Hedgerows	None	New hedgerow planting on two sides of the development	Moderate beneficial
5. Vernacular Elements	None	Reinstatement of part of original parkland boundary	Minor beneficial
6. Watercourse	None	None	No change
7. Effect on Local Landscape Character	Extension of built form within Moor Court Unregistered Parkland	Creation of a renewable energy plant within a working agricultural landscape	Minor adverse

4.5. Historic Landscape Appraisal

This brief Historic Landscape Appraisal considers the effect of the proposed development on the Moor Court Unregistered Parkland, with reference to the following:

- source material;
- chronology; and
- historical analysis, including a summary of key layers and changes.

4.5.1. Source Material

The Herefordshire Sites and Monuments Record (SMR) has been consulted as well as English Heritage's Public Archive. Readily available material is rather limited at present as the Moor Court Estate Collection has recently been deposited with the Hereford Record Office and is currently being catalogued. Parks and Gardens U.K. Records, have also been consulted. Additional information was sought from Hereford Council and the Worcester and Hereford Garden Trust in March 2014.

4.5.2. Chronology

As indicated above, the site falls within the 'Unregistered Parkland' of Moor Court. The original building was re-built in the early 19th century after 1815 and demolished in the 1950's. The surrounding garden appears to be the remains of a formal garden of avenues, a canal and walk of the late 17th century (Parks and Gardens U.K, Record Id: 5297).

The SMR states that:

"There is evidence for a formal garden at Moor Court in the existence of a canal near the House, paths laid out in a geometrical pattern, and three avenues of trees (one of Elms, Limes and Firs, one of Elms and one of Walnuts). There were also Yew trees and a clipped Yew hedge west of the House, and an old mulberry tree on the lawn was surrounded by 'double grooves', possibly the remains of paths.

The first map to show the formal landscape is the 1832 OS 1" map, which shows the Elm avenue, two ponds flanking the drive, and an L-shaped park. The House was rebuilt in the early 19th Century, and by 1846 the lawn had circular flower beds and new trees. Field names on the 1842 tithe map also provide evidence for the formal landscape. All the main features also appear on the OS 6" map of c.1888.

Early 20th Century sale catalogues show the Elm avenue, lawns bordered by Yews, a tennis court, a rose garden, a vinery, two fish ponds, and a walled kitchen garden with various fruit trees, a greenhouse and outhouses. There was also an orchard and additional kitchen garden. The House was demolished in the 1950's."

The Yeld Farmhouse dates back to the 17th century and was probably enlarged in the late 18th century. The site of the current Yeld Farmhouse is indicated as 'the Yeld', the name indicating a reference to a barren area or 'not yielding milk'.

The SMR includes a brief mention of the Yeld as follows:

"The Site is no longer visible as a moated site, though its former location may be discerned. The Site was bulldozed and infilled following survey by the Woolhope Archaeological Research Society. Average depth of ditch 6'. Under corn. No irregularities could be seen, moat may have been filled in. Survey by Woolhope ARS immediately before levelling. Site examined after, remains of some structures & few shards of pottery, indicating C13-14 date: small but built on edge of ditch & to rear of main buildings (cess pit) stone-lined pit. Entry from NNW where ditch absent for c7m (circular moat)."

4.5.3. Historical Analysis – Summary of Key Layers and Changes

It can be seen in Figure 1.2 and Figure 1.3 that the site of the proposed anaerobic digester is within the western boundary of the Unregistered Parkland which, by reference to the 1888-1890 OS map appears to have been demarcated by a hedge, which is now absent.

Within the locality of the site much of the essential pattern of field boundaries and woodlands survives intact (Figure 1.3) although it would appear that there has been loss of tree cover within the grounds of Moor Court and along the main drive and avenue leading from the Lodge on the A44.

Built development since the 19th century comprises dwellings within Moor Court and beyond the boundary of the parkland, namely Yeld Cottages and the existing poultry units.

In contrast to some other parts of the County where there has been relatively little hedgerow removal, field enlargement has taken place adjacent to the Curl Brook.

The main PRoWs were already in existence during the 19th century, including the alignment of public footpath PM46 to the west of the site and PM43 to the south. The 1888-90 map shows woodlands to the north-west of the site being present and that has remained until the present. Within the Historic Parkland boundary, lost features include an orchard, hedgerows and some trees, particularly along the original tree lined avenue. The field pattern surrounding the application site has been altered as hedgerows have been removed over time. Another hedgerow running eastwards from Yeld Cottages is shown, and still survives, whilst the line of the watercourse to the south of Yeld Cottages is shown as lined by a hedgerow which has now gone, and part of the watercourse has also been culverted. This hedgerow is being reinstated as part of the landscape works for the four newest poultry houses.

It is unknown when the orchards shown on Figure 1.3 were removed although it is known that their removal is not associated with the development of poultry units. The block of woodland immediately to the north-west of the proposed development site is not present on the first edition map although the western boundary of this block is denoted by what appears to be a hedge, still represented today by a line of mature deciduous trees.

4.5.4. Summary of Issues and Vulnerability

The part of the parkland which remains largely intact is the 'Core Area' of the unregistered parkland (concentrated around the main avenue), as opposed to the peripheral fields within the original parkland boundary. The original house at Moor Court has been demolished and there has been some degradation of the avenue and tree cover within the immediate vicinity of the house. The proposed application site is within the physically undefined extent of the unregistered parkland.

Whilst the 'Core Area' could undoubtedly be vulnerable to possible agricultural development, the actual area within which the proposed development is located, is to a large extent physically separated from the Core by a hedgerow with mature trees and therefore does not make an essential contribution to the integrity of the parkland.

4.5.5. Significance of Effect on Moor Court Parkland

The site of the proposed development, and its immediate vicinity, has been subject to the most change within the whole of the parkland's extent. There has been loss of hedgerows and orchards, but also the introduction of an extensive block of woodland to the north-west, which has extended and consolidated an original area of woodland to the north of the site. In addition, there has been the development of poultry units and Yeld Cottages. Within this context, the proposed AD development would not have a significant effect on the historical integrity of the parkland for the following reasons:

- The field in which the application site is situated was formerly an agricultural field, as indicated on the 1888-1890 OS map, with surrounding (presumed) grazing land at the margin of the defined parkland and was not part of the Core Area of formal landscape around the former house. Current land use within the parkland is predominantly agricultural.

- The site is to a large extent physically and visually separated from the rest of the Park by woodland and the existing hedgerow on the north-eastern boundary of the site. The original house has been demolished and there are no listed buildings integral to the visual setting of the original house. Whilst the site is possibly in view from the grounds around the Garden House, on entering from the A44 views towards the site from the main drive leading towards the Core Area would appear to be largely obstructed or filtered by intervening hedgerows and topography.
- All means possible were investigated to seek out any future plans relating to Moor Court Parkland, including contacting Herefordshire Council and the Worcester and Hereford Garden Trust. At present, there is no information available on any plans to restore the unregistered parkland, which is currently in agricultural and domestic use.
- Landscape mitigation measures to be proposed as part of this proposal will be sympathetic to the original parkland boundary (which is non-existent in places) and where possible, reinstate original field boundary hedgerows thus having a beneficial effect on the parkland.

5. VISUAL APPRAISAL

Viewpoints are shown in Appendix 1 and each viewpoint is accompanied by a viewpoint description.

5.1. Definition of the Visual Envelope of the Site

The 'Visual Envelope' is defined as the tract of land within which there is potentially a view of any part of the proposed development.

This is shown on Figure 1.1, and represents the extent to which the proposed development may be partially visible.

The site is highly visually contained to the immediate north to north-west by woodland (Figure 1.1) whilst the 'Visual Horizon' is indicated by topographical horizons. The horizon to the north is close range, formed by a ridgeline along which runs the main A44 (this is the 'effective' horizon, at 400 - 800m from the site. At much greater distance, further to the north, is a topographical horizon west of the Lewis Wych vicinity, although from here the site is not distinguishable). To the west and south, the 'Visual Horizons' are formed by rising ground between Lyonshall and Holme Farm, at 1200 - 1500m from the site.

Within the 'Visual Envelope' views of the site are often obstructed or filtered by intervening hedgerows, tree belts and woodland that are frequent within this essentially complex and small-scale landscape (Figure 1.1). There are few vantage points commanding open views of either the development site or the existing units, and such views confined to the south-east, which are generally at long range, i.e. more than 1100m. Short range views are confined to the extreme south-east of the 'Visual Envelope' along PRoW no. PM46 (Figure 1.1).

5.2. Visual Receptors

Within a 'Visual Envelope', the primary 'Visual Receptors' are defined as those who would experience views of the proposed development.

These are classified as:

- users of Public Rights of Way;
- road users;
- occupants of residential properties; and
- users of publicly accessible land.

An examination of the Ordnance Survey Map indicates that PRow PM46 runs immediately adjacent to the proposed development.

No public open spaces or other sites generally open to the public are within 1.5m of the site. PRow users are sensitively considered in this assessment. The proposed development is within the locally designated parkland of Moor Court. This is an unregistered parkland which continues north of the site, however this is not open to the public.

5.3. Roads and Public Rights of Way

A44 Main Road

This main road which links Leominster to Kington runs parallel to the site to the north. An elevated section of this road, being at its closest some 400m from the site, has glimpsed views of the location of the proposed development, these views are confined to gateways where it is possible to briefly obtain views beyond Moor Court (viewpoint 4 shows one such view from the A44) above the hedgebank through mature scattered trees. Such views are mainly obtained travelling west, with likely views of the roof of the plant on show above vegetation from this elevated position although, this will be short lived and will mainly affect road users travelling east to west.

