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Site Boundary
Bryn Henllys Solar Farm
ZTV - Bryn Henllys Extension Visible Only (3m)
ZTV - Existing Bryn Henllys Site Visible Only (2.5m)
Both Sites Visible

Screened ZTV Production Information -

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

- Indicative Woodland and Building heights are modelled at 15m and 8m respectively. - Viewer height set at 1.7m
- Calculations include earth curvature and light refraction
 This ZTV does not include any hedgerows or individual
- trees/groups located within or around the site as surveyed by Arb consultants.

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

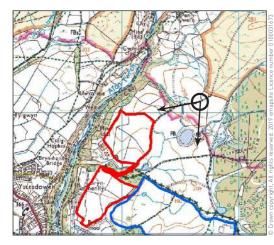
FIGURE 5.10

Cumulative Screened Zone of Theoretical Visibility

DRWG No: **P18-2622_04** Sheet No: - REV: -Date: 30/05/2019 Scale: 1:45,000 @ A3







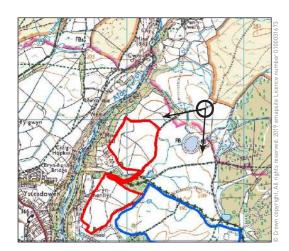
Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 11:54 OS reference : 276686, 213095 Viewpoint height : 216m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

VIEWPOINT 1

FIGURE 5.12

Cumulative Photomontages





Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 11:54 OS reference : 276686, 213095 Viewpoint height : 216m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

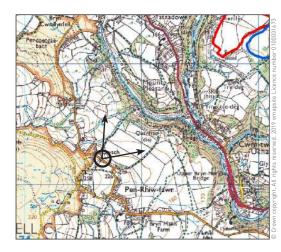
VIEWPOINT 1

FIGURE 5.12

Cumulative Photomontages







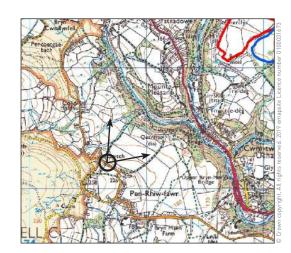
Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 13:44 OS reference : 274677, 211188 Viewpoint height : 220m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

VIEWPOINT 4

FIGURE 5.12

Cumulative Photomontages





Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 13:44 OS reference : 274677, 211188 Viewpoint height : 220m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

