HEARING SESSION 6
DEVELOPMENT MANAGEMENT POLICIES 1
ACTION POINT 6.1 – COUNCIL RESPONSE

PUBLISHED: 26th July 2019

HEARING 6 - ACTION POINT 1 RESPONSE

Action Point

The Council to submit a paper:

- *Justifying the boundaries of the Cwm Glo and Rhydycar West Sites of Importance for Nature Conservation (SINCs), with reference to the most recent site survey evidence (whether already submitted, in relation to the Cwm Glo Site of Special Scientific Interest, or any more recent, supplementary evidence provided through liaison with Marvel or from additional site visits).*

- *Setting out proposed changes to the Plan to:*
    - *Identify qualifying features for each SINC, including the dates and availability of site survey (or resurvey) evidence, within an appendix to the Plan, and*
    - *Refer to nature conservation 'features' in policy EnW3, with new reasoned justification cross-referencing the information in the appendix.*

Council's Response

This statement has been prepared by the Council in response to issues that arose at Hearing Session 6 regarding the identification of the Cwm Glo and Rhydycar West Sites of Importance for Nature Conservation (SINCs) and the justification for boundary amendments. A response to this is provided in the following section.

Other issues regarding references to SINCs in the Replacement LDP were also identified. To address these issues, Policy EnW3 has been amended to differentiate between nature conservation features and geological features under Matters Arising Changes set out in this statement. A new table has also been prepared to replace the existing table that lists all SINCs in Merthyr Tydfil County Borough currently shown in the Appendices of the Replacement LDP Written Statement. The proposed new table to be shown at Appendix 4 of the LDP provides further details of the qualifying features and citations of surveys undertaken for each SINC as required by Planning Policy Wales, paragraph 6.4.20. This additional information is also referenced at LDP paragraph 6.7.22 in the proposed Matters Arising Changes shown at page 22 of this statement.

Justification for the boundaries of the Cwm Glo and Rhydycar West Sites of Importance for Nature Conservation (SINCs)

This statement provides justification for the Replacement Local Development Plan (LDP) amendments to the boundaries of two Sites of Importance for Nature Conservation (SINCs): Cwm Glo (SINC 12) and Rhydycar West (SINC 36), with reference to the most recent site survey evidence.

The evidence supporting the designation of SINCs 12 and 36 is provided in the David Clements Ecology survey reports dated May 2006 (see documents ED48 and SD55 respectively) which informed the designation of the SINCs in the existing Adopted LDP.

In the Adopted LDP, the boundaries of SINCs 12 and 36 partially coincide with the boundary of the Cwm Glo a Glyndyrys SSSI, an international nature conservation designation. However, some sections of the SSSI lay outside of the SINC areas following confirmation of an extended SSSI boundary on 8th April 2009. The Cwm Glo a Glyndyrys SSSI citation has been submitted as examination document ED48.

The Council's Hearing Statement, under matter 6.3 (a), explained the approach to reviewing boundaries at existing SINCs across the County Borough. For practical reasons, and where access was permitted, amendments focussed on known boundary issues and on any changes since the Adoption of the LDP and preparation of the SINC surveys.

It is understood that access to inform the boundary amendments proposed for SINCs 12 and 36 during 2017 was not possible at that time. Consequently, boundary amendments for these designations relied on known built development that has taken place and on other material changes such as the designation of the amended SSSI.

In the preparation of this statement the Council has been in correspondence with the land owners, and access has been permitted to view the relevant areas of SINCs 12 and 36 and site visits took place during the week commencing 22nd July 2019. This statement provides additional justification for the amendments to the SINC boundaries with reference to the latest survey information.

Cwm Glo (SINC 12)

Appendix 7 shows a plan illustrating the Adopted LDP SINC designation, amended SINC designation and the SSSI boundary. The Replacement LDP has amended the boundary of SINC 12 for two distinct reasons:

1. The boundary has been expanded in three relatively small areas to rationalise it with that of the Cwm Glo a Glyndyrys SSSI. This will mean that all areas of the SSSI will be included within the SINC.
2. The boundary has also been reduced in places to reflect areas on the periphery where new development has taken place. These areas sit outside of the SSSI boundary.

Rhydycar West (SINC 36)
Appendix 8 shows a plan illustrating the Adopted LDP SINC designation, amended SINC designation and the SSSI boundary. The Replacement LDP has amended the boundary of the SINC 36 in a single area along the eastern boundary. The change is a boundary reduction to reflect an area removed to account for new hard standing access.

Summary of SINC 12, SINC 36 and Cwm Glo a Glyndyrys SSSI Designations

The following section provides summaries of the reasons for the designation of SINC 12, SINC 36 and the Cwm Glo a Glyndyrys SSSI. A general description of each site is provided and, where relevant, includes the Selection Criteria Guidelines (Habitats and Species) met by each SINC (SINC designation guidelines for South Wales).

Cwm Glo (SINC 12)
Extensive mosaic of 'ffridd' (valleyside) habitats support a complex of semi-upland and lowland vegetation, in large part this has developed on old spoil heaps and colliery tips. Mainly unimproved acid grasslands but with extensive areas of wet and dry heathland. Also contains areas of grass-heath, marshy grassland and acid flush, semi-improved neutral grasslands, semi-improved acid grasslands, bracken slopes, small ponds and streams, the latter typically lined by semi-natural broadleaved woodlands. The habitats intergrade to form a complex mosaic.

Great crested newt occurs in small ponds, especially to the north-west, together with a range of other common amphibians and reptiles. Otter is believed to occur along the watercourses, and water vole has been recorded in the past. The site contains at least one known bat roost, and there are probably others. There is a good nesting bird fauna. Marsh fritillary occurs in the SSSI and therefore will also be present on the SINC site. Up to 11 species of Nationally Scarce invertebrates have been recorded in the area, mainly associated with wetlands, with other local species present.

Plant species of interest include regionally scarce species such as fen bedstraw, soft-leaved sedge, intermediate lady's-mantle, alternate-leaved water milfoil, moonwort and dwarf elder, as well as local species such as devil's-bit scabious, meadow thistle, wavy hair-grass, whorled caraway, saw-wort, petty whin, greater burnet, marsh arrow-grass and southern marsh-orchid. The nationally scarce moss *Ephemerum serratum var serratum* also occurs. The species of interest are distributed throughout the site.

The Cwm Glo/Rhydycar West area, including the Cwm-glo a Glyndyrys SSSI, is of international significance for waxcap fungi and is collectively the joint 13th most significant waxcap grassland site in the British Isles. SINC 12 itself contains 13 known waxcap grasslands which collectively support at least 24 species of waxcap (*Hygrocybe* spp) as well as many other associated species. These include one site for pink meadow waxcap and 7 sites for live earthtongue, both of which are UK BAP Priority Species. The waxcap grasslands within SINC 12 itself are collectively of at least national significance.

SINC 12 meets the following SINC Selection Criteria (SINC designation guidelines for South Wales): H1, H4, H6, H7, H9 (borderline), H10, H11, H16, H18, H20, H22, S1 (borderline), S2, S4, S6, S8.

Rhydycar West (SINC 36)
Extensive mosaic of 'ffridd' habitats and former mine spoil supporting complex of semi-upland and lowland habitats, partly contained within conifer plantation. Main components are ancient semi-natural woodland fragments, other semi-natural woodlands together with wet woodlands of alder, wet heathland, dry heathland, marshy grassland and semi-improved neutral grasslands. Also there are some bracken slopes, scrub, small ponds, streams and sections of dismantled railway. There are areas of semi-improved acid grasslands to the south especially. The habitats intergrade to form a complex mosaic, and may therefore also include some small areas of improved or low diversity semi-improved grassland, but any such areas are a very minor component.

Great crested newt occurs in small pools within the SINC, and noctule and pipistrelle bats have both been recorded. Water vole may occur and a small badger sett is present. Marsh fritillary is likely to occur in marshy grassland areas in the SINC, since it occurs in similar habitats in nearby areas. Twelve Nationally Scarce invertebrates have been recorded from the area and are thought to occur on the site, mainly associated with the wetlands. Other local butterfly species are present. There is a good nesting bird fauna.

Plant species of interest include regionally scarce species such as fen bedstraw, moonwort, bladder sedge, soft-leaved sedge and intermediate lady's-mantle, as well as local species such as saw-wort, deer-grass, petty whin, devil's-bit scabious, meadow thistle, whorled caraway. The Nationally Scarce moss *Ephemerum serratum var serratum* is also present.

The site also contains a known 'waxcap grassland' which is of regional significance in itself. The larger Rhydycar West/Cwm Glo area, including the Cwm Glo a Glyndyrys SSSI, is of international significance for these species, and is collectively the joint 13th most significant waxcap grassland site in the British Isles.

SINC 12 meets the following SINC Selection Criteria (SINC designation guidelines for South Wales): H1;H4; H6; H7; H9; H10; H11; H15 (borderline); H16; H18; H20; H21 (borderline); H22; S1; S2; S4; S6; S7; S8.

Cwm Glo a Glyndyrys SSSI
Sites of Special Scientific Interest (SSSI) were originally notified under the National Parks and Access to the Countryside Act 1949. SSSIs were then renotified under the Wildlife and Countryside Act 1981 and improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000. Landowners have an obligation, under legislation, to manage a SSSI in a way which helps conserve its special features, with NRW providing the landowner with details of legislation affecting the site, management practices, activities likely to cause damage, activities requiring permission on site and those activities that are exempt. NRW are the statutory body with the powers to enforce SSSI issues.

The Cwm Glo SSSI was first notified on 23rd January 2003. The Cwm Glo a Glyndyrys SSSI notification of enlargement was made on 17th July 2008 with a site area of 203.1 hectares. Following additional evidence and representations by the landowner to NRW through the process of notifying, the proposed SSSI boundaries were amended and the amended SSSI was confirmed on 8th April 2009, with a reduced area of 181.3 hectares, resulting in the current Cwm Glo a Glyndyrys SSSI designation. The Council is therefore confident that the SSSI boundary is based on rigorous and robust evidence based process. More recent field visits have taken place by Natural Resources Wales (NRW) in June 2015. Field notes from these visits by NRW have been submitted as examination document ED48.

The Cwm Glo a Glyndyrys SSSI is of special interest for its extensive areas of marshy grassland, species-rich neutral grassland and acid grassland, and for the association of these habitats with others including woodland and heath. It is also of special interest for its diverse assemblage of grassland fungi, including 32 species of waxcap, making it one of the best sites in Britain.

The site is found on the northeast and east-facing slopes to the west of Merthyr Tydfil. The site comprises a series of small enclosures surrounded by woodland, extensive areas of open land with scattered mature trees, scrub and woodland. An important element of the site is a series of remnant colliery spoil tips colonised by a range of semi-natural habitats.

In the north east of the site are a series of small enclosures, sheltered by mixed woodland. These are wet areas supporting base-rich fen meadow communities characterised by meadow thistle, Devil's bit scabious and a number of sedge species.

In places the fen meadow community grades into drier species-rich neutral grassland characterised by bird's foot trefoil, black knapweed and a range of grasses including common bent and sweet vernal grass. A slight acid nature to the soil is suggested by the presence of heath grass and tormentil and in other places flushing is indicated by quaking grass and great burnet.

In other areas, the landscape is more open, with pastures separated by wooded streams and former field boundaries. The fen meadow is present here, but with an ericoid element (cross-leaved heath and heather). Wet pasture communities also occur. In drier areas and on old spoil heaps, two types of grassland have developed (species-rich neutral grassland and acid grassland).

The significant grassland fungal community has developed on the drier, free-draining areas of the site predominantly occurring in association with species-rich neutral grassland and dry acid grassland onsite habitats. The tips present throughout the site support much of the fungi interest. Some 32 species of waxcaps have been identified at Cwm Glo a Glyndyrys making the area one of the best sites for these attractive fungi in western Europe.

Other interest on the site includes:

- extensive areas of woodland, known to have been present at the site since at least 1800
- patches of heath across the site where soils are acidic
- small areas of flushes and springs
- small ponds
- small areas of swamp
- scarce and local species (e.g., whorled caraway, petty whin, bladder sedge, soft-leaved sedge)
- Marsh fritillary butterfly noted in the marshy grassland areas
- Nationally scarce moth (the cloaked carpet) recorded in the southern part of the site.
- Notable bird species (nightjar, cuckoo, tree pipit, whinchat, wood warbler, redstart).
- Great crested newt has been recorded in onsite ponds.

The Cwm Glo a Glyndyrys SSSI (as a statutory designation and nationally important site) has been designated with reference to the "Guidelines for the Selection of Biological SSSI" (Part 2: Detailed Guidelines for Habitats and Species Groups).

The SINC designations are local level non-statutory designations identified based on regionally important criteria (The Mid-Valleys SINC Criteria).

When comparing the SSSI criteria with the Mid-Valleys SINC Criteria the former always meet the latter criteria for the habitats present within Cwm Glo a Glyndyrys SSSI. Therefore, there should be no conflict between the two designations.