B Road Moorcot Lane, From Weston to Holme Marsh

This road descends southwards from its junction with the A44 towards the village centre and south-east towards Moorcot. Where the road is not bounded by hedgerows and mature trees, a short length of the elevated section has fragmented views, looking west towards the poultry units and the woodland which sits behind the proposed development (Appendix 1 shows

the view obtained from viewpoint 3, from the residential properties in Moorcot). There are occasional views which follow the line of a local ridge from Cold Heart Farm, looking across the Curl Brook Valley. As the road ascends south of Moorcot, towards Holme Marsh, occasional views are captured through breaks in the adjoining hedgerow along the first 500m of this elevated lane leading from Holme Marsh, which then dissipate for a stretch before the B road becomes elevated.

From this position, looking north-east looking across the Curl Brook Valley towards the site, clear views of the proposed development with the poultry units and the woodland backdrop will be obtainable, however, they will be partially obscured by woodland. As the lane descends from Cold Heart eastwards towards Moorcot, views are largely blocked by hedgerows and Orchards.

(Appendix 1 shows the view obtained from viewpoint 5, near Cold Heart Farmhouse).

From the Moorcot vicinity, views towards the site are largely unobtainable, partial views reveal the poultry units and neighbouring woodland on rising, higher ground, however intervening vegetation screens the majority of the site with only the tree tops of the woodland.

Between Moorcot and Weston, the lane is at a lower level relative to the site and any views towards the site are blocked by intervening trees and hedges.

Public Footpath, Herefordshire Council Reference PM46 (Close Range)

Most significantly, PM46, an eastward extension of the PM43 footpath towards Moor Court and Western Court Farm, running along the block of woodland to the immediate north to north-west of the site is completely exposed to the development and passes within 10m of the site.

The development will be in full view along a relatively short section of this path, approximately 120m, as are the existing poultry units. Views are partly screened by path users approaching from the Moor Court Parkland, with the hedgerow and mature Oak tree providing some screening.

Public Footpath, Herefordshire Council Reference PM43

This is the main footpath within the vicinity of the site, linking the A44 with the unclassified lane to the south. A section of this path runs through Yeld Farm, alongside the existing units, and within 110m of the west boundary of the development site. The path from Moorcot across Yeld Farm towards the A44 is well screened by a tree belt situated south-east of the site. On approaching Yeld Farm, the topography of the site rises sharply and open views are not widely available due to the landform, the linear bund and intervening vegetation along this path. South-west of the poultry units, views from this section of path are directly obstructed by the units and woodland (Figure 1.1). This footpath is not demarcated on the ground and would appear to be infrequently used.

Whilst there are other PRoW within the Visual Envelope of the site, views from these are mostly obstructed by trees, hedges and topography.

However, the footpath LZ10 running north-west after Cold Heart does have framed views of the site, and these are the main vantage points from which the site can be seen. (Appendix 1 viewpoint 6 and viewpoint 7 demonstrate the views from LZ10 and Cold Heart). These views are of short duration, and the site is not exposed along the entire path.

Within the south west quadrant of the Visual Envelope are two lengths of path from Lyonshall, first, to Cold Heart and, second, to Moor Court Farm. The first of these has elevated viewpoints blocked by adjacent hedges whilst, as it descends northwards towards Lyonshall, intervening woodland obstructs views of the site, including the existing units. The second of these paths is at a lower level relative to the site and whilst there are frequently open views of the poultry units, the units themselves obstruct direct view of the site.

5.4. Residential Properties

Residential properties in proximity of the site are:

- Yeld Farm House;
- Garden House (Moor Court Estate);
- Moor Court;
- Moorcot settlements;
- High Barn; and
- Cold Heart.

No direct views are anticipated from any property of the proposed development, although it is possible that the upper sections of the tanks will be partially visible through intervening vegetation in Moorcot. However, the development would not be seen against the sky, with the existing woodland to the north forming a backdrop.

In addition to this it is proposed that the hedgerow adjacent to the site is enhanced with native trees which will, in time, provide additional short-range screening. The essential nature of the view will not be fundamentally altered.

Yeld Farmhouse (180m distance from edge of the development)

At ground level the garden is enclosed with mature trees and the poultry units which are in close proximity to the house. The closest property has upper gable windows, however there are no direct views of the site due to the orientation of the windows.

Garden House and Moor Court House

Views towards the site are largely screened with no views of the site anticipated from these properties as they are both well enclosed by mature trees and views from the property to the site are presumably non-existent, although there could be glimpsed views. At most, glimpsed views of the upper parts of the AD tanks may be obtainable above vegetation as the landform steadily rises towards the site from Garden House.

It is therefore reasonable to assume that the proposed development would be largely hidden from view. Moor Court house is 470m distance from the development and Garden House is at a distance of 345m.

Most probably, the upper parts of the tanks and enclosed fuel preparation area are not visible from the grounds of either property due to obstructing boundary vegetation, although there is still a possibility. (Figure 1.3).

Moorcot (440m distance from the development)

There is a line of Mixed Properties in Moorcot, not all of which are orientated towards the site. Views towards the site looking west are fragmented with the upper part of the tanks only partially visible if at all. It is therefore reasonable to assume that the proposed development would be largely hidden from view from ground level; there are potential views from first floor windows from properties in the north side of Moorcot Lane are orientated towards the development. (Appendix 1 viewpoint 3)

In addition to the above, there are other properties at the northern and southern extremity of the Visual Envelope, namely Cold Heart Farm and Holme Farm.

Cold Heart (1070m distance from the development)

Cold Heart House is not orientated towards the site. Views from the grounds of the house are partially obstructed, from the particularly the front garden. However, open views of the landscape are obtainable from the north and north-east around in the vicinity of Cold Heart. The topography sweeps down towards the Curl Brook valley and from here there are elevated long range views towards the site. (Appendix 1 viewpoint 6)

In addition to these properties, from the High Barn residence on the A44, there are no views from the house however there are glimpsed views of the site from the field gateway opposite this property (Appendix 1 viewpoint 4).

5.5. Summary of Residual Visual Effects

Whilst it has been shown that any visual effects of the completed development would be limited in scope, there would be some further, albeit modest, reduction in localised residual impact due to the proposed hedgerow planting. A hedgerow surrounding part of the development will screen short-range views, particularly from PRow PM46, and a tree belt would screen the development in views from the north and south which would lessen the impact of the development. Tree planting is proposed in front of an existing bund to screen views of the existing poultry units to mitigate cumulative impact. The character of the public path PM46 along the section of the footpath would be altered as the open view will become an enclosed green corridor due to the introduction of a hedgerow north-west of the site.

Within more elevated, longer-range views from the southwest, the existing poultry units are already difficult to distinguish and the AD plant would, similarly, not be readily identifiable once the planting scheme matured.

From the south, particularly from public footpaths, within the close range zone of under 500m the new units would be hidden by both the existing units and the woodland adjacent to the site due to the topography of the field which contains the application site.

5.6. Cumulative Visual Impact

The proposed development may be seen in conjunction with the existing poultry units in some views. Both the poultry units and the AD plant would be visible from the south-east, however, from other cardinal directions, a combined view is mostly prohibited due to the adjacent woodland. The height and the form of the two developments are different; the poultry sheds have a ridge height of less than 6m and the AD has a height of approximately 12m, however, these are of similar material and both of agricultural character. The poultry units are partly screened by a vegetated bund adjacent to the units.

The roofs of the poultry units are visible in elevated views from the south-east, therefore the addition of the AD will have a minor cumulative effect in views from the south-east. The landscape strategy proposal has considered cumulative visual impact. See Section 6 below which addresses mitigation and the effect of landscaping with regard to visual impact and cumulative visual impact.

6. MITIGATION OF EFFECTS AND LANDSCAPE STRATEGY

The proposed development relates to the character of the existing poultry units, with similar materials but different form, therefore constituting a consolidation of the existing poultry farm complex. The profiled steel cladding will be polyester coated, a suggested colour being a muted green (Moss – RAL 6005) which would be similar in appearance to the worn black of the poultry units, and not in contrast against the dark backdrop of the woodland to the north-west of the site.

Whilst the siting of the proposed development extends the potential visibility of built form (in juxtaposition with the existing poultry units) in both local viewpoints, and in longer range, wider views, the view is extended somewhat beyond the Zone of Visual Influence of the existing poultry units due to the increased height, form and location of the development.

Part of the original parkland boundary will be reinstated to the south-west of the proposed development. A freely growing hedgerow with intermittent hedgerow trees is proposed to the south-west which follows the alignment of the unregistered parkland boundary, a lost heritage asset which once defined the parkland. The new hedgerows would contribute to the enhancement of the landscape character by compensating for a loss of hedgerows in the locality. A mix of native species is proposed, with Hawthorn and Hazel, and a proportion of hedgerow Oaks planted as small feathered trees.

A 10m tree belt with understorey growth is proposed to mitigate views from the south, and similarly a 6m tree belt is proposed to the north-east with understorey growth, screening views from across the parkland.

To the north-west of the site, a species rich wild flower meadow and a 3m hedgerow is proposed between the existing woodland and north-western boundary of the site and to screen views from the public footpath PM46.

In essence, the proposed landscape strategy shown on Figure 1.4 would aim to reinstate part of the historic field pattern, and introduce tree belts to provide screening of the proposed development.

This is in keeping with the landscape characteristics of the 'Principal Timbered Farmlands' described in Section 4.1, the single large field that currently exists arguably being at odds with the 'irregular organic shapes' and 'complex mosaic of small to medium size fields' that typify the landscape type. Replacement of hedgerows and hedgerow Oaks, generally, is a key 'enhancement' objective of the landscape strategy.

The planting strategy in Appendix 2 provides a detailed description of the landscape mitigation planting proposed for the site. The planting proposed will soften the development and lessen the impact on the landscape character of the area. In time the development will be screened by two tree belts and two hedgerows with intermittent trees.

The landscape strategy (Section 6.1, Figure 1.4) has been designed in accordance with the Herefordshire Landscape Character Assessment (LCA) and relevant policies. The landscape strategy aims to fulfil guidance set by the LCA through the planting design and mitigation proposal to ensure the development is sensitive to the scale and nature of the localised landscape.