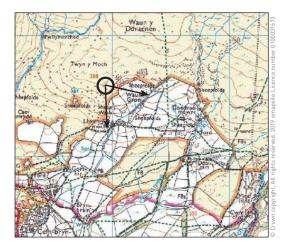
VIEWPOINT 4

FIGURE 5.12

Cumulative Photomontages





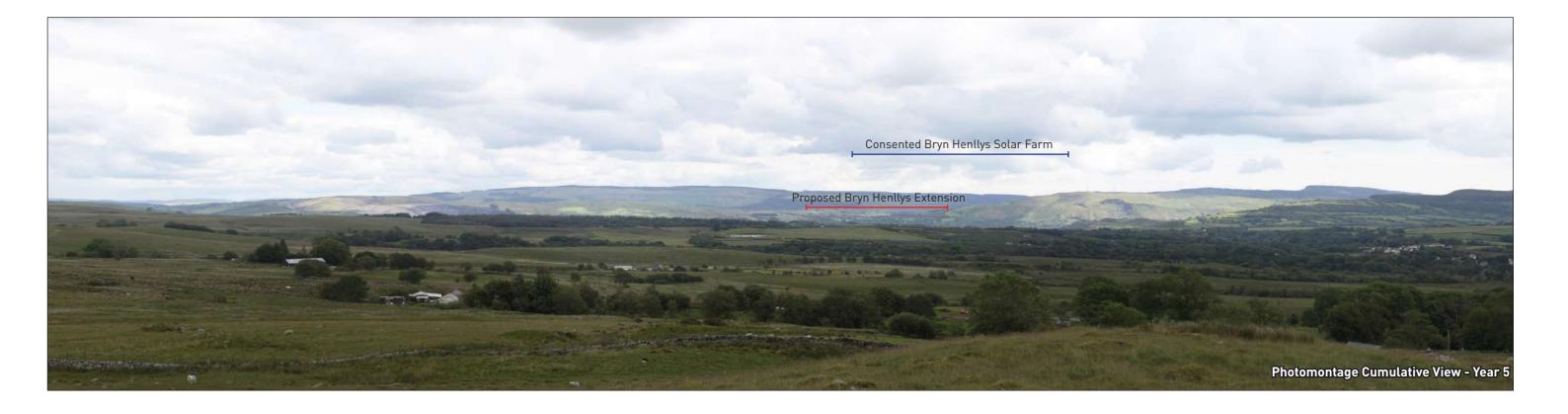


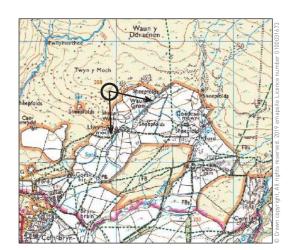
Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 14:58 OS reference : 274952, 214589 Viewpoint height : 278m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

VIEWPOINT 6

FIGURE 5.12

Cumulative Photomontages





Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 14:58 OS reference : 274952, 214589 Viewpoint height : 278m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

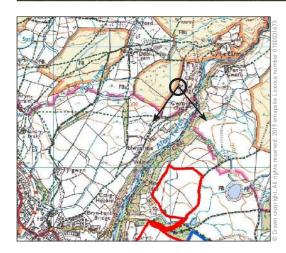
VIEWPOINT 6

FIGURE 5.12

Cumulative Photomontages







Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 12:36 OS reference : 276069, 213666 Viewpoint height : 212m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

VIEWPOINT 9

FIGURE 5.12

Cumulative Photomontages





Camera make and model: Canon EOS 5D with a fixed 50mm lens. Date & time of photography : 19.06.19 @ 12:36 OS reference : 276069, 213666 Viewpoint height : 212m Recommended Viewing distance : 30cm Angle of view : 75° Camera height set at 1.5m Document dimensions (420mm x 297mm)

VIEWPOINT 9

FIGURE 5.12

Cumulative Photomontages

PLANTING SPECIFICATION

naintenance guidelines are for planning purposes only to indicate the necified and do not constitute a detailed specification

GENERAL

- 1.2. All plants shall conform to BS 3936 and be in accordance with the National Plant Specification. Supplying nurseries shall be registered under the HTA Nursery Certification Scheme. All plants shall be packed and transported in accordance with the Code of Practice for Plant Handing as produced by be pa CPSE
- 1.3. Planting shall not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds. AlL bareroot planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out. Tree handling, storage and planting shall be in accordance with BS 8545 Chapters 9 to10 and Annexes E to F.
- 1.4. The landscape contractor shall maintain all areas of new planting for a period of 12 months foll practical completion. All stock deemed to be dead, dying or diseased within the defects period sh replaced by the contractor at his own cost.
- 1.5. A minimum intervention approach will be used in terms of weed control. In areas of transplant tree/chrub or ornamental shrub planting this is to be achieved by using mulch mats and hand-weeding. Weed killer and other chemicals will be used as little as possible on site. Spot removal of weeds will be carried out by hand removal as necessary.

2. TREE PLANTING

Ground Pre aration and Tree Pit Excavation

- . Where necessary remove existing weeds by hand. Chemical removal using a glyphosate based herbicide will be avoided unless large areas need clearing following which allow a suitable period to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 2.2. Tree pits of at least 75mm diameter greater than the root system and no deeper than the rootball / container depth are to be excavated and the sides well scarified to prevent smearing. All extraneous matter such as plastic, wood, metal and stones greater than 50mm in any dimension shall be removed from site.
- of the pit, the soil dug should be placed to one side separating topsoil and subsoil as 2.3. During excavation far as is practical