The following section compares the qualifying features of SINC 12 with those of the Cwm Glo a Glyndyrys SSSI by way of example. This demonstrates both designations have been identified for similar nature conservation reasons.

Comparison of SINC 12 and Cwm Glo a Glyndyrys SSSI

This comparison is based on the following official survey documents for both SINC 12 and the Cwm Glo a Glyndyrys SSSI:

- Cwm Glo a Glyndyrys SSSI Citation (2008) from Countryside Council for Wales (now Natural Resources Wales)
- Cwm Glo SINC 12 Ecology Report (2006) compiled by David Clements Ecology Ltd (document ED48)

The data within these documents has been compared to identify common features. Tables 1-3 focus on the comparison between the two designations detailed above in terms of Habitats, Flora and Fauna. Those Habitats and species of Flora and Fauna common to both documents are highlighted in the central column with a tick (•).

HABITATS

Table 1: Comparison of habitat types

SSSI	Common habitats	SINC
Marshy grassland	•	Marshy grassland
Species-rich neutral grassland	•	Neutral grassland
Lowland acid grassland	•	Acid grassland
Associated woodland	•	Broadleaved woodland
Associated heath	•	Dry heathland Wet heathland
Grassland fungi	•	Grassland fungi (within Acid grassland classification)
		Scrub communities
		Exposed rock
		Streams and ditches
		Ponds
		Stone walls
		Ruderal habitat
6 common habitat types		

FLORA

Table 2: Comparison of species of flora

SSSI	Common species of flora	SINC
Adder's tongue		
		Agrimony
Alder		Alder
		Alternate leaved water milfoil

-

SSSI	Common species of flora	SINC
		Ash
		Aulacomnium palustre
Autumn hawkbit	•	Autumn hawkbit
Beech		
Betony	•	Betony
Big blue pinkgill		
Bilberry	•	Bilberry
Birch		
Bird's foot trefoil	•	Bird's foot trefoil
Black knapweed		
		Black spleenwort
Bladder sedge		
Bluebell	•	Bluebell
		Bog stitchwort
		Bracken
		Bramble
		Branched bur-reed
		Bristle club-rush
		Broad buckler fern
		Brooklime
		Brown bent
		Bulbous buttercup
		Bulbous rush
		Calliergon cuspidatum
Carnation sedge	•	Carnation sedge
		Cladonia spp
		Cladonia chlorophaea
		Cladonia ciliate
		Cladonia gracilis
Cladonia lichens		
		Cladonia uncialis
		Cleavers
		Cock's foot
Common bent	•	Common bent
Common cat's ear	•	Common cat's-ear
		Common centaury
		Common dog-violet
		Common knapweed
		Common lousewort
Common mouse-ear	•	Common mouse-ear

-

SSSI	Common species of flora	SINC
		Common nettle
Common sedge	•	Common sedge
		Common sorrel
		Common valerian
Common yellow sedge		
		Compact rush
		Creeping bent
		Creeping buttercup
		Creeping thistle
Crested dog's tail	•	Crested dog's tail
Cross-leaved heath	•	Cross-leaved heath
		Cuckooflower
		Curled dock
Daisy	•	Daisy
		Dandelion
Deer grass	•	Deer grass
Devil's bit scabious	•	Devil's bit scabious
		Dicranum scoparium
		Dingy skipper
		Diplophyllum albicans
		Dog-violet
		Downy birch
		Early hair grass
		Elder
		Ephemerum serratum var serratum
Eyebright sp	•	Eyebright sp
		Fairy flax
		False oat grass
		Fen bedstraw
		Field wood rush
Flea sedge		
		Floating sweet grass
		Foxglove
Glaucous sedge	•	Glaucous sedge
		Goat Willow
		Gorse
Great burnet	•	Great burnet
		Greater bird's foot trefoil
		Green-ribbed sedge

-

SSSI	Common species of flora	SINC
		Grey Willow
		Gymnocolea inflate
Hairy lady's-mantle		
		Hairy sedge
		Hawthorn
		Hazel
Heath bedstraw	•	Heath bedstraw
		Heath grass
		Heath milkwort
		Heath rush
		Heath speedwell
Heath wood-rush	•	Heath wood-rush
Heather		
Heath-grass	•	Heath-grass
		Herb Robert
		Hogweed
		Holly
Hygrocybe calyptriformis		
		Hypnum jutlandicum
Intermediate lady's-mantle	•	Intermediate lady's mantle
		Ivy
		Japanese knotweed
		Jointed rush
		Lady-fern
		Lesser celandine
		Lesser spearwort
		Lesser stitchwort
		Ling heather
		Lophozia ventricosa
Lousewort	•	Lousewort
		Male-fern
		Marsh bedstraw
		Marsh pennywort
		Marsh ragwort
		Marsh thistle
		Marsh violet
		Marsh willowherb
Mat-grass	•	Mat-grass
		Meadow buttercup

-

SSSI	Common species of flora	SINC
Meadow thistle	•	Meadow thistle
		Meadowsweet
		Moonwort
		Mouse-eared hawkweed
Narrow buckler-fern		
Nitrous waxcap		
		Non-native dwarf elder
		Non-native pearly everlasting
Olive earthtongue	•	Olive earthtongue
		Opposite-leaved golden-saxifrage
		Oval sedge
Pedunculate oak	•	Pedunculate oak
		Peltigera
		Perennial ryegrass
Petty whin	•	Petty whin
Pill sedge	•	Pill sedge
Pink meadow waxcap	•	Pink meadow waxcap
		Pleurozium schreberi
		Polypody sp
		Polytrichum formosum
		Polytrichum juniperinum
		Pseudoscleropodium purum
		Ptilidium ciliare
Purple moor grass	•	Purple moor grass
Quaking Grass		
		Racomitrium ericoides
		Racomitrium lanuginosum
		Ragged-robin
		Red clover
Red fescue	•	Red fescue
		Reedmace
		Rhytidiadelphus squarrosus
		Ribwort plantain
		Rosebay willowherb
		Rough meadow grass
		Round-leaved crowfoot
Rowan	•	Rowan
		Saw wort

-

SSSI	Common species of flora	SINC
		Scaly male-fern
		Self-heal
		Sessile oak
		Sharp flowered rush
		Sharp rush
Sheep's fescue	•	Sheep's fescue
		Sheep's sorrel
		Silverweed
Smoky spindles		
		Sneezewort
		Soft rush
Soft-leaved sedge	•	Soft-leaved sedge
		Southern marsh orchid
		Spear thistle
Sphagnum spp	•	Sphagnum spp
Spring sedge		
		Square-stemmed St John's wort
		Star sedge
Sweet-vernal Grass	•	Sweet vernal grass
Tawny sedge	•	Tawny sedge
Tormentil	•	Tormentil
		Tufted-hair grass
		Velvet bent
		Water forget-me-not
		Water mint
		Water starwort
		Wavy bittercress
		Wavy hair-grass
		Western gorse
		White clover
Whorled caraway	•	Whorled caraway
		Wild angelica
		Wild goldenrod
Wild Thyme		
Willow spp		
		Wood avens
		Wood horsetail
Wood sorrel	•	Wood sorrel
		Yarrow

SSSI	Common species of flora	SINC
		Yellow sedge
41 common species of flora		

FAUNA

Table 3: Comparison of species of fauna

SSSI	Common species of fauna	SINC
		Badger
		432 Invertebrate species – Merthyr Village project area (HRA 2002) in 1x Red Data Book species and 12 species listed as Nationally Scarce in the UK.
Bird species (inc nightjar, cuckoo, tree pipit, whinchat, wood warbler, redstart)	•	Bird species (inc bullfinch, reed bunting, linnet, song thrush)
		Brown long-eared bat
Cloaked carpet moth		
		Common dormouse
		Common frog
		Daubenton's bat
		Dingy skipper
		Grass snake
		Grayling
Great crested newt	•	Great crested newt
Marsh Fritillary	•	Marsh Fritillary (Cwm Glo SSSI 1994)
		Noctule
		Otter
		Palmate newt
		Pipistrelle sp
		Smooth newt
		Soprano pipistrelle
		Water vole
		Yellow meadow ant
3 common species/groups of species of fauna		

The comparison of the sites using the most recent survey data demonstrates that both surveys are describing essentially the same collection of habitats. The SINC Ecology Report is more in-depth when compared with the SSSI citation document and this is reflected in the greater number of Habitat types and species of Flora and Fauna reported within the tables.

Justification for SINC 12 boundary, including amendments to match the Cwm Glo a Glyndyrys SSSI boundary

The evidence base for SINC 12 is provided by document ED48. The boundary amendments to SINC 12 are shown at Appendix 7 of this statement. As previously mentioned, parts of the SINC 12 boundary have been expanded to rationalise it with that of the Cwm Glo a Glyndyrys SSSI. This is justified on the basis that:

1. The SSSI was designated more recently than the SINC, and more recent field visits have been undertaken (see NRW field notes in ED49 and references to site visits in July 2019 in this statement).
2. The criteria for SSSI designation meets and exceeds the SINC criteria.
3. The overall similarities of the designations (essentially they include the same habitats).
4. A comprehensive designation provides a more logical unit, recognising some areas will be lower in ecological value but contribute towards the wider value of the ecological unit. In addition, lower value areas can be improved over time with appropriate management.

As part of the Deposit Plan public consultation Marvel Limited proposed the following revisions to SINC 12, indicated as areas of land at Point H and between Points E and F on their submitted plan (see Appendix 2):

1. *Marvel would [however] like to query the expansion of the SINC at Point H. The sole reason for this amendment would appear to be to rationalise the SINC boundary with the separate SSSI boundary. However, the land in question is heavily invaded by Japanese Knotweed with little residual grassland interest, and therefore we question whether it qualifies for inclusion [either within the SSSI and] (by reference to the Mid Valleys SINC criteria) within the SINC.*
2. *Marvel further suggests that the continued inclusion of land between Points E and F on the attached Plan (outside the SSSI) and extending east above Collier's Row is questionable. This area is shown shaded in solid blue on the attached plan. The woodland here is in part of plantation origin (towards the eastern end) and is not well-related to the rest of the site. By reference to H1 of the Mid Valleys SINC criteria, we question whether the inclusion of this land can be justified and would ask for it to be removed from the SINC and/or the basis of its inclusion to be explained prior to any formalisation of the boundary into the Local Plan.*

With reference to the survey for SINC 12 and recent site visits by the Council undertaken during the week commencing 22nd July 2019, it is considered that no further changes to the boundary for SINC 12 are justified. The Council provides the following observations:

1. The areas of land at Point H have been included as part of rationalising the SINC boundary with that of the Cwm Glo a Glyndyrys SSSI. These areas include the woodland boundary to the west and an area of grassland to the south. Bringing the SINC boundary in line with the SSSI boundary along the woodland edge makes logical sense and can be fully justified – the woodland has been included within the SSSI and is therefore of SSSI standard. Therefore, it would also qualify as SINC standard. The criteria for SSSI designation meets and exceeds the SINC criteria.

   The grassland habitat to the south contains stands of Japanese Knotweed that have been allowed to establish and expand between 2010 and the present date. The grassland species include the following: crested dog's-tail, bent sp., common knapweed, cock's-foot, Yorkshire fog, common bird's-foot trefoil, ribwort plantain, red clover and white clover. The grassland in this area can therefore be classified as British National Vegetation Classification MG5 (*Cynosurus cristatus – Centaurea nigra*). MG5 qualifies for SINC status under Guideline H4 (Neutral Grasslands). Rather than being removed from the SINC area, the Japanese Knotweed should be managed out to return the whole of the area back to MG5 grassland habitat. NB this area and therefore the Japanese Knotweed is also included within the SSSI boundary. SSSIs are protected under the Wildlife and Countryside Act 1981 (as amended). Each SSSI has an associated site management statement, which sets out the special features of the site and how they should be managed.

   Furthermore, SINC 12 as a whole ecological unit also qualifies under Guideline H20 (Mosaic Habitats). This states 'Any coherent site which has represented at least three distinct habitats, where at least one is approaching SINC selection status in its own right, providing that improved or degraded elements of low or negligible conservation interest do not form a significant proportion *i.e., >25% of the total site area'.

   There is therefore strong justification for inclusion of these areas within the SINC boundary.

2. A site visit undertaken by the Council during the week commencing 22nd July 2019, assessed the area of land between Points E and F in ecological terms. The area includes the Nant Cwm Pant Bach, which is a diverse semi-natural broadleaved wooded stream corridor. Tree species present included, for example: ash, hazel, birch sp., holly, hawthorn, oak sp., alder, rowan and sycamore. Ivy was also present and there was an understorey including, for

example, the following species: bramble (predominant), herb Robert, hedge woundwort, cleavers, willowherb sp., enchanter's nightshade and herb Bennet. This area qualifies for inclusion in the SINC under H15 (Watercourses). The woodland of plantation origin (referred to by Marvel) appears to be further north of this area (and outside of the SINC boundary).