The landscape strategy's function is to lessen the visual impact of the proposed development, enhance the landscape character and respect the heritage value at a localised level. The proposed development fits into the landscape in terms of its scale, not impinging on the horizon which complies with Policy E13 (Agricultural and Forestry Development). The mitigation strategy ensures that the development relates well to its surroundings, through scale, design, colour and materials which also complies with Policy E13 (Agricultural and Forestry Development).

The addition of hedgerows as part of the mitigation planting has been influenced by the LCA, as the hedgerows are a lost landscape feature in this area.

The landscape strategy includes a five year programme of maintenance (Appendix 2) to ensure the successful establishment of all planted stock and outlines the measures to control the ingress and development of pernicious weed species onto the site. Specifically the plan details:

- Species of native trees and shrubs that will act as an effective screen and reflect existing species present around the site;
- Species of plants that provide cover, nectar, pollen, fruit and nuts for a variety of wildlife;
- Size of plants to be used;
- The planting layout to produce an effective form of screening;
- Quantities of plants and spacing;
- Planting period;
- Plant protection;
- Techniques to control weeds including mulch and the use of herbicides; and
- Timing and frequency of operations.

6.1. Description of Landscape Strategy

The landscape proposals are illustrated on Figure 1.4.

The proposed planting will be undertaken following the completion of the AD plant, minimising the risk of damage to the planting from construction vehicles and plant.

The planting proposals comprise species rich hedgerow to be planted on two sides of the boundary; to the north-west of the site which runs adjacent to the public path, and the south-west of the site where the original parkland boundary was once demarcated by a hedgerow. The hedgerows will be 3m in width and the total length will be approximately 170m, which will enhance the biodiversity of the site and surrounding landscape as well as enhance the local landscape character.

Hedgerow trees will take full effect after 15 years as shown on the Section Elevation in Figure 1.5.

Tree belt are to be planted on the north-east boundary and along the south-eastern boundary. Trees will be planted at 3m centres in staggered rows to maximise screening potential on the south-eastern side and a double staggered row along the north-east site boundary.

A wildflower seed mix will be sown along the public path, adjacent to the proposed hedgerow, and a wetland grass mix will be planted in and around the detention basin. This will encourage biodiversity on site.

A boundary fence will be constructed for safety and the hedgerows and tree belts will screen the fence, which will be present on all sides of the site. The hedgerows will be semi-managed as to appear freely growing. The hedge will be allowed to grow to a height of 3-5m, providing a linear hedgerow with native trees planted at irregular intervals to fit in with other local hedgerows. Please refer to Appendix 2 for a detailed description of the planting scheme and management proposed for the landscape strategy.

A Sustainable Urban Drainage System (SuDS) scheme is proposed to address the drainage on site. It comprises a detention basin on the south-west of the application site with drains leading from the proposed AD plant. As mentioned above this will be planted with a wetland grass mix to encourage biodiversity on site.

7. SUMMARY

The development would not impact on or be seen from any designated landscape areas such as an AONB. Although it is not demarcated by any existing features at present, the proposed development is within the original unregistered parkland boundary of Moor Court and therefore would impact on any vestigial landscape structure to some degree. However, this assessment demonstrates that the development is situated in the part of the unregistered parkland of Moor Court which has undergone landscape change, as well as the majority of the parkland since the 19th century due to agricultural advances. The Landscape Change Plan (Figure 1.3) shows that the proposed development is physically separated from the parkland by an intact hedgerow and woodland plantation. This draws a clear divide between the section of the parkland landscape which remains partially intact, and the arable field chosen as the location for the AD plant.

The strongly defined Landscape Character Type of the Principal Timbered Farmlands with its mosaic of small, complex fields and woodlands, suggests that the site is within an area of moderate rather than high sensitivity to landscape change. The landscape therefore has capacity to accept new development, subject to it consolidating existing built-form and being integrated into the local landscape, which the submitted proposals seek to achieve.

It has been shown that the Visual Envelope of the site is restricted in extent and that the 'Zone of Visual Influence' of the proposal is frequently disrupted by hedgerows and woodlands. There are a limited number of private properties with views of the site, and from the majority of these, views are either oblique or partially obstructed.

From the closest properties, including Yeld Farmhouse, Garden House, Moor Court House and residential properties in Moorcot, views of the development are substantially screened by various clusters of mature trees whose canopies prohibit views to the site. Within the Visual Envelope, views are afforded from short sections of footpaths and roads to the south.

The A44 affords only brief views of the site, such as the view from the gateway opposite High Barn, which accounts for a very short section of the road, whilst other minor roads offer very limited and, again, glimpsed views of the site due to the narrow nature of the roads which are lined with well-structured hedgerows.

In all viewpoints, the digester and digestate storage tanks would not be seen against the skyline and in most instances would be viewed against the dark backdrop of existing woodland. The nearest public footpaths (PRoWs PM46 adjacent to the site and PM43 to the south-west) appear to be little used and undefined on the ground. From the south, the AD plant would be visible after passing the poultry units whilst, from the north, a large Oak tree in the hedgerow provides some screening until the path is immediately adjacent to the site and the proposed development becomes exposed. The proposed development will affect this section of the path, by altering the character of this stretch of path (120m stretch). The view will change by the creation of a corridor between the woodland and the AD plant as opposed to a view across an arable field. Paths PM46 and PM43 could be considered less sensitive as they run adjacent to the poultry units at Yeld Farm.

In short range views from the south, the proposed development is clearly visible in conjunction with the adjacent woodland and to a lesser extent the poultry units. The height of the woodland has a beneficial impact on views as the scale of the AD plant will appear reduced, as the height of the development is substantially lower than the tree tops. Within the few longer range elevated views, looking down towards the site from the south-west, views of the proposed development are available from a small number of locations, namely Cold Heart and the footpath LZ10, which are illustrated in viewpoint 6 and viewpoint 7. A large majority of views towards the AD plant and poultry units are completely screened by intervening landscape features from the north-east and east or they are not readily distinguishable.

No views are permitted from the west and north-west due to the mature woodland immediately bordering the site which is considerably taller than the development. It therefore follows that in such views where the development can be seen, this is limited to medium range views from the south, and from the east and north-east, views would largely be limited to partial views of the development, mainly the top part of the AD plant.

Both the poultry units and the AD plant would be visible from the south-east, however, from other cardinal directions, a combined view is mostly prohibited due to the adjacent woodland. Therefore the addition of the AD will have a minor cumulative effect in views from the south-east.

The development will not lead to the loss of any hedgerows, tree groups, or vernacular features or the destruction of any significant semi-natural habitat. Landscape mitigation measures include hedgerow planting and substantial tree belts, the former is sympathetic to the original parkland boundary which is not apparent at present, and the tree belts would offer a measurable amount of screening, enhance the landscape character, offer habitat provision and other various ecosystem services including flood resilience and soil stabilisation. The proximity of the development to the existing woodland has been addressed in a separate ecological assessment; however, the development will not impact the semi-natural habitat and therefore complies with biodiversity policies.

In conclusion, the proposed development will be a source of renewable energy, service the farm within which it is proposed and its design, scale and material used are appropriate for the setting of the local landscape character. Lastly, the proposal is not in conflict with any relevant Landscape Policies contained in the Herefordshire UDP, or NPFF as summarised in Section 1.2.

8. REFERENCES

- Ref. 1.1 Department for Communities and Local Government, (2012). National Planning Policy Framework.
- Ref. 1.2 Herefordshire County Council (2007). Herefordshire Unitary Development Plan Adopted March 2007.
- Ref. 1.3 Herefordshire Council, (2004-updated 2009). Landscape Character Assessment, Supplementary Planning Guidance.
- Ref. 1.4 The landscape Institute and the Institute of Environmental Management & Assessment (2013), Guidelines for Landscape and Visual Impact Assessment – Third edition.
- Ref. 1.5 The Countryside Agency and Scottish Natural Heritage, (2002). Landscape Character Assessment Guidance for England and Scotland.

APPENDIX 1: VIEWPOINTS 1 – 7

Viewpoint 1 PRoW PM46



This viewpoint is taken from PM46 and the site will be in very close proximity at only 40m from the location of the viewpoint. The whole of the proposed development will be in clear view from this position and will dominate the immediate view.

Viewpoint 2 PRow PM46 Moor Court Parkland



This shows the view for PRow users walking south at a distance of 110m from the closest edge of the proposed development. From this view both AD tanks will be a prominent feature seen beyond the hedgerow. The hedgerow largely blocks views to the broader landscape, and the AD site will prohibit far distance views towards the ridgeline where Cold Heart farm is located.

Viewpoint 3 Moorcot Lane, east of site



This viewpoint is taken from a field gateway on Moorcot lane, approximately 465m from the site. Views are largely prohibited from this viewpoint due to a tall tree belt. The Woodland which forms the backdrop can be seen in the backdrop. The top of the proposed development may be seen from this position, although this stretch of Moorcot Lane is low lying, therefore topography and the tree belt intervene in views from this location.