Tree Planting

- 2.4. Trees shall be planted as per the planting arrangement as set out on the planting plan and plant schedule
- 2.5. The typical rooting depth for trees is 900mm. The first 300mm shall be made up of topsoil; it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth.
- 2.6. The root system of the tree should be wetted prior to planting. The tree should be planted at the correct depth taking into account the position of the root flare and the finished level the rootball or root stem transition should be level with the existing nost soil or surface. The base of the rootball should sit on subsoil, for larger rootballs the subsoil will sit around the lower portion of the rootball.
- 2.7. Tree pits should be backfilled with the excavated topsoil, if the original topsoil is not available or deemed unsuitable, a multi-purpose topsoil should be used. Any subsoil excavated should be discarded and the subsoil depth lipeyord 300mm depth Actiliated with a high sand content subsoil. Backfills should be added gradually, in layers of 150mm to 230mm depth, ensuring the tree is held upright At each stage the fill should be firmed in to eliminate all air pockets under and around the root system, but with care being taken not to excessively compact the soil. The final layer should not be consolidated.
- 2.8. General-purpose slow release fertiliser [at the rate of 75gm/m2] and Tree Planting and Mulching Compost at the rate of (20litres/m2] are to be incorporated into the top 150mm of topsoil during final cultivations.
- 2.9. Selected standard trees will be protected from rabbit and deer damage by fitting appropriate tree quarter
- 2.10. All extra heavy standard size trees are to be double staked with 75mm dia stakes. Stakes should be driven at least 300mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables etc. and should typically be one third the height of the tree stem above ground.
- 2.11. Staked tr shall be secured to stakes with suitable proprietary rubber tree ties and spacer
- 2.12.Immediately after planting, but before applying the below bark mulch, all trees should be saturated to field capacity.
- 3.Ornamental composted bark mulch will be spread to a depth of 75mm across a 0.8m dia circle individual trees, ensuring that the root flare and base of the stem, along with any ground cover are not buried.

3. HEDGEROW AND HEDGEROW REINFORCEMENT PLANTING

- 3.1. Where necessary existing weeds will be treated with a glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 3.2. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter will be removed from site to a registered waste disposal facility.
- Planting

Ground Preparation

- 3.3. The planting arrangement shall be as set out in the plant schedule on the relevant planting plan.
- 3.4. Bare-root hedge plants shall be notch planted in a double staggered row at the rate of 5 plants per linear metre (using 1 shaped notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the ground surface. The notch must then be closed and the solt will be well limed routed from tors in line with the uguidelines as as eat out he 54 zeld (199).
- 3.5. Container-grown hedge plants will be planted into a pit dug 1.5x the diameter of the root r the bottom and sides of the planting pit broken up to aid root expansion. The plants will be that the root collar is exactly level with the ground surface.
- 3.6. All bare-root hedge planting stock will be protected from rabbit damage using approved propr 600mm clear plastic spiral guards, supported with 0.9m 12/14lb canes as advised by the manufac



 L. All landscape operatives will be appropriately trained, certified and qualified to undertake the tasks required. When required, the relevant certificates will be made available for inspection. All work is to be carried out in accordance with the relevant British Standards, Codes of Practice and Legislation.
 J. All landscape operatives will be replaced with plants of similar size and species. If the species may be used as replacement if agreed with the LPA. ved herbicid ance period using appr

3.9. The planting area will be kept weed free throughout the maintena in April, June and August

4. GENERAL MAINTENANCE

- 4.1. The Landscape contractor shall maintain all areas of new planting for a period of 12 months following practical completion. All stock deemed to be dead, dying or diseased within the defects period shall be replaced by the contractor at his own cost. The site is to be visited monthy hroughout the year to
 - undertake the Following operations: Weed clearance: All planting areas to be kept weed free by hand weeding or herbicide
 - treatment. Litter clearance: All litter is to be removed from planting beds. Watering: All planted areas are to be watered for the first two years from May to Septe following any dry periods of 7 days.
- Trees and Shrubs

R

29

4.2. All trees are to be watered weekly from May to the end of September unless unnecessary due to All trees are to be watered weekly from May to the end of September unless unnecessary due to heavy rain, to receive 20 gallons of water. All shrubs are to be watered for the first two years from May to September following any dry periods of 7 days. All tree ties and stakes are to be checked and adjusted if too loose, too tight or if chaffing is occurring. Any broken stakes are to be replaced. Any damaged shouts/branches are to be pruned back to healthy wood. Plants are to be pruned in accordance with good horticultural practice to maintain healthy, well-shaped specimens. Native shrubs - Using approved herbicides a 1 m diameter circle centred on each planting station shall be kept weed free throughout the maintenance period. Stakes may be removed from Year 2 if plant is fully established and if shelter os suppressing further growth.