There is therefore no reason to remove this area from the SINC boundary.

Justification for SINC 36 boundary

The evidence base for SINC 36 is provided by document SD55. The boundary amendment to SINC 36 is shown at Appendix 8 of this statement. No changes to the boundary have been proposed as a result of changes to the SSSI designation as the SINC incorporates a wider area. The only boundary change to this SINC is located along the eastern edge of the SINC, adjoining the A470 and immediately south of the SSSI designation. This is to take account of new hard standing of no ecological value and is an amendment which would not impact on the wider SINC designation. As part of the Deposit Plan public consultation Marvel Limited proposed the following revisions to SINC 36, indicated as areas of land at Points I and J on their submitted plan (see Appendix 2):

1. *At point I, we note that the northern (south-facing) slope of the cutting within which the access track connecting (via underpass) to Rhyd-y-car is set is included within the SINC. This does not appear logical given the exclusion of the near-identical south side of this cutting. We have suggested a proposed revision to the SINC boundary here (black dotted line) to correct this anomaly.*
2. *At point J there is an area of species-poor grassland on top of a former tip which has a species-poor community by virtue of the addition of higher fertility soils during the construction of the A470, and subsequent more recent disturbance in the process of remedial activities on adjoining land to the north. We contend that this area (defined by black dotted lines) does not logically conform to any of the Mid-Valleys SINC criteria.*

With reference to the survey for SINC 36 (document SD55) and recent site visits by the Council undertaken during the week commencing 22nd July 2019, it is considered that no further changes to the boundary for SINC 36 are justified. The Council provides the following observations:

1. The area of land at Point 'I' is included, not only within the SINC, but also within the Cwm Glo a Glyndyrys SSSI. In the 2006 Ecology Survey undertaken by David Clements Ecology Ltd, this area of the SINC (at Point I) was identified as semi-improved neutral grassland (see Appendices 3 and 4 of this statement). Within the 2006 Ecology Report, three National Vegetation Classification (NVC) communities of neutral grassland were identified within the SINC (MG5 Cynosurus cristatus – Centaurea nigra grassland, MG6 Lolium

perenne – Cynosurus cristatus grassland and MG10 Holcus lanatus – Juncus effuses rush-pasture). The report concluded that the SINC qualifies for inclusion under *Guideline H4: Neutral Grasslands* (SINC designation guidelines for South Wales).

Using historic aerial photography information, changes to the habitat since 2006 can be demonstrated. Appendix 5 shows aerial photographs of the area of the site at Point 'I' from 2006, 2008, 2010, 2013, 2016 and 2018. The images show a change in the habitat since 2006 with the grassland area gradually scrubbing over and developing into young woodland. This was also confirmed by the Council's onsite field survey in July 2019. This area to the north of the cutting does now match that of the south side of the cutting. This is a consequence of a lack of management on the site allowing tree species to encroach into the grassland area and develop into woodland.

It should be noted that SSSIs are protected under the Wildlife and Countryside Act 1981 (as amended). Each SSSI has an associated site management statement which sets out the special features of the site and how it should be managed. The site management statement for SINC 36 includes species-rich neutral grassland as one of its special features. It also specifies controlled Grazing as a management tool to prevent grassland areas turning to scrub and then woodland.

According to the 2006 Ecology Survey Report (document SD55) the SINC also qualifies for SINC status under *Guideline S4: Amphibians* due to the SINC supporting four species of amphibian including Great Crested Newt. Pond 1 lies close to Point 'I' (c.60m to the north west – see Appendix 4) and notwithstanding the change in the nature of the habitat (grassland to young woodland) this area constitutes suitable habitat for terrestrial GCN and therefore would still qualify for SINC status. There is no reason to remove this area from SINC 36.

2. In the 2006 Ecology survey undertaken by David Clements Ecology Ltd, the area of the SINC (at Point J) was also identified as semi-improved neutral grassland and also qualified under Guideline H4 – Neutral Grasslands (see Appendices 3 and 4). Again, given that, historically, there have been issues with site access the 2006 Ecology Survey represented the most recent survey data.

   However, following site visits undertaken by the Council during the week commencing 22nd July 2019 up-to-date information regarding the habitat at Point J is now available. Most species referred to as present within the MG5

grassland classification in the 2006 Ecology survey (paragraphs 3.1.20 and 3.1.21) were also present at Point J during the 2019 visit. This confirms that the habitat remains essentially unchanged since the 2006 assessment. Historic aerial photography information further illustrates lack of change in the habitat since 2006. Appendix 6 shows aerial photographs of the area of the site at Point J from 2006, 2008, 2010, 2013, 2016 and 2018. This shows that the site has remained essentially unchanged since the 2006 survey[1]. Additionally, during the 2019 visit, the possible presence of Devil's bit scabious (the larval foodplant of Marsh Fritillary Butterfly) was identified. The plants observed were all in bud and confirmation of the species can be made later in the season when they are in full flower.

The unchanged nature of the habitat at Point J means that there would be no reason to remove this from the SINC designation as it still qualifies under Guideline H4 (Neutral Grasslands). In addition, the possible presence of Devil's Bit Scabious provides further justification for inclusion under Guideline S6 (Invertebrates).

This is consistent with the justification provided in the Council's responses to the Deposit Plan representations which advised "the addition of higher fertility soils during the construction of the A470" referred to in representations occurred in 1996/1997, a significant duration prior to the SINC surveys and designation. The National Terrestrial Phase 1 Habitat Survey (Countryside Council for Wales), undertaken prior to the construction of this portion of the A470, also shows this area as semi-natural habitat within area J evidencing a continuation of this habitat over a reasonable period of time. The recent site visit has confirmed the area continues to meet the SINC criteria and consequently no changes to the SINC boundary at this location are proposed.

[1] In 2008 there was some disruption to the habitat at the western edge of the section at Point J. This was in connection to repairs to a sinkhole.

SINC Designation Site Boundaries and Conclusion

The Criteria for the Selection of SINCs in the Mid-Valleys document (ED024) advises that SINC boundaries should be drawn as far as possible to be meaningful in ecological terms. Where sites are selected on species criteria, appropriate regard should be given to the habitat requirements of the species concerned. The guidance advises that observable physical boundaries or topographic features should be used as defensible boundaries wherever possible.

Where only part of a management unit is of qualifying quality, the whole management unit should still be designated. Where areas (such as single fields) failing to meet the criteria occur within a definable complex of management units (such as a block of fields), then the whole complex can still be designated as a SINC providing the qualifying areas form a clear majority of this SINC.

Furthermore, the guidance advises that areas of land which marginally fail to meet any of the criteria but which lie adjacent to qualifying habitat, and thus form part of an effective ecological unit, should be selected. The areas identified above as being low value are considered to contain some nature conservation value and lie adjacent to other higher value areas with qualifying features. In this respect, the areas identified contribute towards the wider mosaic habitat of the SINC and their removal would leave relatively small areas excluded from the designation, contrary to this advice. These areas should therefore form part of the SINC designation as they provide a logical component of the wider SINC complex and are areas that contribute towards the overall biodiversity interest of the designation. This applies to areas E-F, G, H, I and J as summarised below:

Objection Area	SINC no.	Nature conservation features (species and habitats) and reasons for inclusion
E-F	SINC 12	A site visit undertaken by the Council during the week commencing 22nd July 2019, assessed the area of land between Points E and F in ecological terms. The area includes the Nant Cwm Pant Bach, which is a diverse semi-natural broadleaved wooded stream corridor. This area qualifies for inclusion in the SINC under H15 (Watercourses).
G		The area of land at Point G has been included as part of rationalising the SINC boundary with that of the Cwm Glo a Glyndyrys SSSI. The area (according to the most recent – 2015 - survey plan supplied by NRW) comprises sections of damp semi-improved grassland, other acid grassland and dense scrub. During the recent visit to the site in July 2019 by the Council this habitat is mostly unchanged, the only difference being the scrub section having developed into young woodland.
H		The areas of land at Point H have been included as part of rationalising the SINC boundary with that of the Cwm Glo a

		Glyndyrys SSSI. These areas include the woodland boundary to the west and an area of grassland to the south. • Woodland boundary - included within the SSSI and is therefore of SSSI standard. Logically, it would also qualify as SINC standard as the criteria for SSSI designation meets and exceeds the SINC criteria. • Area of grassland - contains stands of Japanese Knotweed. The grassland in this area contains species within British National Vegetation Classification MG5 (*Cynosurus cristatus – Centaurea nigra*). MG5 qualifies for SINC status under Guideline H4 (Neutral Grasslands). The Japanese Knotweed should be managed out to return the whole of the area back to MG5 grassland. Furthermore, SINC 12 as a whole ecological unit also qualifies under Guideline H20 (Mosaic Habitats).
I	SINC 36	The area of land at Point I was previously identified in 2006 as semi-improved neutral grassland and included within the SINC on that basis. Since that time, this area has changed in character, scrubbing over and developing into young woodland. The SINC also qualified under Guideline S4 (Amphibians), with Great Crested Newt recorded in a pond approximately 60m to the north west of Point I. Both grassland and woodland habitat represents suitable habitat for GCN in their terrestrial phase. Therefore, despite the habitat changing from grassland to woodland, it is still suitable habitat for terrestrial GCN and should be included within the SINC boundary on this basis. Furthermore, SINC 36 as a whole ecological unit also qualifies under Guideline H20 (Mosaic Habitats).
J		The unchanged nature of the habitat at Point J means that there would be no reason to remove this from the SINC designation as it still qualifies under Guideline H4 (Neutral Grasslands). In addition, the possible presence of Devil's Bit Scabious provides further justification for inclusion under Guideline S6 (Invertebrates).

SINC designations are non-statutory designations with the primary role to ensure that development proposals, that might affect SINC features, receive proper consideration though the planning system. SINCs are therefore a planning designation used to identify areas of nature conservation interest in order to provide appropriate local policy protection, such as through Policy EnW3 in the Replacement LDP. They are also used to inform decisions made by a wide variety of other individuals and organisations (for example for management and / or improvement).

The inclusion of the areas in question within the SINC designation boundary would not be an additional constraint to future development proposals. This is because development proposals are required to promote ecosystem resilience, including through maintaining and enhancing biodiversity features, under the Environment

(Wales) Act 2016 and the Replacement LDP policy EcW1 (as explained under the amended LDP paragraph 6.7.8 proposed in the Council's Hearing Statement under matter 6.1a). Any development proposal with the potential to effect areas of biodiversity interest would be required to establish the biodiversity value of the site through the preparation of up-to-date ecological surveys and assessments that consider the impact on features of importance for nature conservation.

Replacement LDP Policy EnW3 lists the circumstances that development proposals likely to have an adverse impact on SINCs would be permitted. If there is limited or no impact on nature conservation interest on small areas of land within the SINC, the policy would not prevent development from taking place. Specifically, the policy requires; justification as to why the development proposal outweighs the conservation value of the site; that adverse impacts are avoided; that appropriate and proportionate mitigation and compensatory measures are provided (in line with the stepwise approach set out in national policy) and that proposals maintain and where possible enhance biodiversity interests. Therefore, if an area of land is lower in ecological value, and the proposal does not impact on the wider SINC or nature conservation features for which the SINC has been designated, development proposals can still be permitted. This is consistent with PPW Edition 10, paragraph 6.4.20 which states "Policies for non-statutory sites should make it clear that such designations do not preclude appropriate developments, where there are no adverse impacts on the features for which a site is designated."

The identification of a logical ecological unit therefore helps to proactively identify areas where there will be a need to consider impacts on nature conservation interests and SINC features. Consequently, it is considered the approach to include these areas within local SINC designation is justified. No changes to the Replacement LDP SINC boundary are therefore proposed.

Matters Arising Changes

Policy EnW3: Regionally Important Geological Sites, Sites of Importance for Nature Conservation and Priority Habitats and Species.

Development proposals likely to have an adverse impact on Sites of Importance for Nature Conservation, Regionally Important Geological Sites or Priority Habitats and Species will only be permitted where it can be demonstrated that:

1. The need for the development clearly outweighs the conservation value of the site;
2. Adverse impacts on nature conservation **features** ~~and~~ **or** geological features can be avoided;
3. Appropriate and proportionate mitigation and compensation measures can be provided; and
4. The development maintains and where possible enhances biodiversity and geodiversity interests.

6.7. 22 Sites of Importance for Nature Conservation (SINC) are identified to protect areas of high wildlife value at a local level. Regionally Important Geological and Geomorphological Sites are locally designated sites of local, national and regional importance for geodiversity (geology and geomorphology). Approximately 4,040 hectares of land in the County Borough are designated as SINCs with 7.8 hectares designated as Regionally Important Geological Sites (RIGS) in both countryside and urban locations. The LDP Proposals Map includes 64 locally designated SINCs[2], listed at Appendix ~~2~~ **4**, and two RIGS known as Nant Ffrwd and Llan-Uchaf[3]. **Appendix 4 also includes information regarding their individual qualifying features and reference to relevant surveys undertaken at each site.**

Amend Appendix 4 of the LDP Written Statement as follows:

Replace the table shown at Appendix 4 of the LDP Written Statement (List of Sites of Importance for Nature Conservation) with the table shown at Appendix 1 of this statement to provide details of qualifying features and the citation of original survey information in line with national policy requirements.