Viewpoint 4 A44 High Barn, north of site



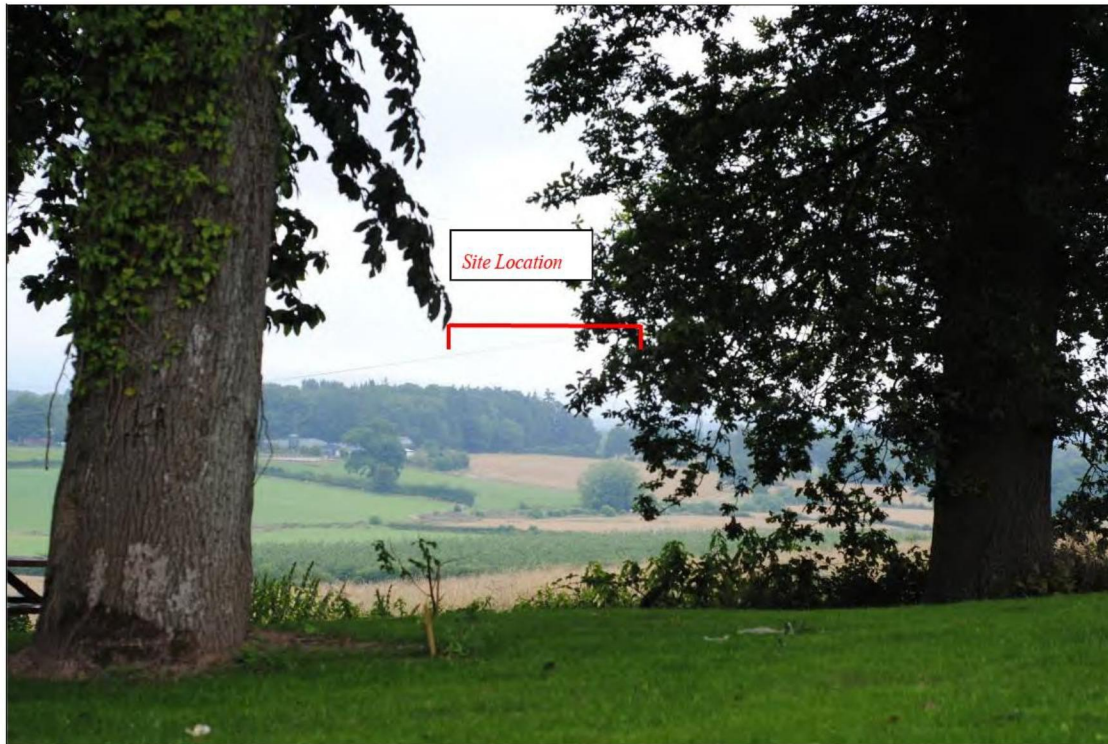
This viewpoint is taken from one of the only gateways along this stretch of the A44, opposite High Barn residence, approximately 800m distance from the edge of the development. This view looks across Moor Court Parkland and a partial view of the site can be obtained. The view to the proposed development is heavily restricted by scattered mature trees although it is anticipated that the tanks will be somewhat visible from this location.

Viewpoint 5 Bridleway PM64, south-west of site



Viewpoint 5 is taken from a bridleway which traverses a field of arable production. Approximately 480m distance from the site. A partially open view to the site can be obtained, where the proposed development will be seen in context of the woodland and the existing poultry units. The scale of the woodland will lessen the scale of the development, due to the height of the mature trees which stand at an estimated 20-25m tall.

Viewpoint 6 Footpath LZ10 Cold Heart, south-west of site



From this location, which is approximately at a distance of 1060m from the site, framed views of the site can be obtained from the PRow which runs adjacent to Cold Heart farm. The view is not an open view however where views towards the site are obtained, the site will mostly be in clear view as the topography slopes down towards Curl Brook before rising again up to Yeld farm. Once again, the site is seen in context of Yeld Farm and woodland backdrop, as opposed to a backdrop of the sky.

Viewpoint 7 Footpath LZ10, south-west of site



Similar location to viewpoint 6, however viewpoint 7 is taken from a footpath LZ10 from within a crop field, approximately 1055m from the site. Views across the landscape are open, although views exposing the proposed development are not fully permitted due to mature trees which intervene in the line of view. The long range distance from which both viewpoint 6 and viewpoint 7 have been captured show the extent of the relatively small scale of the development in the landscape. From these locations the site is situated in the far distance, yet it does not impact the horizon line, which is created by stand alone trees within a hedgerow and the woodland. The impact of the development from these locations is moderate to minor as the proposed development fits within the localised context of other farm buildings at Yeld Farm and the large woodland backdrop.

APPENDIX 2: LANDSCAPE SPECIFICATION AND MANAGEMENT PLAN

Site Preparation and Planting Recommendations

The planting proposals are illustrated in Figure 1.4 Landscape Mitigation Strategy.

Prior to planting it will be necessary to undertake some ground preparation to improve soil conditions and suppress weeds. Ground preparation operations may include pre-planting weed control, soil manipulation for drainage and cultivation, and take place two months before planting. Soil will be excavated from the application site during construction should be evenly spread within the field.

All stock will be bare-rooted, trees will be fast growing 2m feather standards. All plants will be sourced from a supplier in Herefordshire to ensure local provenance and to minimise transportation. The initial planting and any re-stocking operations will be carried out between November and the end of March. All planting is to be in accordance with BS4428:1989 General Landscape Operations.

Plants should be inspected when delivered and insecticide dipped trees should be ventilated by loosening the bag seal.

Each plant will be protected by a 0.6m bio-degradable shelter supported with a 0.75m long, treated softwood stake. The shelters will protect the plants from browsing voles and rabbits and facilitate spot-treatment with herbicide to control the annual growth of weeds.

The species of native tree and shrub selected are appropriate to the local landscape character and will benefit wildlife by providing a variety of food for a range of invertebrates, small mammals and birds and will produce a range of colours and shapes throughout the year.

Proposed Mixed Native Tree and Scrub Planting

Mixed native tree and scrub planting is proposed on the south-eastern and north-eastern boundary of the site. Trees will be planted at 3m centres in staggered rows to maximise screening potential on the south-eastern side and a double staggered row along the north-east site boundary. The species composition will be 60% trees species and 40% scrub species as set out in the table below.

TREE SPECIES	Composition in %	Size
<i>Quercus robur</i> (Pedunculate Oak)	25	1.75m -2.50m
<i>Acer campestre</i> (Field maple)	15	1.75m -2.50m
<i>Prunus avium</i> (Wild Cherry)	10	1.75m -2.50m
<i>Prunus domestica</i> (Damson)	5	1.75m -2.50m
<i>Pyrus pyraster</i> (Wild Pear)	5	1.75m -2.50m
Total	60	
SHRUB SPECIES		
<i>Crataegus monyogyna</i> (Hawthorn)	15	1+1 BR
<i>Prunus spinosa</i> (Blackthorn)	15	1+1 BR
<i>Corylus avellana</i> (Hazel)	5	1+1 BR
<i>Sambucus nigra</i>	5	1+1 BR
Total	40	

Proposed Hedgerow Planting

Native mixed species hedgerows with hedgerow trees are proposed along the south-east, south-west and north-eastern boundary of the site.

The proposed planting of the hedgerow will comprise 10% tree species and 90% shrub species, with shrub species planted in double staggered rows along the north-western edge closest to the AD plant, and the south-western edge where part of the original parkland boundary was planted.

The trees and shrubs within the hedgerow will be planted to reflect the surrounding hedgerow formations, and the planting pattern will be interspersed. The species and composition proposed for the site are detailed in the tables below:

TREE SPECIES	Composition in %	Size
<i>Quercus robur</i> (Pedunculate Oak)	3	1.75m -2.50m
<i>Acer campestre</i> (Field maple)	3	1.75m -2.50m
<i>Prunus domestica</i> (Damson)	2	1.75m -2.50m
<i>Pyrus pyraster</i> (Wild Pear)	2	1.75m -2.50m
Total	10 %	
SHRUB SPECIES	Percentage %	Size
<i>Crataegus monyogyna</i> (Hawthorn)	35	1+1 BR
<i>Prunus spinosa</i> (Blackthorn)	25	1+1 BR
<i>Corylus avellana</i> (Hazel)	10	1+1 BR
<i>Cornus sanguinea</i> (Dogwood)	5	1+1 BR
<i>Viburnum lantana</i> (Wafaring Tree)	5	1+1 BR
<i>Sambucus nigra</i>	5	1+1 BR
<i>Rosa canina</i> (Dog Rose)	5	1+1 BR
Total	90	

Wildflower Meadow and Wetland Area

Wildflower seeding is proposed between the existing woodland and the proposed development. The wildflower mix proposed is Emorsgate EM5, a meadow mixture for loamy soils, or similar. This seed mix contains 80% slow growing grasses, and 20% native wild flowers, once common in unimproved flower-rich lowland meadows. Loamy soils are medium textured soils: a mixture of clay, silt and sand with none predominating. They are usually found in low lying areas developed from alluvium and other material, frequently over chalky or limestone bedrocks and so are often neutral to alkaline. The wetland area would be planted with species suited to both wet and dry conditions such as British Seed Houses WFG9 Wetland and or equivalent as the detention basin would mostly be dry, only retaining water for up to 48 hours.

Implementation and Maintenance Programme

The following implementation and maintenance programme is proposed in order to maintain the landscape mitigation works for five years post-completion.

Hedgerows

The ground below planting will be maintained as bare ground in the first 2 to 3 years after establishment. Depending upon establishment of trees, these areas would then be seeded with a low-vigour native wildflower seed mix suitable for hedgerows, such as Emorsgate EM5 – Meadow mixture for loamy soils. The ground flora should be maintained through annual cutting and manual removal of vigorous weed species. Once established, new hedgerow planting should be subject to the same maintenance work as for the existing hedgerows.

Specific management operations for hedgerows include:

- The south-western hedgerow is to follow the pattern of the original hedgerow as per the 1888-1890 OS map (Note* it is not a straight hedgerow, and hedgerow trees should be spaced at uneven intervals).