В

8

PROPOSED NORTHERN TREE

(678.00m²; 2.00m centres) 26no. Acer campestre **(SStd)**

26no. Alnus glutinosa (SStd) 26no. Quercus robus **(SSTd)** 17no. Acer campestre **(F)**

17no. Alnus glutinosa **(F)**

9no. Ilex aquifolium 17no. Quercus robur (W) 9no. Salix caprea **(T)**

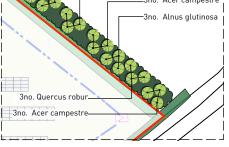
17no. Crataegus monogyna **(T)** 9no. Corylus avellana **(T)**

BELT - 5 m wide

 Existing hedgerow retained and reinforced with infill planting where appropriate (273.00m length - Assumed 20% infill requirement) 33no. Acer campestre 131no. Crataegus monogyna 16no. Cornus sanguinea 16no. Corylus avellana 66no. Fagus sylvatica 66no. Prunus spinosa

Inset 1

Inset 1 -3no. Acer campestre -2no. Quercus robur -3no. Alnus glutinosa 3no. Acer campestre -3no. Alnus glutinosa

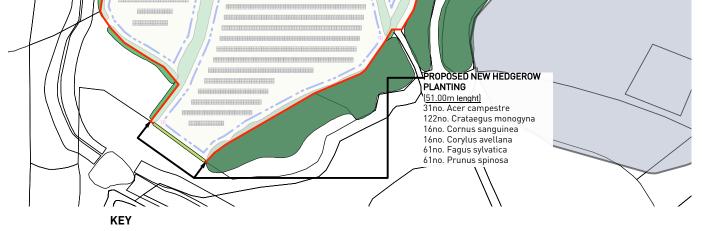


PLANTING SCHEDULE Native Tree Planting

	-					
Quantity	Species	Form	Girth	Height cm	Clear Stem	Root Condition
9	Acer campestre	Extra Heavy Standard	18-20	450-500	200cm min.	100-200L
6	Alnus glutinosa	Extra Heavy Standard	18-20	425-600	200cm min.	100-200L
5	Quercus robur	Extra Heavy Standard	18-20	450-500	200cm min.	100-200L

Northern Tree Bel

CON



To be planted at 2m centres in drifts. Species to be planted in an evenly spaced but irregular pattern (i.e. no grids or lines) in single species groups with approximately 3-7 plants per group.

Species	Form	Age + Times Transplanted	Height cm	Root Condition
Acer campestre (15%)	SStd	10-12	300-350	45Lt
Alnus glutinosa (15%)	SStd	10-12	300-350	45Lt
Quercus robur (15%)	SStd	10-12	300-350	45Lt
Acer campestre (10%)	Feathered	2x	150-175	В
Alnus glutinosa (10%)	Feathered	2x	150-175	В
Crataegus monogyna (10%)	Transplant	1+1	40-60	В
Corylus avellana (5%)	Transplant	1+1	40-60	В
Ilex aquifolium (5%)	Leader with laterals	-	40-60	2L
Quercus robur (10%)	Whip	1+1	100-125	В
Salix caprea (5%)	Transplant	1+1	40-60	В

Proposed Hedgerow and Hedgerow Reinforcement Planting

To be planted at 6 per linear metre in a double staggered row, rows will be 40cm apart

Species	Common Name	Percentage in Mix %	Height/Spread cm	Form	Age / Times Transplanted	Root Condition
Acer campestre	Field Maple	10%	60-80	Transplant	1+1	В
Crataegus monogyna	Common Hawthorn	40%	60-80	Transplant	1+1	В
Cornus sanguinea	Dogwood	5%	60-80	Transplant	1+1	В
Corylus avellana	Hazel	5%	60-80	Transplant	1+1	В
Fagus sylvatica	Common Beech	20%	60-80	Transplant	1+1	В
Prunus spinosa	Blackthorn	20%	60-80	Transplant	1+1	В





Proposed 5m Tree Belt

- Proposed Hedgerow
- Existing hedgerow retained and reinforced with infill planting where appropriate