[2] Merthyr Tydfil CBC Review of Sites of Importance for Nature Conservation background paper (2018)
[3] As nominated in the British Geological Survey South Wales RIGS Audit Volume 1 (2012)

Appendix 1 – Replacement Appendix 4 to the LDP Written Statement (Proposed MAC)

Appendix 4: Summary of Sites of Importance for Nature Conservation (SINC) features in Merthyr Tydfil County Borough

Table A4.1: Sites of Importance for Nature Conservation in Merthyr Tydfil County Borough

SINC No	Site Name	Summary Description	Meets and/or Exceeds Mid Valleys selection SINC Criteria[4]	Survey Information[5]
1	Bryn Morlais/ Morlais Hill	Complex semi-upland area of limestone-influenced habitats, partly derived from old limestone quarries (Morlais Quarries) and screes associated with the former Morlais Castle. Part of the site is currently in use as a golf course. Extensive calcareous grasslands and screes supporting numerous rare and characteristic species, including nationally scarce plants. Also includes areas of neutral grassland and some small areas of acid grassland. Other habitats include limestone outcrops with ledge communities, bracken stands, limestone scrub and a pond.	H3, H4, H5, H6, H7, H9, H16, H20, H21 & H22. S6, S7 & S9.	SO 00NE/1, David Clements Ecology Limited, April 2008. Resurveyed in June 2016 and SINC boundary retained.
2	Bryniau	Semi-upland site comprising a complex mosaic of mainly acidic habitats associated with disused quarries (Bryniau Quarries) and spoil tips. Main habitats are acid grasslands with bracken slopes, intermixed with numerous areas of acid flush and marshy grassland. Also present are areas of semi-natural woodland, including wet woodland areas, neutral grassland, ponds and streams, a small reedbed and some small areas of species-rich calcareous grassland on a limestone tip.	H1, H3, H4, H5, H6, H7, H9, H11, H12, H15, H16, H18, H20, H21 & H22. S4 & S7.	SO 00NE/2, David Clements Ecology Limited, January 2008. Resurveyed in June 2016 and SINC boundary retained.
3	Blaenmorlais	A large area supporting a mosaic of upland habitats at the western edge of Merthyr Common. Mainly acid grasslands with acidic flushes, grass-heaths, dry heathlands, marshy grasslands, bracken slopes and smaller areas of wet heathland and scrub. The site also contains small disused quarries (Garth Quarries) and acid screes. A section of the Nant Morlais within the site has steep valley sides with rocky outcrops. A large pond in the south of the site supports a regionally rare plant, and several uncommon dragonflies. To the north the site contains an area of limestone spoil tips supporting unimproved upland calcareous grassland, as well as some limestone outcrops and scree.	H3, H9, H5, H6, H7, H9, H10, H12, H15, H16, H18, H20 & H21. S6 & S7.	SO 00NE/3, David Clements Ecology Limited, February 2008. Resurveyed in July 2016 and SINC boundary retained.
4	Merthyr Common Central	Area of upland common land comprising a range of habitats including marshy grassland, acid grassland, wet and dry heath and acid flush. Includes large and small ponds, one of which (Isaac Morgan's Pond) supports a diverse range of aquatic plant species and a good dragonfly fauna. Numerous streams and drainage ditches run through the wetter areas. The area is a small part of a far larger proposed SINC lost as a consequence of coal mining which has remained undisturbed and actively managed (grazed) focussing on ecological issues	H6, H7, H10, H12, H15, H16, H20 & H22. S1, S2, S4, S6 & S7.	SO 00NE/4, David Clements Ecology Limited, January 2007. Resurveyed in July 2016 and boundary amended to include only areas not required for opencast mining under Ffos-y-fran land reclamation scheme.
5	Clyn-mil/ Glynmil	Mosaic of semi-upland ffridd habitats at the western edge of Merthyr Common, partly on old colliery spoil tips. Comprises mainly unimproved and semi-improved acid grasslands, with smaller areas	H1, H3, H6, H7, H10, H12, H15, H16, H18, H20,	SO 00NE/5, David Clements Ecology Limited, January 2007.

[4] Mid Valleys Area Criteria for the selection of Sites of Importance for Nature Conservation, 2008.
[5] Survey material is available from the Council on written request.

		of marshy grassland, acid flush, dry acidic heath, bracken slopes and scrub. Also includes an area of ancient semi-natural oak woodland, and numerous smaller areas of wet woodland. Localised purple moor-grass pastures, with areas of acid flush and unimproved acid grassland, are present. Several ponds and numerous small streams run through the wooded areas.	H21, H22.	Resurveyed inJune 2016 and SINC boundary retained.
6	Cwm Golau	Small semi-upland valley system alongside the course of the Nant Gyrawd on the eastern side of Merthyr Common. Comprises mainly valley side marshy grasslands, with unimproved and semi-improved acid grasslands and small areas of wet heathland. Some small areas of semi-improved neutral grassland, sedge swamp, dry heath, scattered scrub, acid flush and bracken slopes. Lower sections of the Nant Gyrawd are wooded. Small areas of colliery spoil are present; these have mainly re-vegetated with acid grassland and contain several ponds which have a moderate and stable population of Great Crested Newt.	H1, H3, H4, H6, H7, H9, H10, H11, H12, H15, H16, H20, H21.	SO 00NE/6, David Clements Ecology Limited, December 2006. Resurveyed in June 2016 and SINC boundary retained.
7	Cwm Ffrwd	Valley habitats along the Nant Ffrwd, a large stream draining from the uplands in a largely unmodified course, passing through narrow gorges in places. The woodlands have a rich ground flora supporting many ancient woodland indicator species. Regionally rare plant species frequent the steep woodlands, several nationally scarce bryophytes and lichens have also been recorded.	H1, H6, H7, H9, H10, H12, H20, H21. S6, S7, S9 & S10.	SO 00NW/1, David Clements Ecology Limited, November 2007. Resurveyed in May 2017 and SINC boundary retained.
8	Bryn-ddu & Ty'n-y-Coedcae	Extensive upland moorland area of mainly marshy grasslands with wet heathlands and smaller areas of blanket bog, acid flush, valley fen, and acid grassland, forming a mosaic. The acid grasslands are mainly unimproved, with smaller areas of semi-improved acid grassland in the east. Valley fen is a very scarce habitat in the County Borough. Several uncommon dragonflies have been recorded.	H6, H7, H10, H11, H12, H15, H20. S6.	SO 00NW/2, David Clements Ecology Limited, November 2007. Resurveyed in May 2017 and SINC retained with minor bounary amendments.
9	Gorllewin Winchfawr/ Winchfawr West	Very extensive area of mostly upland habitats, comprising a complex mosaic of moorland and ffridd habitats on the eastern slopes of the Bryn y Gwyddel/Bryn y Badell/Mynydd Aberdar hill system. The wet and dry heathlands are of particular note; these are partly developed on old colliery spoil tips and are the most extensive heathlands in the County Borough. Other habitats of note include marshy grasslands and unimproved acid grasslands, acid flushes and grass-heaths. Outlying areas support semi-improved acid and neutral grasslands and scrub. Numerous ponds are present supporting a small population of Great Crested Newts, along with small streams and some sections of outcropping sandstone. Extremely diverse series of habitats supporting many species of interest.	H3, H4, H6, H7,H10, H12, H15, H16, H18, H20. S4, S6, S7, & S10.	SO 00NW/4, David Clements Ecology Limited, November 2007. Resurveyed in July 2013 and SINC boundary retained.
10	Scwrfa/ Gellideg North Fields	Series of fields containing species-rich rhos pastures, acid grasslands, marshy grasslands, neutral grasslands and areas of bracken, together with scattered mature trees and sections of dry acid oak woodland and wet alder woodland alongside a small stream. The grasslands support a wide range of regionally scarce insect species.	H1, H4, H6, H7, H9, H10, H15, H18 & H20.	SO 00NW/5, David Clements Ecology Limited, November 2007. Resurveyed in June 2013 and SINC boundary retained.
11	Dwyrain Winchfawr/ Winchfawr East & Clwydyfagwr	Semi-upland area of spoil mounds supporting a mosaic of dry heathland and acid grassland, along with marshy grassland and acid flushes in depressions and areas of neutral grassland. The eastern part of the site supports areas of species-rich marshy grassland and wet heath, along with a series of ponds along a small stream and areas of scrub.	H3, H4, H6, H7, H10, H11, H12, H16, H18 & H20. S4.	SO 00NW/6, David Clements Ecology Limited, April 2008. Resurveyed in July 2013 and SINC boundary retained.
12	Cwm Glo/ Cwm-Glo a Glyndyrus	The SINC contains the Cwm-Glo a Glyndyrus SSSI which is of international significance for grassland fungi. Extensive areas of marshy grassland, species rich neutral grassland and acid grassland alongside woodland and heath supporting an impressive variety of protected, rare and uncommon species including marsh fritillary	H1, H3, H4, H6, H7, H9, H10, H12, H15, H16, H18, H20, H21, H22.	SO 00NW/7, David Clements Ecology Limited, May 2006. SINC boundary amended to remove

		butterfly (*Euphydryas aurinia*), Great Crested Newt (*Triturus cristatus*), big blue pinkgill (*Entoloma bloxamii) and* olive earthtonge *(Microglossum olivaceum*).	S1,S2,S3,S4,S6,S7 & S8.	areas of new development and to align with SSSI designation.
13	Maes Cwm Taf & Tip Cefn Coed/ Cwm Taf Fields & Cefn Coed Tip	Linear series of fields between the Afon Taf Fawr and the A470, also containing areas of semi-natural woodland and a re-vegetated limestone slag tip from the former Cyfarthfa Ironworks as well as smaller areas of semi-improved acid grassland, scrub, bracken slopes and dry heathland. The fields are a mosaic of damp and dry neutral grasslands with species-rich areas. The woodlands are variable in character, including areas of wet willow woodland, acid oak woodland and some base-rich ash woodland near the calcareous tip. The thin soils on the tip plateau support a unique type of calcareous grassland.	H1, H3, H4, H5, H6, H9, H10, H18, H20 & H22.	SO 00NW/8, David Clements Ecology Limited, December 2007. Resurveyed in June 2013 and SINC retained with minor bounary amendments.
14	Cilsanws/ (Cilsanws Common South)	Semi-upland site comprising a complex mosaic of mainly acidic habitats associated with disused quarries and spoil tips. Main habitats are acid grasslands with bracken slopes intermixed with numerous areas of acid flush and marshy grassland. Also present are areas of semi-natural woodland, including wet woodland areas, neutral grassland, ponds and streams, a small reedbed and some small areas of species-rich calcareous grassland on a limestone tip.	H1, H3, H4, H5, H6, H7, H9, H11, H16, H18,H20,H21 & H22.	SO 00NW/9, David Clements Ecology Limited, December 2007. Resurveyed in June 2015 and SINC boundary retained.
15	Taf Fechan (Cwm Taf Fechan)	The SINC contains Cwm Taf Fechan SSSI. The limestone geology gives rise to limestone woodlands, species-rich calcareous grasslands, species-rich neutral grasslands and calcareous scrub. Many species of interest have been recorded from the woodlands which are the designated feature of the SSSI. The neutral and calcareous grasslands of the valley slopes and bottom are typically species-rich. Otter ranges along the Afon Taf Fechan, which also supports a range of native fish species including salmon. Nationally rare and scarce invertebrate and bryophyte species have been recorded from the SSSI.	H1, H3, H4, H5, H9, H10, H12, H15, H20, H21, H22. S1, S5, S6 & S7.	SO 00NW/10, David Clements Ecology Limited, June 2008. Resurveyed inJune 2017 and SINC boundary retained.
16	Taf Fawr (Cwm Taf Ffawr)	Section of major river tributary of the Afon Taf. The river extends into Brecon Beacons National Park to the north. Includes adjacent woodlands, which are relatively undisturbed in the upper reaches and more urban in character further downstream. The upper reaches in particular are of high ecological value, comprising limestone gorge woodland with a rich ground flora. Numerous rare plant species occur here. Further south the riverside woodland is more acid in character, but nevertheless supports a relatively diverse ground. The site also includes some adjacent areas of species-rich calcareous, neutral and acid grasslands. The calcareous grasslands in particular support numerous species which are scarce in the County Borough. Otter ranges along the Afon Taf Fechan, which also supports a range of native fish species including salmon.	H1, H4, H5, H6, H9, H15. S2, S5, S6 & S7.	SO 00NW/11, David Clements Ecology Limited, April 2008. Resurveyed in July 2017 and SINC boundary retained.
17	Y Graig	Area of fridd habitats dominated by bracken with patches of unimproved acid grassland and dry heathland, particularly around gritstone outcrops. An area of species-rich damp neutral and marshy grassland to the west and some wet willow woodland exists to the south. Other habitats include scrub and boulder scree. Associated with the habitats of Cwm Taf Fechan SSSI/SINC to the north, but separated from these by the A465 Heads of the Valleys Road. Regionally rare plant species frequent the woodlands. The damp neutral and marshy grasslands support the regionally scarce plants.	H1, H3, H4, H6, H7, H9, H10, H20, H21. S6 & S7.	SO 00NW/12, David Clements Ecology Limited, December 2007. Resurveyed in August 2017 and SINC boundary retained.
18	Cyfarthfa Park/ Parc Cyfarthfa	Part of an area of mainly ornamental parkland within Merthyr Tydfil. The SINC includes semi-natural woodland and several enclosures of neutral grassland in the eastern half of the park. Also includes small areas of plantation woodland and scrub and several woodland ponds.	H1, H3, H4 & H16. S4.	SO 00NW/13, David Clements Ecology Limited, April 2008. Resurveyed in June 2013 and September