- In the early years after planting, the new hedgerows will be kept clear of weed competition and topped-off once a height of 1.5m has been achieved to encourage bushy re-growth. After this initial period, ground flora will be allowed to colonise naturally. To encourage strong growth, trimming will be undertaken every 2 to 3 years and further topping-off will then be carried-out at 2m (both topping and facing both sides) and then re-growth allowed up to 3.5m prior to finally topping-off at 3m.
- All trees will be clearly tagged and allowed to grow-on to their mature heights.
- The feathered hedgerow trees will be marked and protected from trimming so that they can grow as standards.
- In the interests of wildlife, hand weeding, where feasible, should take precedence over the use of herbicides in hedgerows. However, in certain instances, herbicide may be the most effective measure to take against unwanted species.
- Where herbicide application is needed, it is recommended that an appropriate herbicide is applied in July - August in small controlled areas around the tree base.
- Once established the hedgerows will be maintained at a height of 3m which is optimal for wildlife. They will be trimmed between November and February. Hedgerow trimming will aim to maintain tall, bushy hedgerows, with a strong, bushy base. Hedgerows will be allowed to grow to a width of 4m.
- In the longer term, once the hedgerows start to become 'leggy', a programme of hedge-laying may become necessary, which should be done in sections on an annual basis. (Hedgerow cutting should only be re-commenced 2 years after laying.) Laying would be undertaken subsequently every 10 to 15 years.

Mixed Tree and Scrub Planting

Planting is to be in accordance with BS 4428:1989, and will commence in the first season following the commencement of the construction works. A healthy shrub layer will be allowed to develop beneath canopy trees, forming a dense vertical structure to favour scrub-nesting birds. New structurally diverse habitat edges will be provided by selective pruning and coppicing of shrub species to favour foraging by invertebrates, bats and other fauna. Management operations will ensure that woodland and scrub does not invade areas of open grassland. Native ground flora development will be encouraged. Ground flora should be maintained through annual removal of vigorous weed species.

Management action for the establishment of trees and scrub planting should include carrying out the following works:

- Maintenance of a 1m 80% weed-free area to the base of each plant for five years – this can be achieved through the application of a 5-7.5 cm mulch in this area.
- Maintenance of rabbit guards and other forms of protection.
- Maintenance of adequate levels of soil moisture which may require irrigation during dry periods. A 5-7.5 cm mulch for 1m around the base of each plant will increase retention of soil moisture.
- All tree stakes and ties shall be inspected during the growing season and adjusted as necessary to ensure that they are secure and firm and not chafing the stem of the trees. Loosen as necessary. Stakes and ties shall be removed and disposed of when trees become self-supporting.
- Prune and remove any dead, dying and diseased branches, shoots or snags. Dress any cut ends exceeding 25mm diameter with fungicidal sealant. Remove prunings from site.
- Any plants that have died will be marked for replacement, then replaced at an appropriate season.

- All tree and shrub shelters shall be removed once the planting has become established.

Specific management operations for ongoing long term maintenance include:

- Shrub species should be coppiced on 5-7 year rotation to encourage vigorous new growth. Coppice materials will be stored as woodpiles within the site to provide an additional deadwood habitat resource.
- Hand weeding, where appropriate, should take precedence over the use of herbicides. However, in certain instances, herbicide may be the most effective measure to take against unwanted species.
- Where herbicide application is needed, it is recommended that an appropriate herbicide is applied in July-August in small controlled areas around the shrub/tree base. Herbicides should comply with the Control of Pesticides Regulations 1986 and be on the current DEFRA list of approved products.

Wildflower Meadow

The existing grassland will be retained and will be managed in accordance with the following prescriptions:

- Following completion of the AD plant any bare patches of ground occurring due to construction activity to be seeded with a meadow mixture comprising 20% wild flowers and 80% grasses such as Emorsgate EM5 – Meadow Mixture for Loamy Soils.
- In the first year after seeding: as a result of soil disturbance annual weeds are likely to grow. These will be controlled by mowing regularly e.g. in May and August (which will be determined by weed growth), or where practical, injurious weeds, such as Creeping Thistle (*Cirsium arvense*), Spear Thistle (*Cirsium vulgare*) and Broad-leaved Dock (*Rumex obtusifolius*), will be spot-treated with a broad-spectrum systemic herbicide.
- Localised cultivation and seeding will be repeated if any substantial bare patches remain after one year.

- Part of wildflower meadow will be left uncut each year. This will provide an area of insect food and refuge. This will be done in rotation, leaving a different side uncut each year.
- Injurious weeds such as Thistles and Broad-leaved Dock may persist or appear in the grassland. These will not be allowed to spread to adjoining agricultural land. Spot treatment with an herbicide will be applied as required. If Common Ragwort is found, it will be hand-pulled before flowering in June and removed from the field as it can be poisonous to livestock if the hay is used for forage.
- There will be no ploughing or cultivation (other than described above) and none of the following will be applied to the land: lime or other substances that alter the soil's acidity; inorganic or organic fertiliser; pesticides; or herbicides, except for spot treatment of pernicious weeds (e.g. Thistles; Broad-leaved Dock).

Detention Basin

- The detention basin on the south-western part of the site may require the annual removal of fallen leaves to ensure that the basin remains fully functional.
- This basin will be designed to retain storm water during peak conditions. The basin will have irregular edges and will be graded to ensure a smooth transition in depth from its margins.
- The SuDS will be managed to enhance their visual amenity and value to wildlife. The attenuation basin margins will be seeded with an appropriate seed mix such as British Seed Houses WFG9 Wetland and or equivalent, preferably locally-produced to ensure appropriateness of seed content, which will enable an appropriate interface with meadow grassland.

The SuDS will be monitored annually to assess their condition in both amenity and ecological terms. Monitoring will assess the following:

- Success of marginal plant colonisation;
- Condition and diversity of banks, including presence of scrub;
- The spread of any invasive, exotic species which will be controlled, ideally by hand, to ensure the growth of other species is not suppressed.

Specific management operations include:

- Diversify habitat and prevent ecological succession by removing deep bottom muck, silt or dense stands of dominant vegetation;
- Appropriate cutting back of scrub growth in the margins of the SuDS to provide a variety of open and shaded areas;
- Cut back herbaceous plants and grasses in late summer before they set seed to promote a diverse, tussocky growth; and
- Confine movement channels for maintenance to the minimum number of routes to avoid excessive trampling of the habitat.

Summary of Management Tasks – Proposed Tree and Shrub Planting

- Maintenance of a 1m 80% weed-free area to the base of each tree for five years – this can be achieved through the application of a 50-75 mm mulch in this area. Once or twice a year and as required.
- Maintenance of rabbit guards and other forms of protection. Monthly until removal.
- Maintenance of stakes and ties, including loosening as necessary. Monthly until removal.
- Maintenance of good levels of soil fertility and moisture. Irrigation may be required during dry periods. A 50-75 mm mulch for 1m around the base of each tree will increase retention of soil moisture. Watering (to field capacity) a minimum of 8 times during dry months.

- Treatment of pests and diseases: Monthly.
- Check for root firmness and upright alignment of tree after high winds, frost heave and in spring and autumn until trees are considered to be wind firm.
- Formative pruning to avoid future structural problems and to remedy disease as required following maintenance visits.
- Removal of guards, stakes and ties after 2 years, subject to inspection.

To conclude the landscape strategy, the planting and maintenance proposals detailed above will ensure that the screen planting around the Yeld Farm AD plant will establish well and result in decent early growth. The use of mulch, combined with the timely and targeted application of herbicide, will strengthen and enhance the existing belt of trees and will support a variety of wildlife.

IMPLEMENTATION AND MAINTENANCE PROGRAMME YEAR 1-5

Planting timescale

Planting will commence no later than the first planting season following the completion of the development. All earth works regarding the landscaping scheme should then commence. All planting should be completed between November – March when plants are dormant. The order of the soft landscape works should be implemented starting with hedgerows, then mixed tree and scrub planting followed by seeding of any bare patches of ground with grassland seed mix.

Order of Planting	Landscape Element	Planting Timescale
1	Hedgerows on the north-west and south-west site boundary	November - March
2	Mixed native tree and scrub planting	November - March
3	Seeding of wildflower and wetland areas	February - March