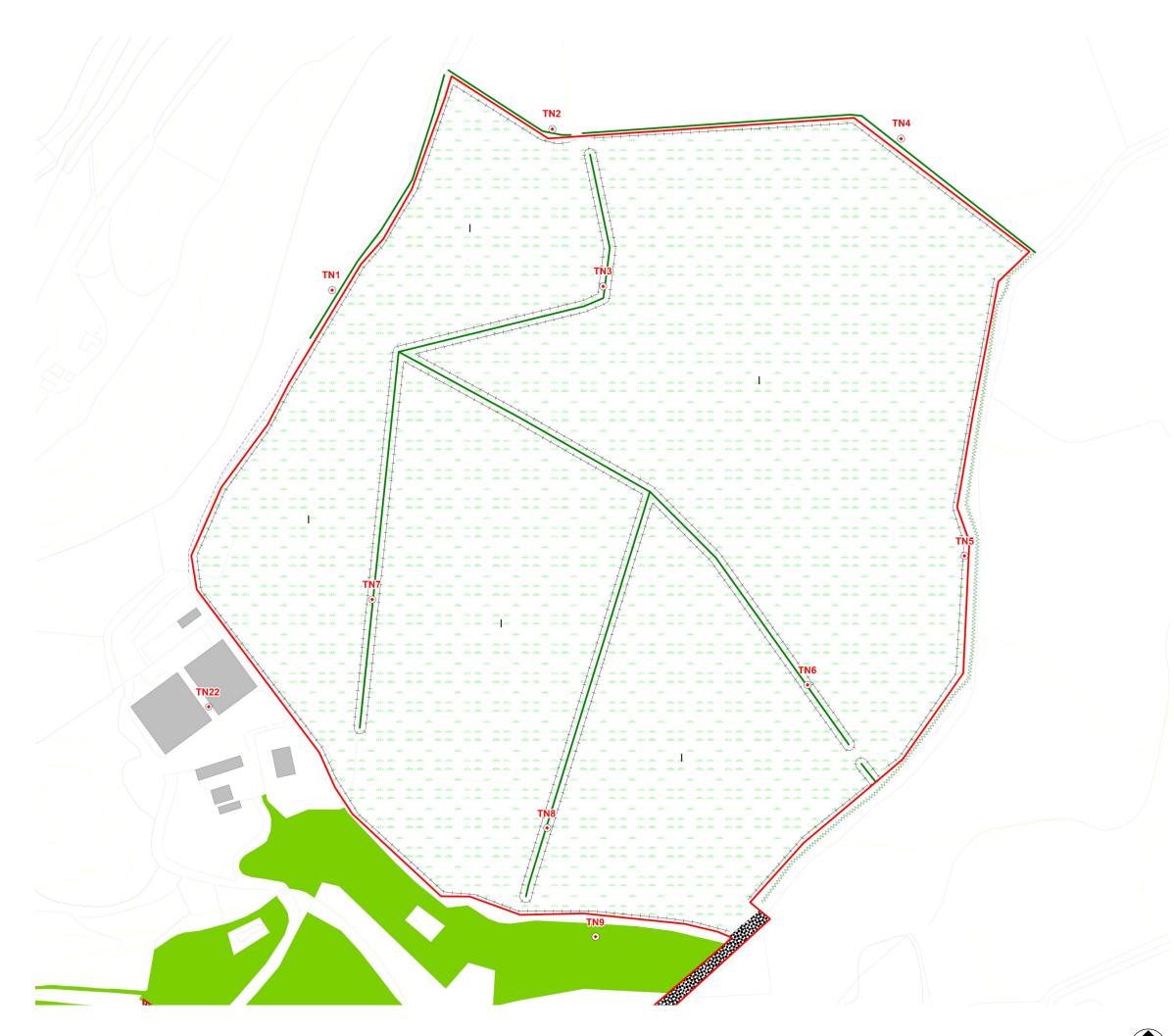
Species Rich Neutral Grassland

FIGURE 5.13

Planting Plan

DRWG No: P18-2622_23	REV: _
Date: 16/08/2019	
Scale: NTS	(d A3

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Legend

Site boundary Target note (TN*)



Broadleaved semi-natural woodland (A1.1.1)

Improved grassland (B4)

Bare ground (J4) Intact hedge, species poor (J2.1.2) Hedge and trees, species rich (J2.3.1) Fence (J2.4) Dry ditch



FIGURE 6.1A

Phase 1 Habitat Plan

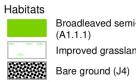
DRWG No: P18-2622_19 REV: -Date: 08/08/2019 Sheet No: 1 of 2 Scale: NTS @ A3





Legend

Site boundary Target note (TN*)



Broadleaved semi-natural woodland (A1.1.1) Improved grassland (B4)