				2016 and SINC boundary retained.
19	Coed Gyrnos/ Gyrnos Wood	Small area of wet woodland and an adjacent field supporting marshy grassland, acid grassland and bracken stands immediately to the north of the Heads of the Valleys Road. There are also some gritstone outcrops and scattered mature trees. The regionally scarce climbing corydalis is present in the bracken stands.	H1, H6, H7, H9, H20, H21.	SO 00NW/14, David Clements Ecology Limited, Februaryl 2008. Resurveyed in June 2017 and SINC boundary retained.
20	Maes Abercanaid/ Abercanaid Fields	Series of fields laying either side of the A470 containing mainly species-rich semi-improved grasslands and marshy grasslands. Also some small areas of semi-natural oak/birch woodland, scattered scrub and trees. Site also includes Webber's pond, a private nature reserve with well-developed marginal emergent vegetation, a section of the Glamorganshire Canal and an adjacent disused railway embankment which supports unimproved and semi-improved acid grassland, bracken slopes and trees.	H1, H3, H4, H6, H7, H9, H10, H15, H16, H18 & H20.	SO 00SE/1, David Clements Ecology Limited, April 2008. Resurveyed in July 2016 and SINC boundary retained.
21	Maes Pentrebach/ Pentrebach Fields	Linear series of species-rich semi-improved neutral grassland fields alongside disused railway embankment. The short-grazed grasslands are dominated by fine-leaved grasses and support abundant mesotrophic herbs. Site also contains scattered dense scrub and bracken slopes. An area of dry heathland dominated by ling heather is present in the north of the site, occurring in a mosaic with acid grassland.	H3, H4, H6, H9, H10 & H20.	SO 00SE/2, David Clements Ecology Limited, Decemmer 2007. Resurveyed in June 2013 and SINC boundary retained.
22	Tip Nantyrodyn/ Pentrebach Tip	Large area of re-vegetated colliery spoil and ffridd. Mainly semi-upland acid grasslands, dry heathland and bracken slopes, with areas of marshy grassland, semi-natural woodland and scrub. Also contains small areas of bare ground, semi-improved neutral grasslands, small streams and outcrops. Regionally rare and scarce insect species are present on the tip.	H1, H3, H4,H6, H7, H9, H10, H15, H18, H20, H21 & H22. S1,S2 &S8.	SO 00SE/3, David Clements Ecology Limited, January 2007. Resurveyed in June 2013 and SINC boundary retained.
23	Troed-y-Rhiw	Large area of ffridd. Mainly dry heathland and bracken slopes with scattered trees, with semi-improved acid grassland to the north. Also some small areas of semi-natural woodland, semi-improved neutral grassland, marshy grassland, scrub and ephemeral/short-perennial vegetation. Two large old quarries in the south of the site, and outcrops with ledge communities. A small wooded pond is present and several drainage ditches cross the site.	H1, H3, H4, H6, H9 & H20. S7.	SO 00SE/4, David Clements Ecology Limited, January 2007. Resurveyed in April 2015 and SINC boundary retained.
24	Comin de Merthyr/ Merthyr Common South	Large upland/semi-upland common along hill ridge between two major rivers. Comprises extensive unimproved and semi-improved acid grasslands, dry heathlands and bracken slopes, together with acid flushes, marshy grasslands, wet heathlands, grass-heath and gorse scrub, forming a complex mosaic. Includes numerous ponds and streams (including a section of the Nant Bargoed, extensive outcrops of rock and some disused quarries. Parts of the site are situated on old colliery spoil; these have largely re-vegetated with acid grasslands and heathlands, but calcareous influences also occur locally.	H1, H3, H6, H7, H9, H10, H18, H20, H21 & H22. S2, S6 & S7.	SO 00SE/5, David Clements Ecology Limited, February 2007. Resurveyed in September 2016 and SINC boundary retained.
25	Cwm Bargod/ Cwm Bargoed	Very large and diverse system of semi-upland ffridd and valley-bottom habitats associated with the Afon Bargod Taf, a section of which flows through the site. Complex mosaic of semi-natural habitats including ancient semi-natural woodland, bracken slopes with scattered trees and scrub, marshy grassland, wet and dry heathland, acid grassland, swamp and acid flush. A very diverse and interesting set of habitats, probably exceeding SSSI designation criteria. Many nationally scarce plant species have been recorded. Several scarce dragonfly, butterfly and moth species have been recorded. Otter ranges along the Bargod Taf, and brown hare has also been recorded. The site is also important for a broad range of birds.	H1, H3, H4, H6, H7, H9, H10, H11, H12, H15, H16, H20, H22. S1, S2, S3, S6 & S7.	SO 00SE/6, David Clements Ecology Limited, January 2008. Resurveyed in May 2017 and SINC boundary retained.
26	Buarth-	Series of semi-upland ffridd fields containing a mosaic of several	H1, H3, H4, H6,	SO 00SE/7, David

-

	Waunydd	locally important habitats, notably acid and marshy grasslands, wet heaths, acid flushes, bracken slopes and semi-natural broadleaved woodlands. There are also areas of neutral grassland and scrub.	H7, H9, H10, H12, H15, H18, H20 & H22.	Clements Ecology Limited, April 2008. Resurveyed in October 2016 and SINC boundary retained.
27	Cnwc	Semi-upland ffridd slopes supporting mainly bracken and an upland mountain top with areas of acid grassland and dry heathland. Wetter soils on the lower slopes support mosaics of marshy grassland, acidic flush and wet heat; wooded valleys with small areas of ancient woodland, and scattered mature trees on the bracken slopes. Two small disused reservoirs are present near the hilltop, one of which supports a regionally scarce plant.	H1, H4, H6, H7, H9, H10, H12, H15, H16, H20 H21 & H22. S6.	SO 00SE/8, David Clements Ecology Limited, May 2008. Resurveyed in October 2016 and SINC boundary retained.
28	Mynydd Merthyr	Large area of semi-upland ffridd and upland moorland habitat mostly developed on old colliery spoil. Chiefly dry acid grasslands on the upper slopes with several areas of inundation vegetation on tip plateaux and areas of bracken and marshy grassland. A small area of bilberry heath is also present.	H1, H3, H4, H6, H7, H9, H10, H12, H15, H18, H20 & H22. S6.	SO 00SE/9, David Clements Ecology Limited, April 2008. Resurveyed inJune 2016 and SINC boundary retained.
29	Camlas Morgannwg/ Glamorganshire Canal (Glamorganshire Canal Woodlands)	Ancient semi-natural woodlands on the valley sides adjacent to the course of the former Glamorganshire Canal, which now forms part of the Taff Trail. Some of the woodlands have ground flora with numerous ancient woodland indicator species. Two long-established pastures supporting acid grassland are present in the south of the site. Also includes small areas of semi-improved neutral grassland, bracken patches and scrub, as well as ditches, streams and a wooded pond. The site is important for a range of woodland birds.	H1, H3, H4, H6, H9, H16.	SO 00SE/10, David Clements Ecology Limited, January 2008. Resurveyed in May 2017 and SINC boundary retained.
30	Graig Gethin	Wooded ffridd slopes, supporting extensive ancient semi-natural woodland and bracken slopes with large trees, together with some scree areas supporting lichen heath. The bracken slopes support abundant bluebell. Also includes an area of wet heathland which extends along a ride within a conifer plantation and supports plant species of interest. The site supports a good range of breeding bird species and brown hare has also been recorded.	H1, H4, H6, H9, H10, H15, H20, H21, H22. S1.	SO 00SE/12, David Clements Ecology Limited, April 2008. Resurveyed in May 2017 and SINC retained and bounary amended to remove areas of new development.
31	Cwm Fedw	Large area of grassland and wet woodland on ffridd slopes beside the course of the Nant-y-Fedw and running down into Cwm Bargod. Mainly semi-improved acid grasslands on the upper slopes, with semi-improved neutral grasslands and marshy grasslands on the lower slopes. The marshy grasslands are mainly rush-pastures, with a small area of fen-meadow also present. There is ancient semi-natural woodland along the course of the Nant-y-Fedw. The site also contains bracken slopes, acid flushes and small areas of both wet and dry heathland.	H1, H4, H6, H7, H9, H10, H12, H15, H20. S1 & S5.	SO 00SE/13, David Clements Ecology Limited, February 2008. Resurveyed in July 2017 and SINC boundary retained.
32	Comin Mynydd-y-Capel/ Mynydd -y-Capel Common	Area of upland common land and ffridd occupying part of the hilltop between the Taf and Bargoed Taf valleys. Supports a mosaic of habitats characteristic of dry acid soils, particularly unimproved and semi-improved acid grasslands, with bracken slopes and small areas of heathland gorse scrub. There are numerous outcrops of acidic rock and small disused quarries.	H1, H3, H4, H6, H9, H10, H20 & H21. S6.	SO 00SE/14, David Clements Ecology Limited, April 2008. Resurveyed in May 2016 and SINC boundary retained.
33	Cwmfelin (Cwmfelin Slopes)	Two parcels of land, comprising ffridd habitats above the Afon Bargod Taf. Mainly acid grasslands and mature broadleaved woodlands, with smaller areas of marshy grassland, dry heathland, grass-heath, acid flush and bracken. The woodlands include some wet woodland and an area of ancient woodland. Marshy grasslands, acid flushes and some of the acid grasslands are unimproved in character.	H1, H6, H7, H9, H10, H12, H15, H20, H22.	SO 00SE/15, David Clements Ecology Limited, April 2008. Resurveyed in July 2017 and SINC boundary retained.

-

34	Aberfan Gorllewin/ West of Aberfan	Two parcels of land situated on the lower slopes of the Taff valley between Aberfan and the A470. The southern areas of the site support a mosaic of damp neutral grasslands, semi-natural broadleaved woodlands along minor streams and bracken stands. The woodlands include areas of wet woodland)and drier areas. The neutral grasslands are generally species-rich and include both unimproved and semi-improved areas. The northern portion of the site consists of a colliery spoil substrate that has revegetated with a mosaic of neutral grasslands and mixed-species scrub.	H1, H3, H4, H9, H15, H18, H20	SO 00SE/16, David Clements Ecology Limited, December 2007. Resurveyed in June 2017 and SINC boundary retained.
35	Blaen-canaid	Series of species-rich semi-improved neutral grassland enclosures surrounded by a large conifer plantation. Also contains small areas of acid and marshy grassland and some scattered scrub and hedges.	H1, H4, H6, H7, H17.	SO 00SW/1, David Clements Ecology Limited, February 2008. Resurveyed in July 2017 and SINC boundary retained.
36	Rhydycar Gorllewin/ Rhydycar West	Very extensive mosaic of ffridd enclosures supporting complex of semi-upland and lowland habitats, partly contained within conifer plantation. Main components are ancient semi-natural woodland fragments, other semi-natural woodlands, wet heathland, dry heathland, marshy grassland and semi-improved neutral grasslands. Also there are some bracken slopes, scrub, small ponds, streams and sections of dismantled railway. There are areas of semi-improved acid grasslands to the south especially. The habitats intergrade to form a complex mosaic, and may therefore also include some small areas of improved or low diversity semi-improved grassland, but any such areas are a very minor component. Great crested newt occurs in small pools; noctule and pipstrelle bats have both been recorded. Nationally rare and scarce invertebrates are varied and common throughout the area.	H1, H3, H4, H5, H6, H7, H9, H11, H12, H15, H16, H17, H18, H20, H21, H22. S1, S2, S3, S4, S6, S7 & S8.	SO 00SW/2, David Clements Ecology Limited, May 2006. SINC boundary amended to take account of development (area of hand-standing).
37	Coed Cwm/ Cwm Woods	Area of ancient semi-natural woodland within a much larger conifer plantation. The grassy field layer has locally abundant bluebell. Also includes some associated areas of bracken, dry heathland, scrub, marshy grassland and acid grassland. A range of localised bird and moth species have also been recorded.	H1, H3, H6, H7, H9, H10, H20, H22	SO 00SW/3, David Clements Ecology Limited, April 2008. Resurveyed in July 2017 and SINC boundary retained.
38	Tyle Haidd	Valley slopes above the Afon Taf Fechan on limestone geology with screes and a disused quarry (Tyle Haidd). Supports unimproved, species-rich, semi-upland calcareous grassland of high biodiversity value, along with calcareous ledge and crevice communities, calcareous scrub woodland, bracken stands and small areas of acid grassland.	H3, H5, H6, H9, H20, H21 7 H22. S6 & S7.	SO 01SE/1, David Clements Ecology Limited, February 2008. Resurveyed in June 2017 and SINC boundary retained.
39	Comin Gogledd Merthyr/ Merthyr Common North	Very extensive area of upland common land supporting a mosaic of both wet and dry moorland habitats. These include extensive areas of unimproved acid grassland, marshy grassland, dry heathland and grass-heath, together with areas of wet heath, acid flush, bracken stands, scree and exposed gritstone bedrock. Tracts of modified blanket bog occur on the highest ground in the north-east of the site; these are often wet with abundant bog-mosses, although sometimes drier where drainage channels have been cut. Numerous small ponds and streams are present, including the headwaters of the Nant Morlais. Several ponds support floating bur-reed, a rare species in Glamorgan. In the north-west of the site, in contrast, there are areas of outcropping limestone, scree and extensive disused quarries (Twynau Gwynion) supporting calcicole grassland and ledge communities of very restricted occurrence in the County Borough. These areas are characteristically species rich, and support many regionally rare and scarce species. Numerous other localised plant species also occur in these habitats.	H5, H6, H7, H9, H10, H12, H15, H16, H18, H20 & H21. S2, S6 & S7.	SO 01SE/2, David Clements Ecology Limited, January 2008. Resurveyed in July 2016 and SINC boundary retained.