Landscape annual management plan: Year 1 – 5

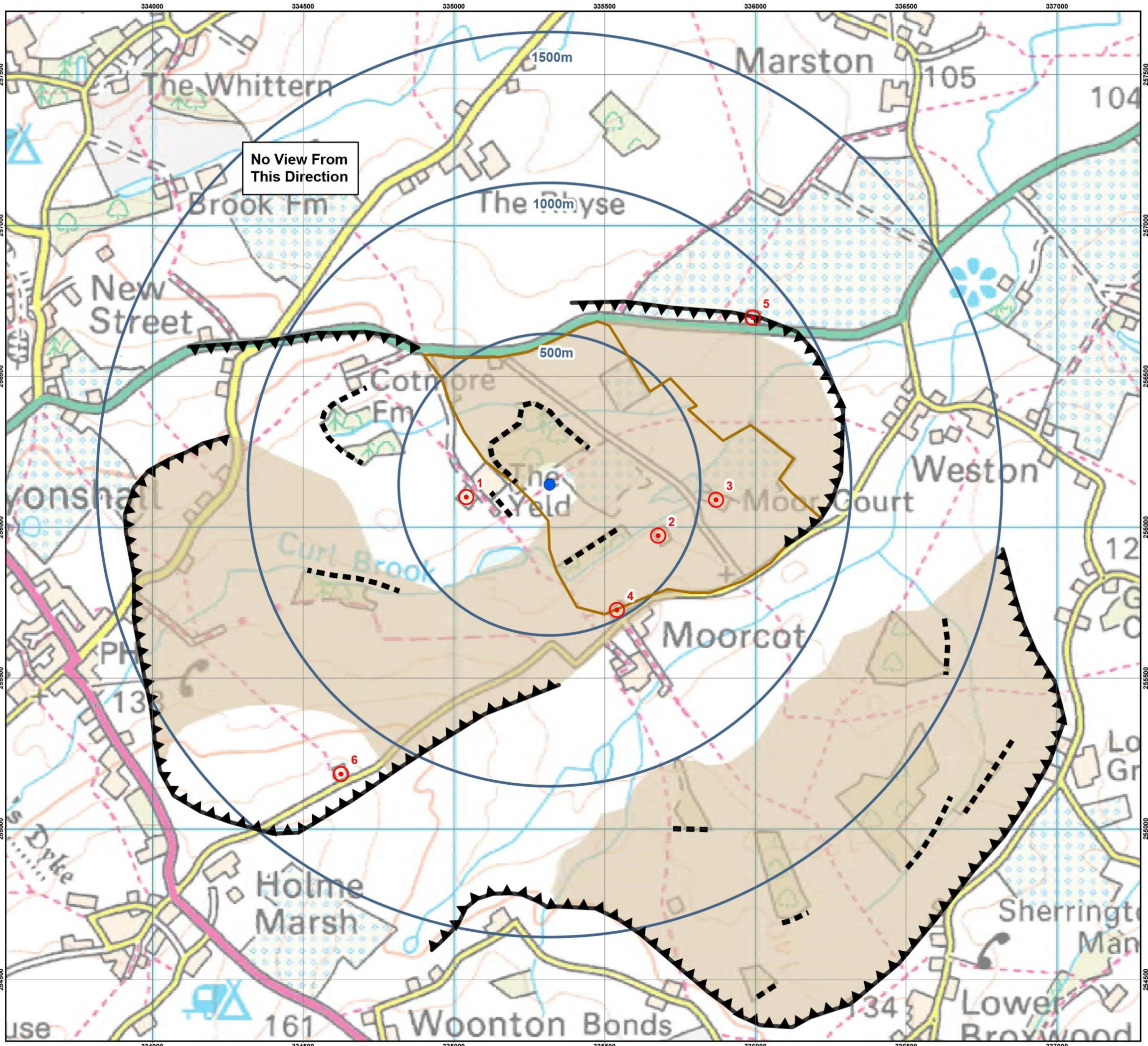
Landscape Element	Actions	Frequency
Hedgerows	A weed free area will be maintained around new planting, through application of 5-7.5cm mulch. Top up mulch annually.	Once or twice a year and as required
	Where herbicide application is needed, it is recommended that an appropriate herbicide is applied in July-August in small controlled areas around the shrub/tree base. Herbicides should comply with the Control of Pesticides Regulations 1986 and be on the current DEFRA list of approved products.	July – August As required
	Treatment of pests and diseases	As required
	Inspect and maintain rabbit guards and other forms of protection.	Monthly until removal
	All plants marked for replacement will be replaced by whips of the same species.	November – February Annually
	Removal of guards, stakes and ties	After 2 years, subject to inspection
	Topping off once a height of 1.5m has been achieved to encourage bushy regrowth.	November – February Annually
	Trimming every 2-3 years to a height of 2–3m	November – February
		Every 2-3 years after Year 5

Landscape Element	Actions	Frequency
	Long term management - hedgelaying, once hedgerows start to become leggy, in sections on an annual basis	November – February After Year 5
Mixed native tree and scrub planting	<p>Maintenance of a 1m 80% weed-free area to the base of each plant for five years – this can be achieved through the application of a 5-7.5 cm mulch in this area.</p> <p>Where herbicide application is needed, it is recommended that an appropriate herbicide is applied in July-August in small controlled areas around the shrub/tree base. Herbicides should comply with the Control of Pesticides Regulations 1986 and be on the current DEFRA list of approved products.</p> <p>Inspect and maintain rabbit guards and other forms of protection.</p> <p>Treatment of pests and diseases</p> <p>Maintenance of adequate levels of soil moisture which may require irrigation during dry periods. A 5-7.5 cm mulch for 1m around the base of each plant will increase retention of soil moisture.</p> <p>All tree stakes and ties shall be inspected during the growing season and adjusted as necessary to ensure that they are secure and firm and not chafing the stem of the trees. Loosen as necessary. Stakes and ties shall be removed and disposed of when trees become self-supporting.</p> <p>Prune and remove any dead, dying and diseased branches, shoots or snags. Dress any cut ends exceeding 25mm diameter with fungicidal sealant. Remove arisings from site.</p>	<p>Once or twice a year and as required</p> <p>July – August Annually</p> <p>Monthly until removal</p> <p>As required</p> <p>Inspect in June – August, during dry periods</p> <p>May – August Annually</p> <p>November – February Annually</p>

Landscape Element	Actions	Frequency
	<p>All plants marked for replacement will be replaced by whips of the same species.</p> <p>All tree and shrub shelters shall be removed once the planting has become established.</p> <p>Shrub species should be coppiced on 5-7 year rotation to encourage vigorous new growth. Coppice materials will be stored as woodpiles within the site to provide an additional deadwood habitat resource.</p> <p>Where herbicide application is needed, it is recommended that an appropriate herbicide is applied in July-August in small controlled areas around the shrub/tree base. Herbicides should comply with the Control of Pesticides Regulations 1986 and be on the current DEFRA list of approved products.</p>	<p>November – February Annually</p> <p>After 2 years, subject to inspection</p> <p>5-7 year rotation</p> <p>After Year 5</p> <p>July – August annually</p>
Wildflower Seed Mixes for Meadow and Wetland Area	<p>Seeding of bare patches of ground following completion of construction.</p> <p>Spot-treat injurious weeds, such as Creeping Thistle (<i>Cirsium arvense</i>), Spear Thistle (<i>Cirsium vulgare</i>), Common Ragwort (<i>Jacobaea vulgaris</i>) and Broad-leaved Dock (<i>Rumex obtusifolius</i>), with a broad-spectrum systemic herbicide.</p> <p>Localised cultivation and re-seeding if bare ground appears.</p> <p>In the first year of establishment mow in May and August to control weed growth. In Year 2 onwards: Cut all growth to a height of approximately 50mm and remove arisings from site.</p>	<p>March – April</p> <p>May – August</p> <p>March – August</p> <p>August or September Annually</p>

APPENDIX 3: FIGURES 1.1 – 1.5

See following page.



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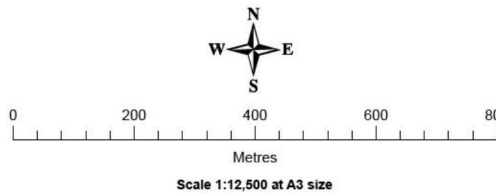
Proposed AD Plant,
Land East of Yeld Farm,
Lyonshall, Herefordshire, HR5 3LY

Figure 1.1
Visual Analysis Plan

- Site Location
- Buffer
- Parkland
- Visual Envelope: within which views towards site are largely fragmented or blocked by intervening features
- ▲ Middle and Long Range formed by topography
- Short Range and Intermediate horizons by woodland
- Visual Receptors

No. Visual Receptor
1 Yeld Farm house
2 Garden House
3 Moor Court
4 Moorcot
5 High Barn
6 Cold Heart

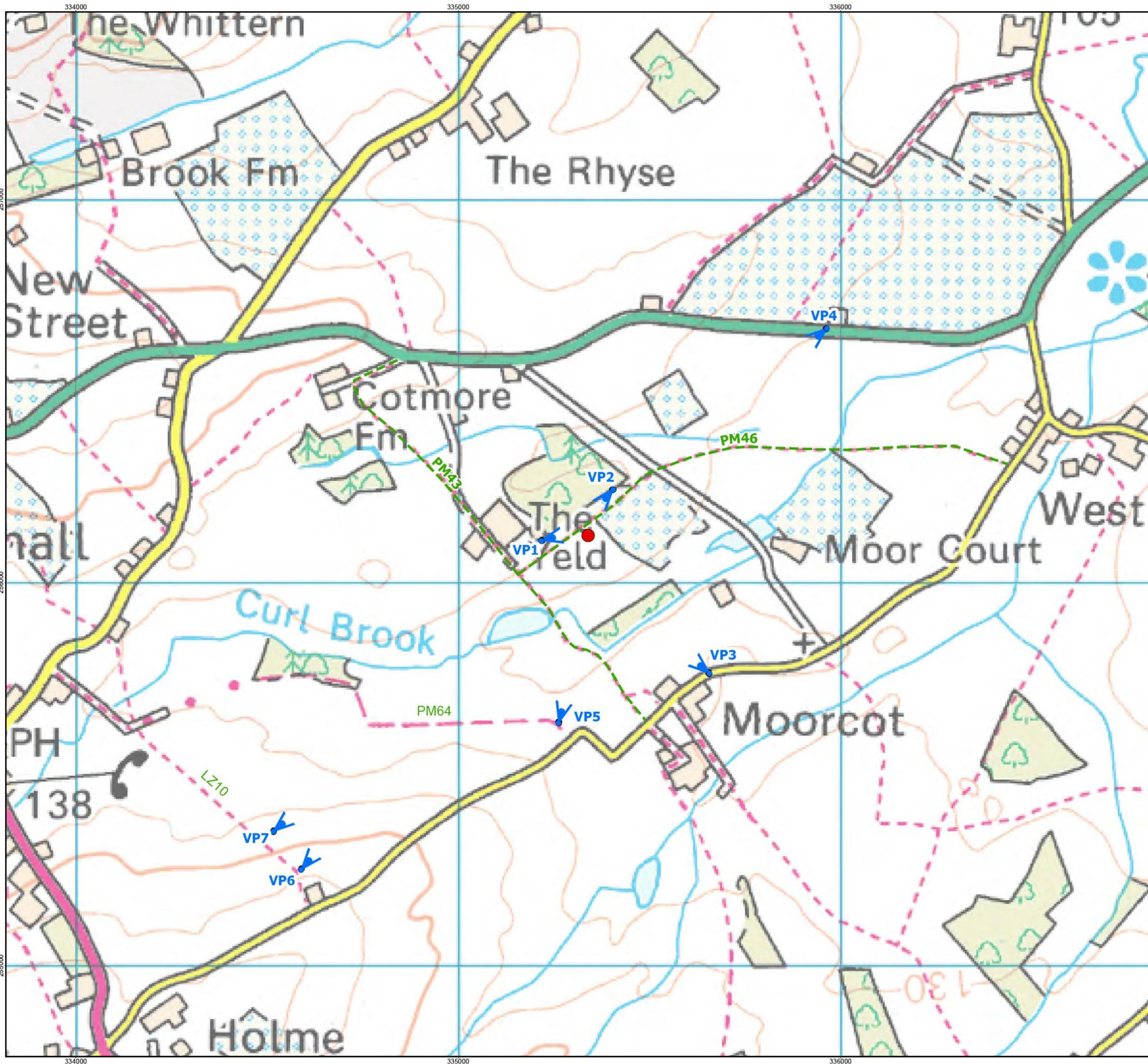
Drawn by L.Donnelly 05/09/2013, Verified by M.Duignan 05/09/2013