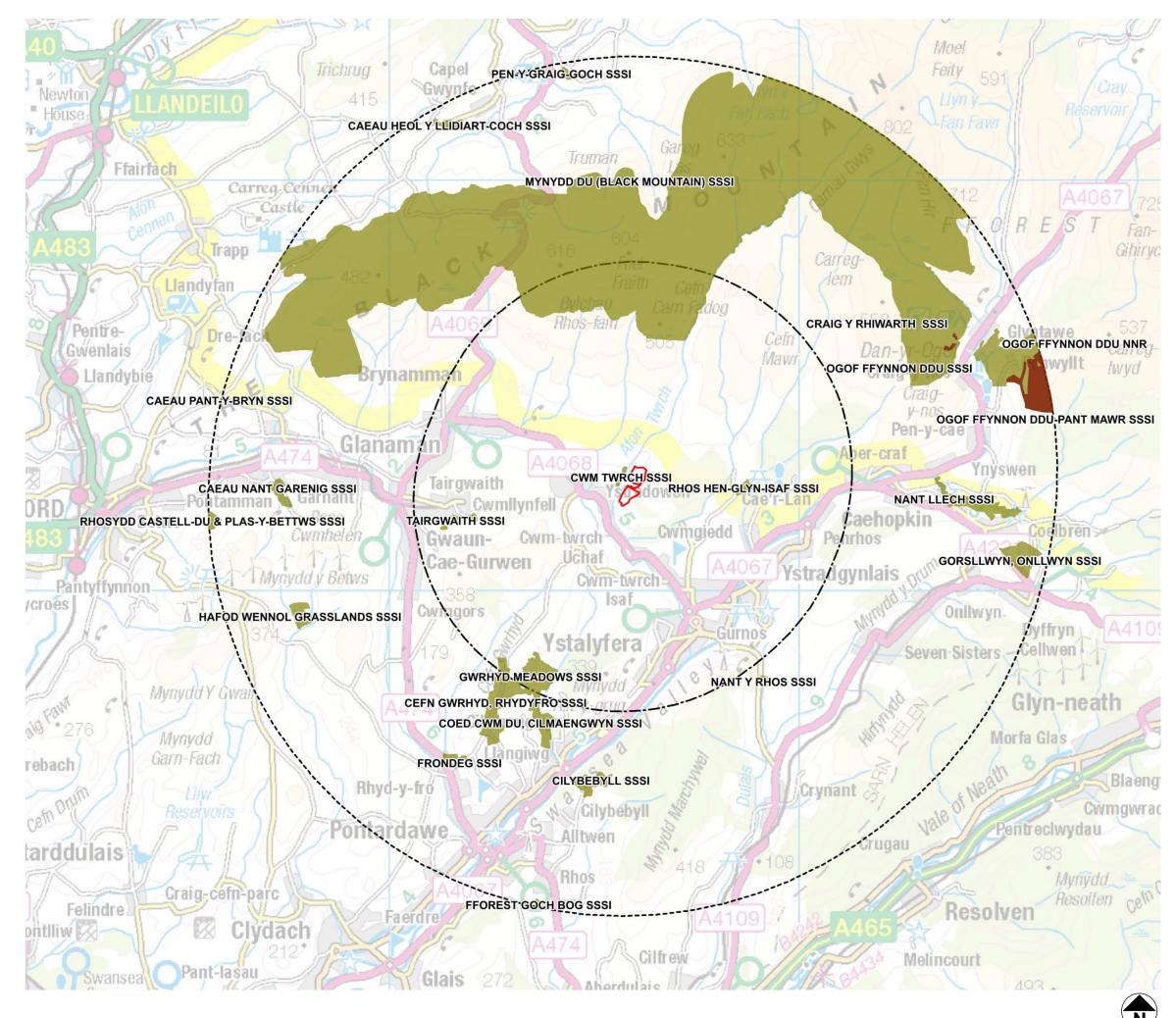
Intact hedge, species poor (J2.1.2) Hedge and trees, species rich (J2.3.1) Fence (J2.4) Dry ditch



FIGURE 6.1B

Phase 1 Habitat Plan

DRWG No: P18-2622_19 REV: -Date: 08/08/2019 Sheet No: 2 of 2 Scale: NTS @ A3



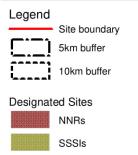




FIGURE 6.2

Statutory Designated Sites

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