-

40	Comin Gelligaer/ Gelligaer Common	A very extensive upland common that continues within the neighbouring authority of Caerphilly County Borough. Comprises mainly acid grassland and grass-heath with areas of dry heath and bracken slopes with scattered trees to the south and west. There are also scattered marshy grasslands, species-rich acid flushes and areas of western gorse scrub. Also included are some adjacent fields supporting species-rich neutral and acid grassland and small remnants of mature oak woodland. Several ponds and small streams are also present. The site supports numerous localised plant species, with a regionally scarce plant occuring in the acid grasslands.	H1, H3, H4, H6, H7, H9, H10, H12, H15, H16, H20, H21, H22. S2.	SO 10SW/1, David Clements Ecology Limited, April 2008. Resurveyed in July 2017 and SINC boundary retained.
41	Nant Llwynog (Coed Nant Llwynog)	Semi-upland ancient semi-natural woodland with bracken slopes and peripheral areas of dry semi-improved acid grassland and damp semi-improved neutral grassland on valleysides above the Nant Llwynog. The site supports a range of breeding woodland birds.	H1. H4, H6, H9.	SO 10SW/2, David Clements Ecology Limited, June 2008. Resurveyed in May 2017 and SINC boundary retained.
42	Coed-y-Hendre (Coed-yr-Hendre)	Upland ancient semi-natural woodland, together with bracken slopes and areas of unimproved and semi-improved acid grassland. There is also a disused quarry (Coed Hendre Quarry) supporting heathland ledge and an old spoil tip supporting semi-improved acid grassland. The woodland supports a range of breeding birds.	H1, H6, H9, H10, H15, H16, H18, H20, H21.	SO 10SW/3, David Clements Ecology Limited, June 2008. Resurveyed in May 2017 and SINC boundary retained.
43	Craig-yr-Efail	Semi-upland ffridd and hill top supporting mainly dry (heath, with bracken predominating on lower slopes. Also some replanted ancient semi-natural woodland, wet woodland, acid grassland, sandstone outcrops and quarries with associated screes.	H1, H6, H9, H10, H15, H21.	ST 09NE/1, David Clements Ecology Limited, February 2008. Resurveyed in June 2015 and SINC boundary retained.
44	Tarren-y-Gigfran, St. Tydfil Forest	Semi-upland valleyside slopes above the A470, including a large disused quarry with screes and outcrops, supporting dry heathland, bracken slopes and semi-improved acid grassland. Also includes numerous areas of semi-natural woodland, including ancient semi-natural woodland and wet woodland along the course of small streams. A second, smaller parcel of land to the west of the main part of the site comprises a hilltop heathland. The site is partially enclosed by conifer plantation.	H1, H6, H9, H10, H15, H20, H21, H22.	ST 09NE/2, David Clements Ecology Limited, April 2008. Resurveyed in June 2016 and SINC boundary retained.
45	Ynysowen/ Merthyr Vale	Complex mosaic of ffridd habitats above the Afon Taf. These comprise mainly semi-natural woodlands, acid grasslands, dry heathlands and bracken slopes. Other habitats include dense and scattered scrub, marshy grassland and neutral grassland. There is also a large disused quarry with associated spoil tips which have re-vegetated with heathland. In the north of the site is a large regraded colliery spoil tip supporting acid grassland with several species of interest.	H1, H4, H6, H7, H9, H10, H15, H18, H20, H21 & H22. S3 & S6.	ST 09NE/4, David Clements Ecology Limited, January 2008. Resurveyed in August 2017 and SINC boundary retained.
46	Cwm Cothi (Coed Cefn Forest & Cwm Cothi)	Large area of semi-natural broadleaved woodland, much of it ancient semi-natural woodland on the valley bottom and valleysides of Cwm Cothi. Site also includes wet heathlands, marshy grasslands and bracken slopes, as well as smaller areas of neutral grassland, acid grassland and acid flushes, and some small disused quarries and revegetated colliery spoil. The marshy habitats support numerous species of interest.	H1, H3, H4, H6, H7, H9, H10, H12, H15, H20, H21. S3 & S6.	ST 09NE/5, David Clements Ecology Limited,January 2008. Resurveyed in June 20117 and SINC boundary retained.
47	Parc Treharris/ Treharris Park (Treharris Park & Cardiff Woodlands)	Semi-natural broadleaved woodlands on valley slopes above the Afon Taf, including areas of ancient woodland and replanted ancient woodland. Also includes some open fridd areas with rocky outcrops, supporting a mosaic of bracken stands and dry heathlands. The site also includes small areas of acid and neutral grassland, scrub and several disused quarries. Ancient woodland	H1, H3, H4, H6, H9, H10, H15, H20, H21. S3.	ST 09NE/6, David Clements Ecology Limited,January 2008. Resurveyed in June 2017 and SINC boundary retained.

		indicator plants grow in the richer woodland areas. The fridd areas support a strong population of reptiles and the woodlands are important for a range of breeding birds		
48	Coed Edwardsville/ Edwardsville Woods (Lower Taf & Edwardsville Woods)	Steep valley sides along the sharply meandering lower section of the Afon Taf, mainly supporting ancient semi-natural woodlands. Also includes some adjacent areas of neutral and acid grasslands, scrub, bracken and grass-heath. The damp woods have a particularly rich ground flora with the dry woods having a much sparser ground flora, but supporting abundant bluebell. A wide range of bird species have been recorded from the woodlands. The grasslands and bracken in the north of the site are important for reptiles.	H1, H3, H4, H6, H9, H10, H15, H20, H21, H22. S1,S2,S3,S5 & S7.	ST 09NE/7, David Clements Ecology Limited, April 2008. Resurveyed in June 2017 and SINC boundary retained.
49	Mynydd Goetre-Coed	Hill-top area of dry heathland, acid grassland, grass-heath and bracken stands. Also some disused quarries and associated scree with scattered scrub and young trees. Includes a large area of colliery spoil to the north supporting mainly species-rich neutral grassland communities.	H4, H6, H9, H10, H18, H20, H21 & H22. S6 & S7.	ST 09NE/8, David Clements Ecology Limited, February 2008. Resurveyed in June 2015 and SINC boundary retained.
50	Comin Craig-Evan-Leyshon (Whitehall Golf Course)	Mainly bracken slopes but with areas of dry heathland, acid grassland, semi-natural woodland (along the course of an old railway line) and disused quarries, forming a mosaic of habitats. (An extension of the much larger Craig-Evan Leyshon Common SINC in the neighbouring authority of Rhondda Cynon Taff County Borough).	H1, H3, H6, H9, H10, H18, H20, H21 & H22. S3.	ST 09NE/9, David Clements Ecology Limited, May 2008. Resurveyed in June 2016 and SINC boundary retained.
51	Cwm Mafon	Area of wet woodland along the course of the Nant Mafon, including some adjacent areas of marshy grassland and damp neutral grassland. Also includes some bracken stands and scrub. The stream has many natural physical features and a number of large mature trees along its banks. The wet woodland supports a rich ground flora. This is a transboundary SINC site, continuing into adjacent marshy grassland habitats in the neighbouring authority of Caerphilly County Borough.	H1, H3, H4, H7, H9, H15, H20. S6.	ST 09NE/10, David Clements Ecology Limited, June 2008. Resurveyed in June 2016 and SINC boundary retained.
52	Craig Berthlwyd	Area of valley side slope in an urban setting supporting a mosaic of dry heathland, acid grassland, bracken and broadleaved woodland. Also includes some rocky outcrops, old quarries and associated clitter scree. The acid grasslands are mostly unimproved	H1, H6, H9, H10, H20, H21, H22.	ST 09NE/11, David Clements Ecology Limited, January 2008. Resurveyed in June 2016 and SINC boundary retained.
53	Goetre Coed (Goetre Coed Wood)	Remnant area of ancient semi-natural woodland and associated bracken slopes with scattered mature trees. There are also some small areas of dry heathland associated with old quarries. The woodland is acidic in character, with a generally sparse ground. Large outcrops of native gritstone rock are a feature of the woodlands. The old quarries and other exposed rocks support heathland.	H1, H6, H9, H10, H20, H21. S1, S2,S3, S6 & S7.	ST 09NE/12, David Clements Ecology Limited, June 2008. Resurveyed in June 2017 and SINC boundary retained.
54	Cwm Bargod/ Lower Cwm Bargod	Large and diverse site on valley sides above the Afon Bargod Taf, comprising semi-natural woodland, including a large area of ancient woodland, bracken slopes, small areas of heathland, and an old colliery spoil tip supporting acid grassland. Other habitats present include small areas of neutral grassland, marshy grassland, scrub and some gritstone outcrops. Also includes a section of the Afon Bargod Taf, along with some adjacent reed beds and two lakes that form part of the Parc Taf Bargod. The spoil heap supports a diverse range of plants. Climbing corydalis occurs in the bracken slopes.	H1, H3, H4, H6, H7, H9, H11, H15, H16, H18, H20, H21, H22.	ST 19NW/, David Clements Ecology Limited, January 2008. Resurveyed in June 2017 and SINC boundary retained.
55	Trelewis (Trelewis Wood/s)	Small remnant of ancient semi-natural woodland. Also includes small areas of acid grassland and marshy grassland in clearings and at the woodland borders. The marshy grasslands are species-rich	H1, H6, H7, H20	ST 19NW/2, David Clements Ecology Limited, April 2008.