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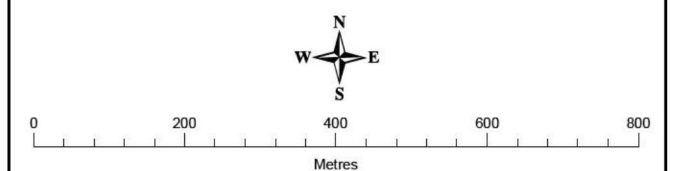
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Proposed AD Plant,
Land East of Yeld Farm,
Lyonshall, Herefordshire, HR5 3LY

Figure 1.2
Viewpoints

- Site Location
- Viewpoints
- Public Right of Way

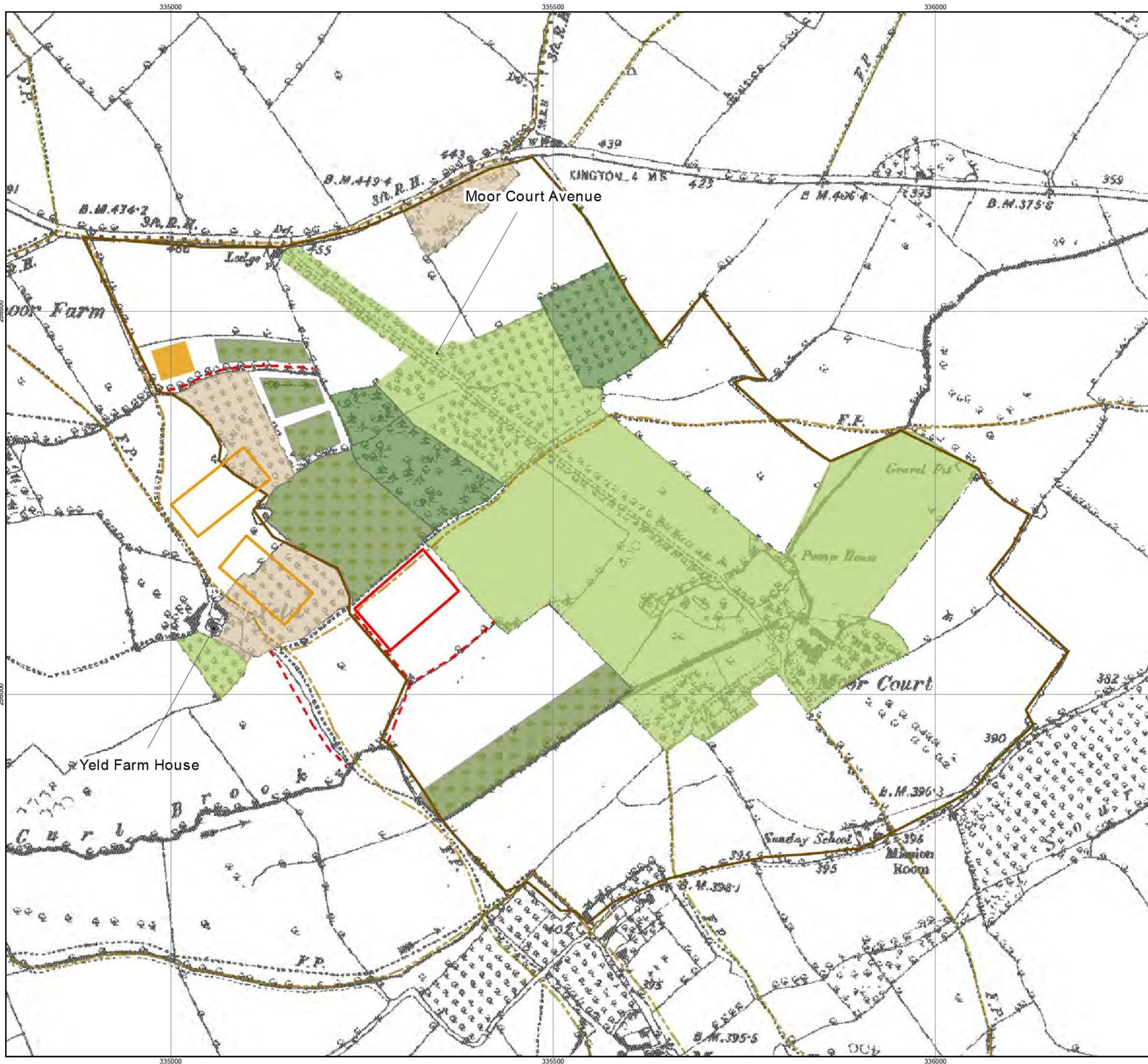
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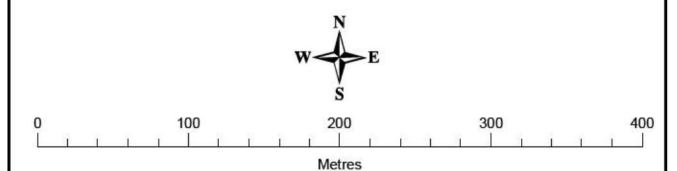
Proposed AD Plant,
Land East of Yeld Farm,
Lyonshall, Herefordshire, HR5 3LY

Figure 1.3
Landscape Change Plan

- Proposed AD Development
- Moor Court Parkland
- Surviving Features Pre-1890
 - Tracks and Footpaths
 - Intact Woodland
 - Partially Intact Woodland/Parkland
- Features Lost Since 1890
 - Hedgerows
 - Woodland/Orchard
- Main Additions To Local Landscape
 - Yeld Cottages
 - Poultry Houses
 - New Woodland/Treebelt/Orchard

1888-1890 OS Map, First Edition.

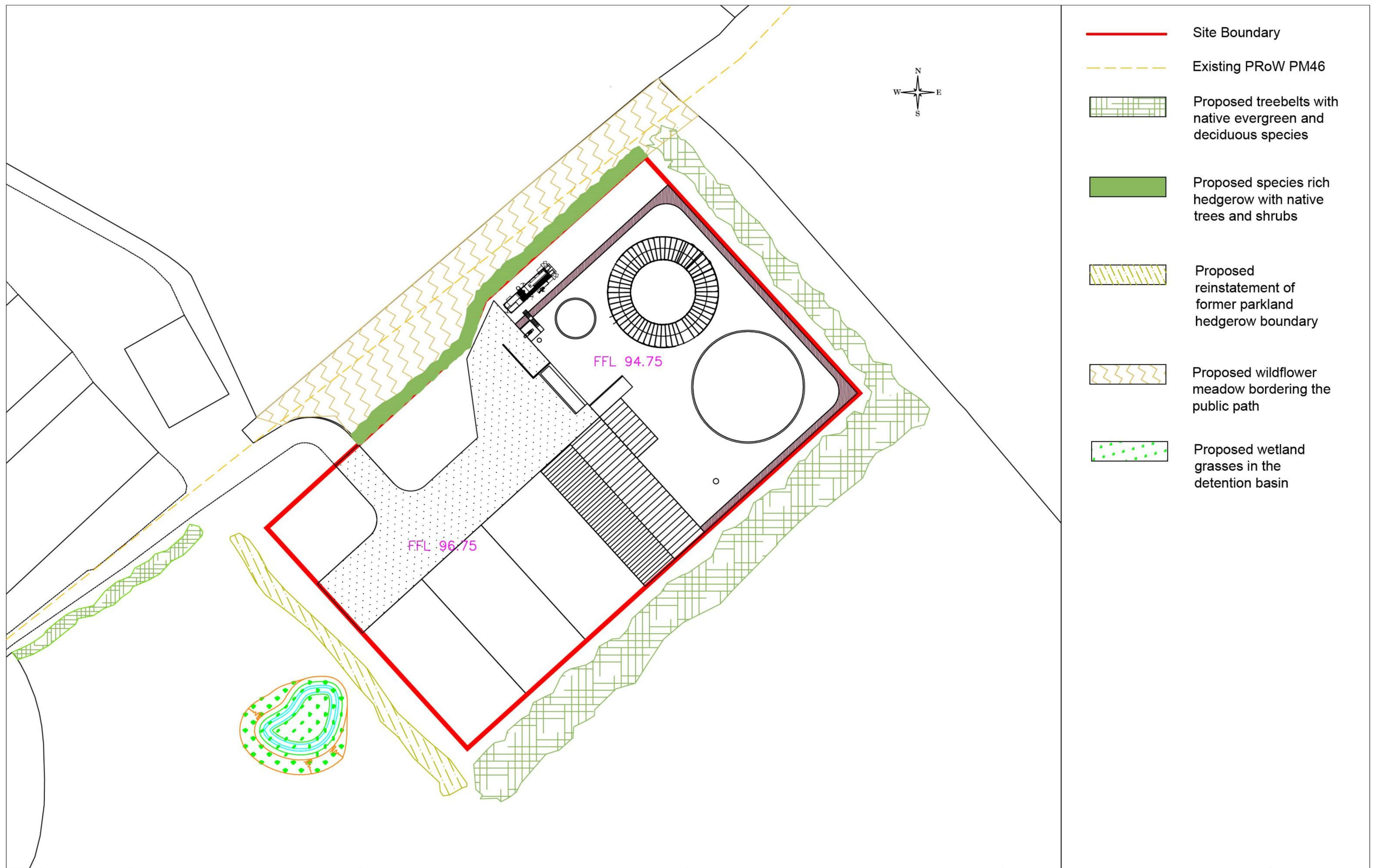
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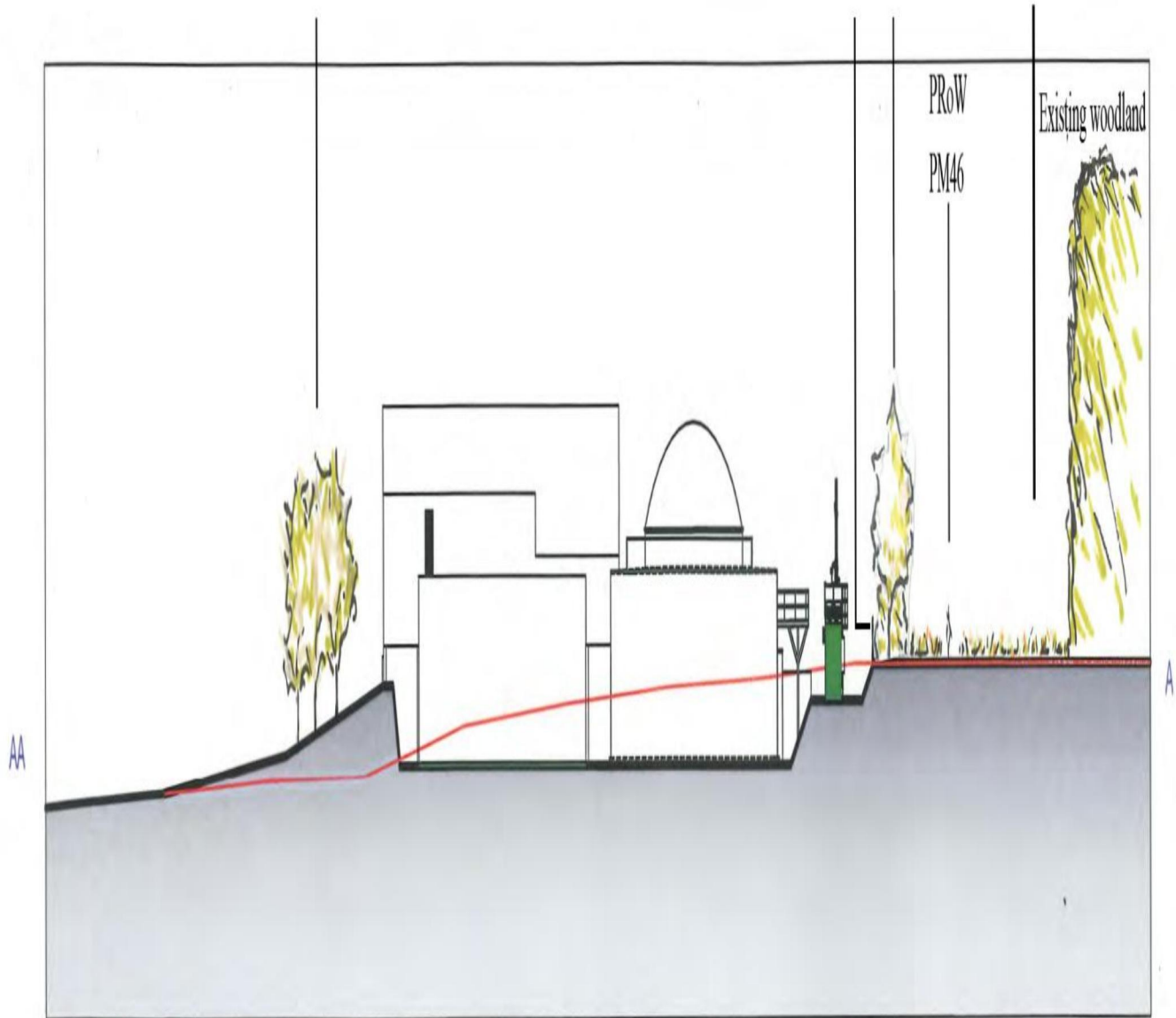


		<p>Title</p> <p>Figure 1.4 Landscape Mitigation Strategy</p>	<p>Project</p> <p>Proposed Anaerobic Digestion Plant Land East of Yeld Farm Herefordshire</p> <p>Date: 24/04/2014</p>	<p>Drawn</p> <p>MD</p> <p>Checked</p> <p>MF</p> <p>Scale</p> <p>1:750 @ A3</p>	<p>ADAS UK Ltd., Pendeford House, Pendeford Business Park, Wobaston Road, Pendeford, Wolverhampton. WV9 5AP. Tel +44(0)1902 271300, Fax +44(0)1902 785574</p> <p>Copyright ADAS UK Ltd 2014.</p>	
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Plans are for illustration purposes only and should not be scaled from.

Proposed tree belt
with three staggered
row planting

Site boundary with fence
Proposed hedgerow with trees
Proposed wildflower meadow

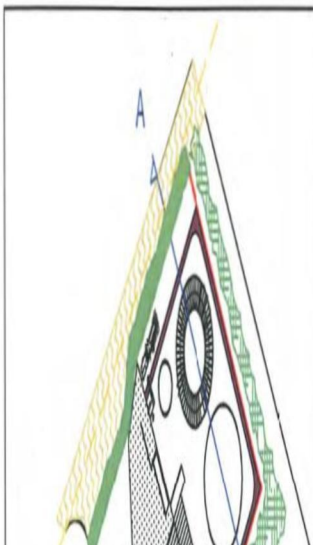


PROPOSED NORTH EAST VIEW

SCALE 1:500 © A3

— Existing Levels

— Proposed Levels



along former parkland

Existing woodland

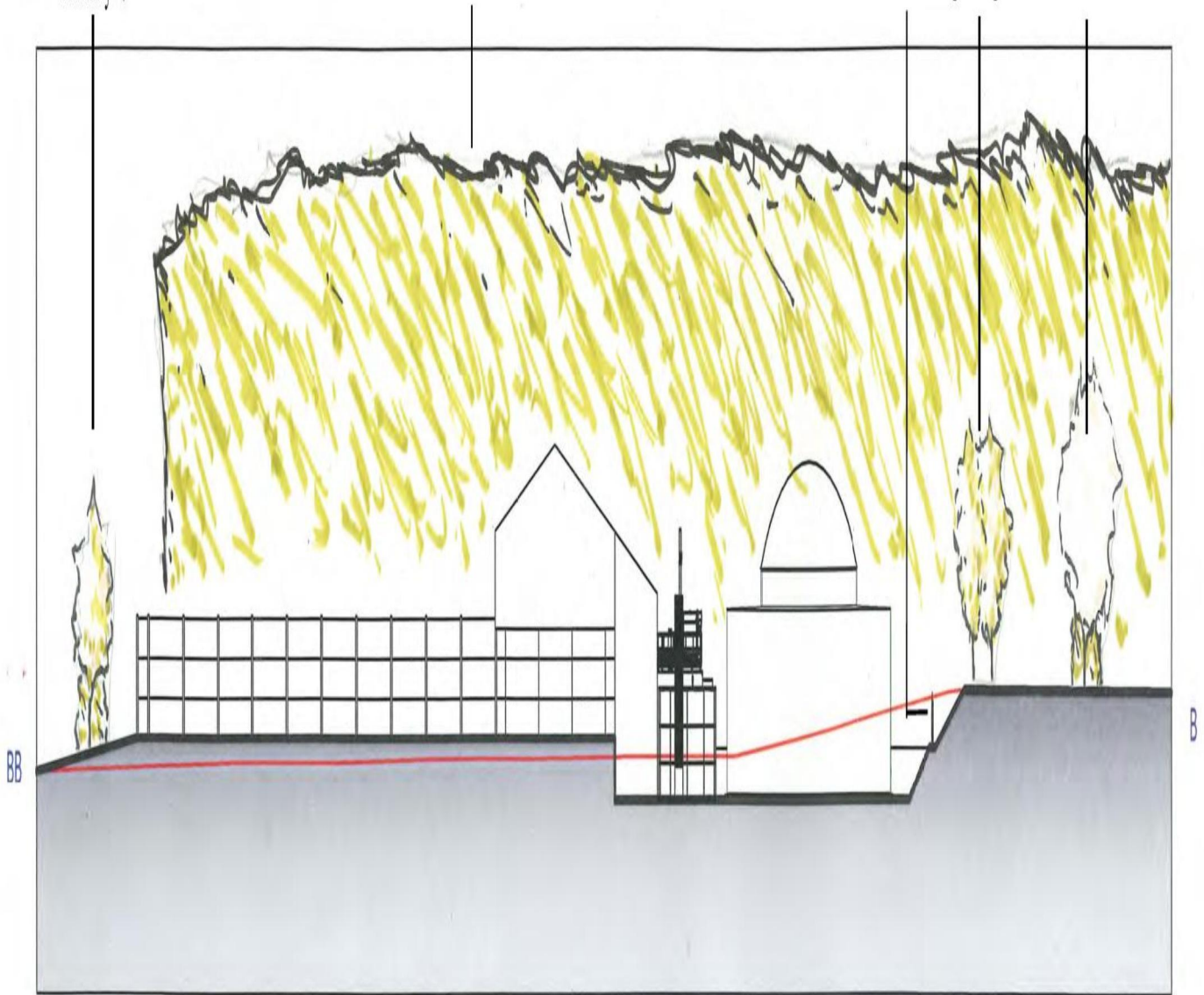
fence

staggered row

trees

boundary

planting



PROPOSED SOUTH EAST VIEW

SCALE 1:500 @ A3

Existing Levels

Proposed Levels