		and support species of interest.		Resurveyed in June 2017 and SINC boundary retained.
56	Nant Caiach (Nant Caeach)	Stream course which is semi-upland in character at its source and progressively becomes a large lowland stream towards its confluence with the Afon Taf Bargod. The stream follows an unmodified course and includes natural physical features such as meanders, small waterfalls, pools and riffles. The lower reaches pass through remnant areas of ancient semi-natural woodland as well as wet woodland pockets. Upstream sections pass through agricultural land, and include some adjacent areas of semi-improved neutral grassland as well as scattered mature broad-leaved trees alongside the stream. There are also small areas of marshy grassland, scrub and bracken.	H1, H3, H4, H7, H9, H15	ST 19NW/4, David Clements Ecology Limited, June 2008. Resurveyed in June 2016 and SINC retained with an amended boundary to remove area of housing development.
57	Berthlwyd	Valley side slopes above the Afon Bargoed Taf, supporting semi-natural woodland, semi-improved neutral grassland and stands. Also includes small areas of acid grassland and scrub and a small disused quarry. Much of the grassland is flowery and species-rich and supports species of interest. Small pockets of acid grassland are also present with regionally scarce species also occurring on the site.	H1, H3, H4, H6, H9, H20	ST 19NW/5, David Clements Ecology Limited, January 2008. Resurveyed in April 2015 and SINC boundary retained.
58	Afon Taf	The major river in the County Borough. Includes areas of bankside habitats, particularly towards the south where the river corridor is less industrialised than further north. Associated habitats are chiefly semi-natural woodland, including areas of ancient semi-natural woodland and linear wet woodlands. There are also numerous neutral grasslands, scrub patches and bracken stands, as well as small areas of marshy grassland and tall herb vegetation. Notable features of the river course include cobble banks which support localised plants. Otter occurs throughout the length of the river which is known to be of value to a wide variety of birds, fish, bats and reptiles.	H1, H3, H4, H7, H9, H15, H16, H22. S3 & S5.	RIV 1, David Clements Ecology Limited, June 2008. Resurveyed in June 2017 LDP SINC boundary retained.
59	Afon Bargod Taf	Major river system flowing through the eastern part of the County Borough. The river passes through former industrial areas in its lower reaches, and includes some sections that have been canalised. The upstream reaches, in contrast, are bordered by woodland and agricultural land. The SINC covers all sections of the Bargod Taf which do not fall in other SINCs along the route, comprising three discrete sections. Includes adjacent bankside habitats, particularly semi-natural woodland along with semi-improved neutral and acid grasslands, bracken stands and swamp. Large mature trees are frequent along the banks, and these may support roosting bats. Otter occurs throughout the length of the river which is known to be of value to a wide variety of birds, fish, bats and reptiles.	H1, H4, H6, H9, H11, H15, H18. S1, S5 & S7.	RIV 2, David Clements Ecology Limited, May 2008. Resurveyed in June 2017 and SINC boundary retained.
60	Coed Meirig (Coed Meirig Pastures)	Small group of horse-grazed fields supporting a mosaic of marshy grassland and semi-improved acid grassland. The marshy areas are mostly species-rich with bordering rush pastures. An area of fen meadow in the east of the site supports the regionally scarce plants. There are also small areas of species-rich neutral grassland and bramble scrub. Mature broadleaved trees are present along field boundaries and several small streams cross the site.	H1, H3, H4, H6, H7, H15, H20, H22.	SO 00NW/3, David Clements Ecology Limited, November 2007. Resurveyed in June 2017 and SINC retained with an amended boundary to remove area of housing development.
61	Gethin Forest	Mosaic of upland and semi upland habitats comprising conifer platantion, semi natural broad leaved, wet and replanted ancient woodland, heathlnad, acid grassland, water courses, stading open water, flushes and supporting scrub, neutral grassland and fridd. The whole site qualifies as as a candidate SINC for its mosaic of habitats, which suport a divesrse range of flora and fauna.	H1, H3, H6, H7, H9, H12, H15, H16, H18, H20, H21,H22. S1,S2,S4 & S7.	David Clements Ecology Limited,February 2013, boundary put forward as SINC.

62	Cefn Forest	Mosaic of semi upland habitats comprising extensive conifer plantation, with supporting semi natural broad leaved woodland, acid grassland, ffridd and heathland. Includes areas of replanted woodland with a range of semi natural woodland indicators & Conifer woodlands that support remnant heathland/acid grassland mosaics.	H20, H1, H6, H10 & H9.	David Clements Ecology Limited,February 2013, boundary put forward as SINC.
63	St. Tydfil Forest (East)	Large area of habitat mosaics, which includs significant coverage of woodland, all of which support ancient woodland indicator species as well as heathland and acid grasland throughout. Bird sepcies present include the marsh tit and barn owl.	H20, H1, H3, H4, H9, H10, H18, H21. S2.	David Clements Ecology Limited,February 2013, boundary put forward as SINC.
64	St. Tydfil Forest (West)	Meet SINC criteria, for its mosaic of extensive conifer wodlands, areas of ancient woodland and semi natural broad leaved woodlands which support ancient woodland species in addition to heathland, acid and . Parts of the site also support a variety of interesting plants and Peregrine falcons nest on the quarry cliffs.	H1, H2, H3, H4, H7, h9, H10, H12, H18, H20 & H21. S2 (contributory).	David Clements Ecology Limited,February 2013, boundary put forward as SINC.

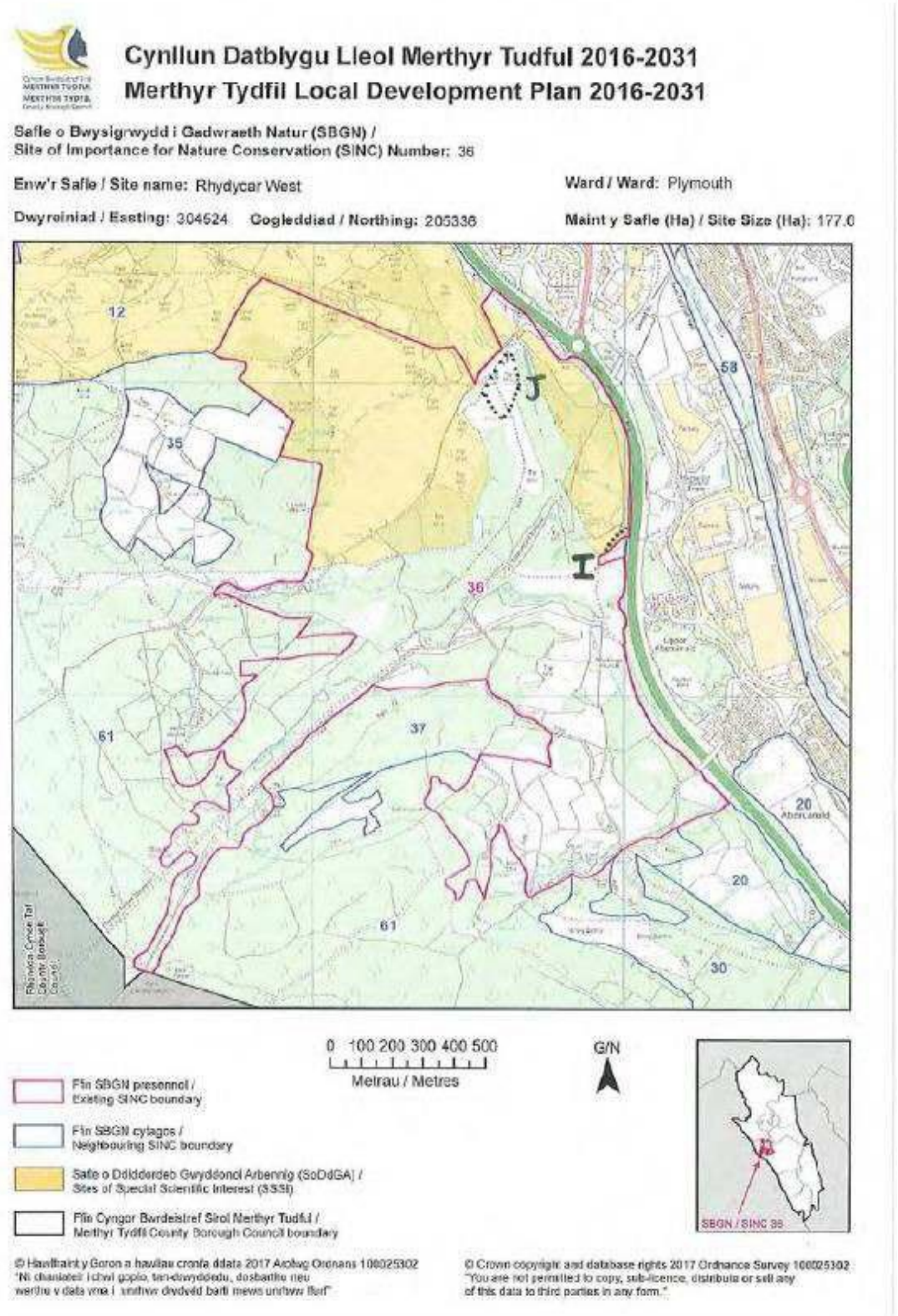
Regionally Important Geological Sites (RIGS) in Merthyr Tydfil County Borough

RIG No	Site Name	Summary of qualifying features i.e. RIGS: Statement of Interest.	RIGS Category	Surveys [6]
1	Nant Ffrwd	Nant Ffrwd is a narrow deeply incised wooded gorge cut into the bedrock of Bishopston Mudstone Formation and was first identified in 1970's. A well-developed waterfall and plunge pool is present at the head of the gorge just west of the road bridge which marks the current knick point. The site forms a unique landscape feature in a tributary of the Taff valley which may have been initiated with the fluctuating climate during the Late Glacial Interglacial Transition at the end of the last (Devensian) Ice Age, and has continued to develop during the Holocene. Likely to be the consequence of rapid down cutting by meltwater after the ice had retreated from the site and water was eroding down to a new base level in the glacially over deepened Taff valley.	Scientific and Educational.	AH-48, surveyed June 2011.
2	Llan-Ucahf	The area comprises an exposed section of track which cuts through mudstones in the Brithdir beds and Pennant formation. It is nominated as RIG due to the presence of high number of plant fossils, including *Stigmaria*, *Neuropteris sp*, cordaites, found in the mudstones and siltstones of the Brithdir beds. This portion of the coal measures is usually fossil poor. The location is also a good place to observe the overlying coal rich muds on top of the Pennant Sandstones.	Educational.	Site-249-433, surveyed September 2010.

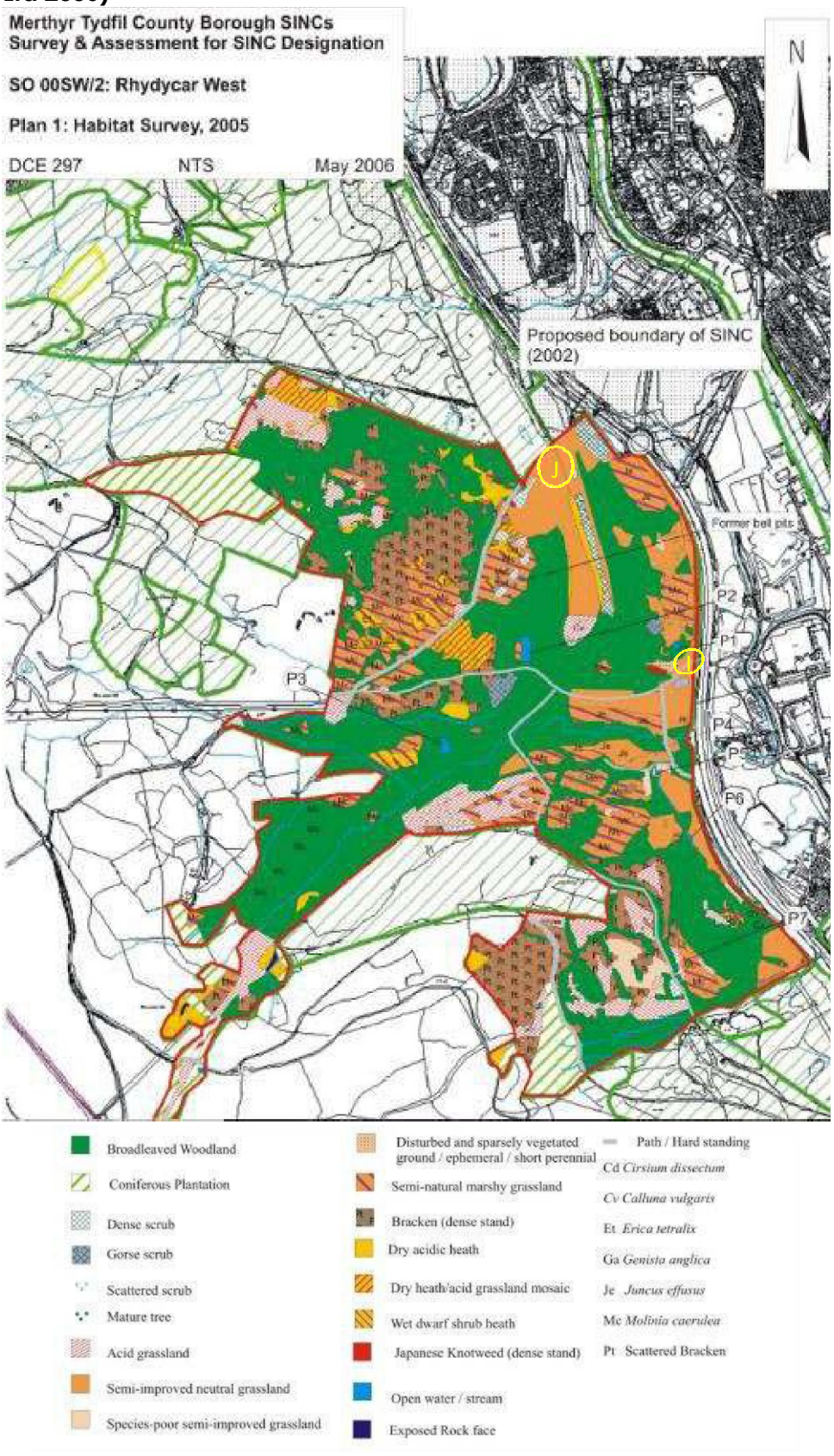
[6] South Wales RIGS Audit Volume 1 – Overview Geology and Landscape Wales Commercial Report CR/12/033 - 2012

-

APPENDIX 2 – Marvel Ltd Areas 'I' and 'J' of SINC 36 Queried



APPENDIX 3 – SURVEY PLAN RE ASSESSMENT FOR SINC DESIGNATION (David Clements Ecology Ltd 2006)



APPENDIX 4 – SURVEY PLAN RE ASSESSMENT FOR SINC DESIGNATION (David Clements Ecology Ltd2006) – AREAS OF PLAN AT POINTS 1' AND 1'

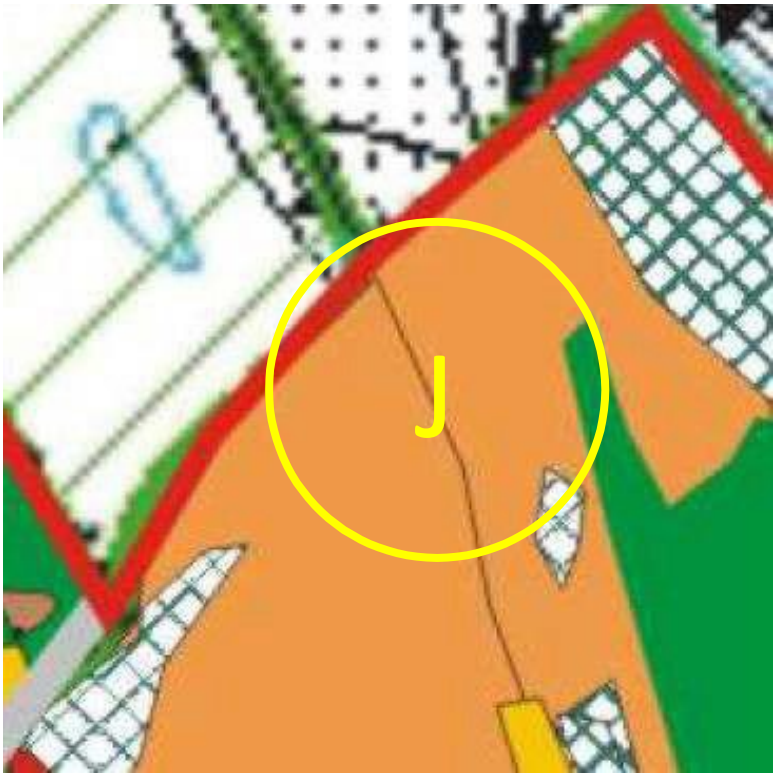


Figure 1 – Area of land at Point J showing a semi-improved neutral grassland classification.

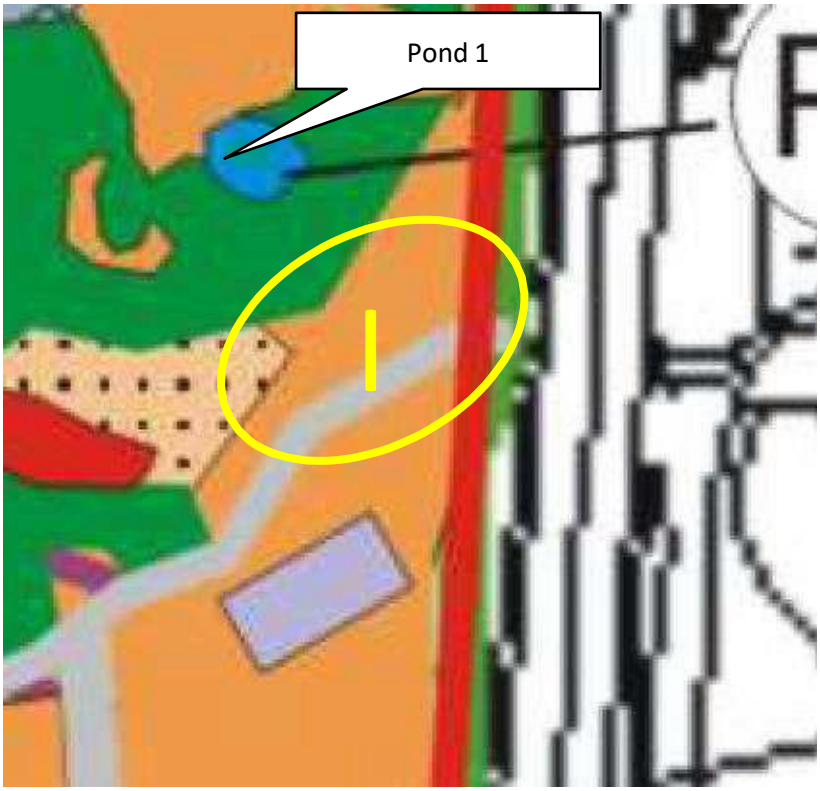


Figure 2 Area of land at Point I showing a semi-improved neutral grassland classification plus the position of Pond 1 (with GCN).

APPENDIX 5 – AERIEL IMAGES, POINT 1'

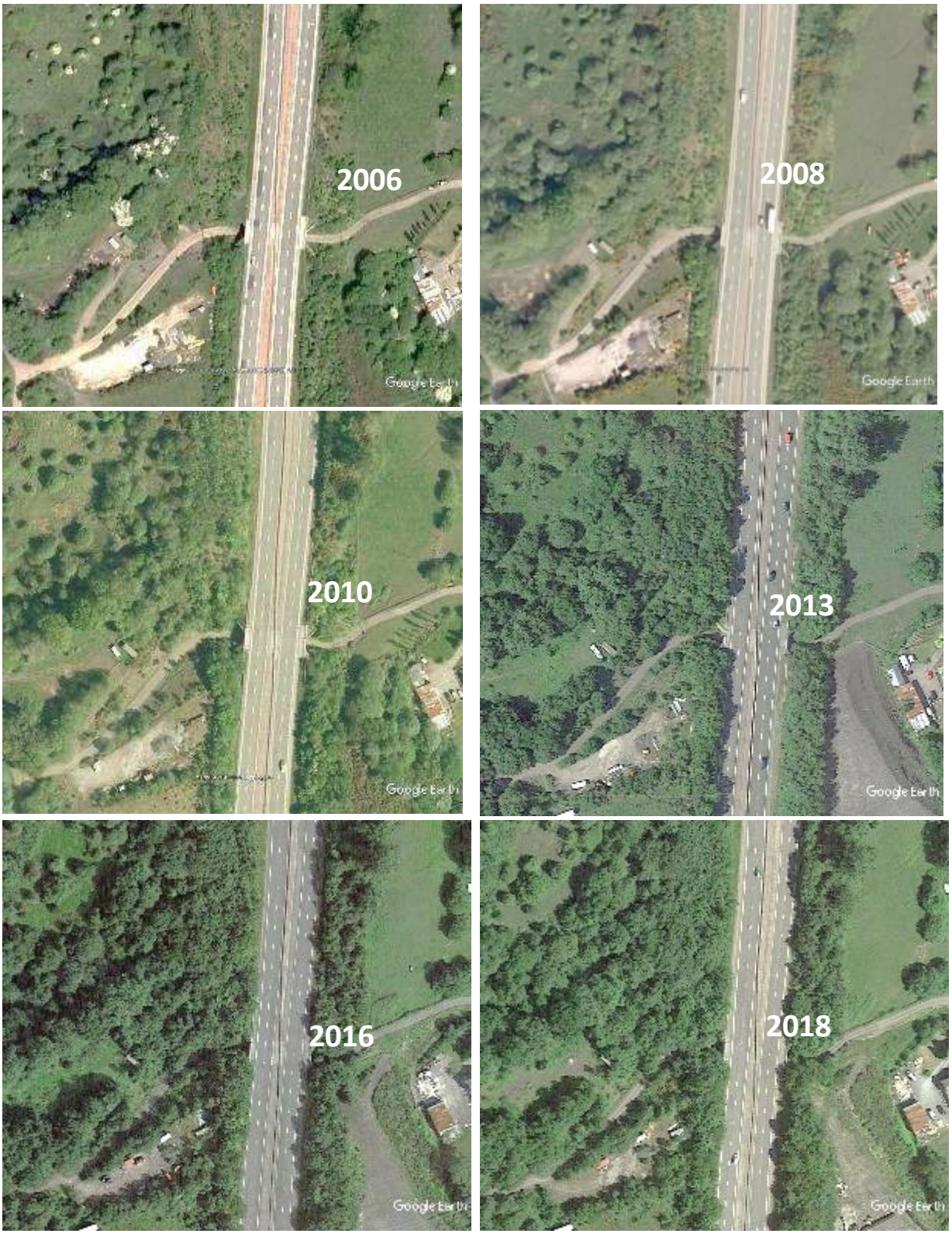


Figure 3 – Historic aerial images of area of SINC 36 - Point I.

APPENDIX 6 – AERIEL IMAGES, POINT J

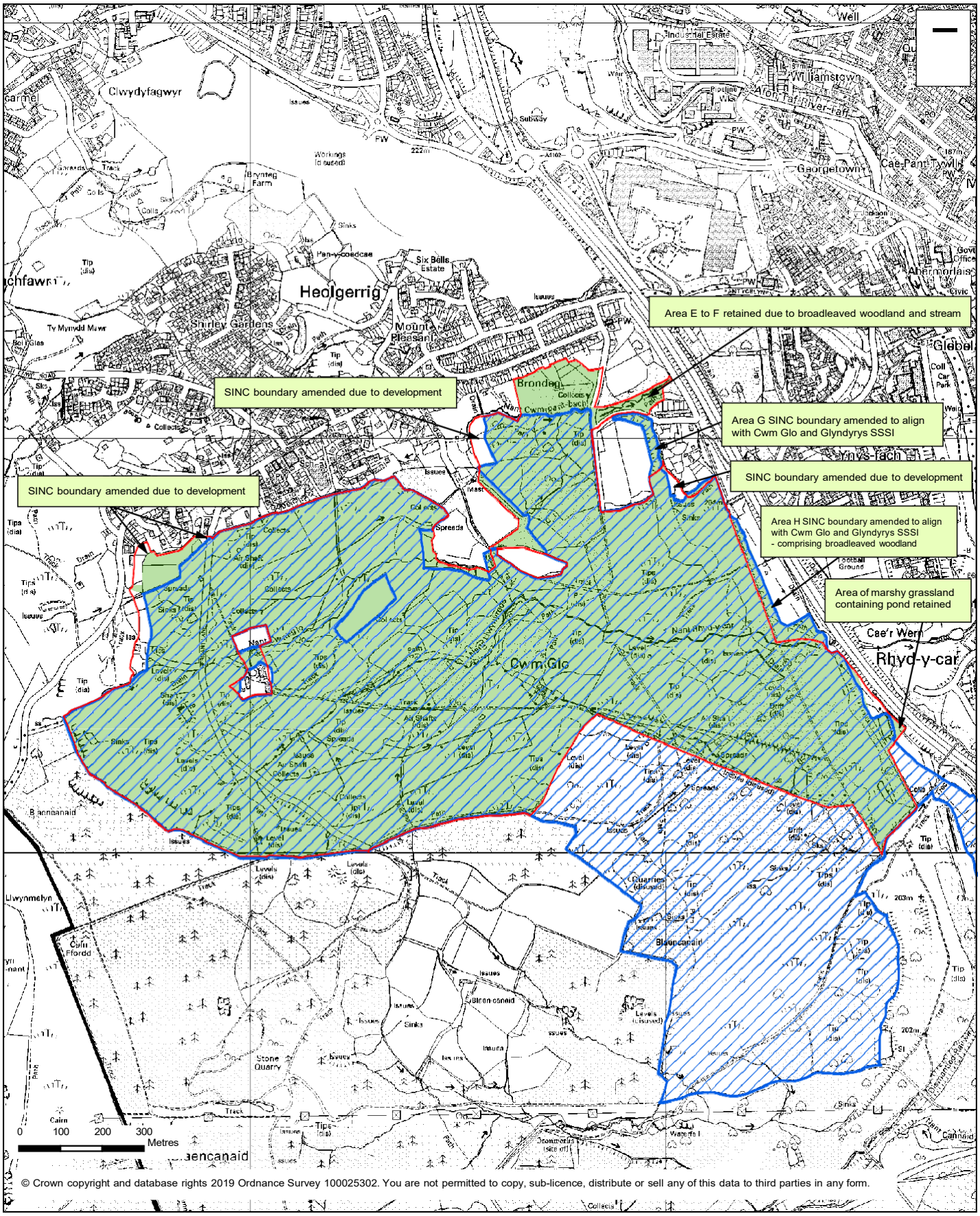
Figure 4 – Historic aerial images of area of SINC 36 - Point J.

Appendix 7 – Boundary Plan for Cwm Glo (SINC 12)

Merthyr Tydfil Local Development Plan 2016-2031

Site of Importance for Nature Conservation (SINC)

Ref: SINC 12 **Name:** Cwm Glo **Site Size:** 127.66



Existing adopted LDP SINC

Replacement LDP SINC boundary

Site of Special Scientific Interest (SSSI) boundary

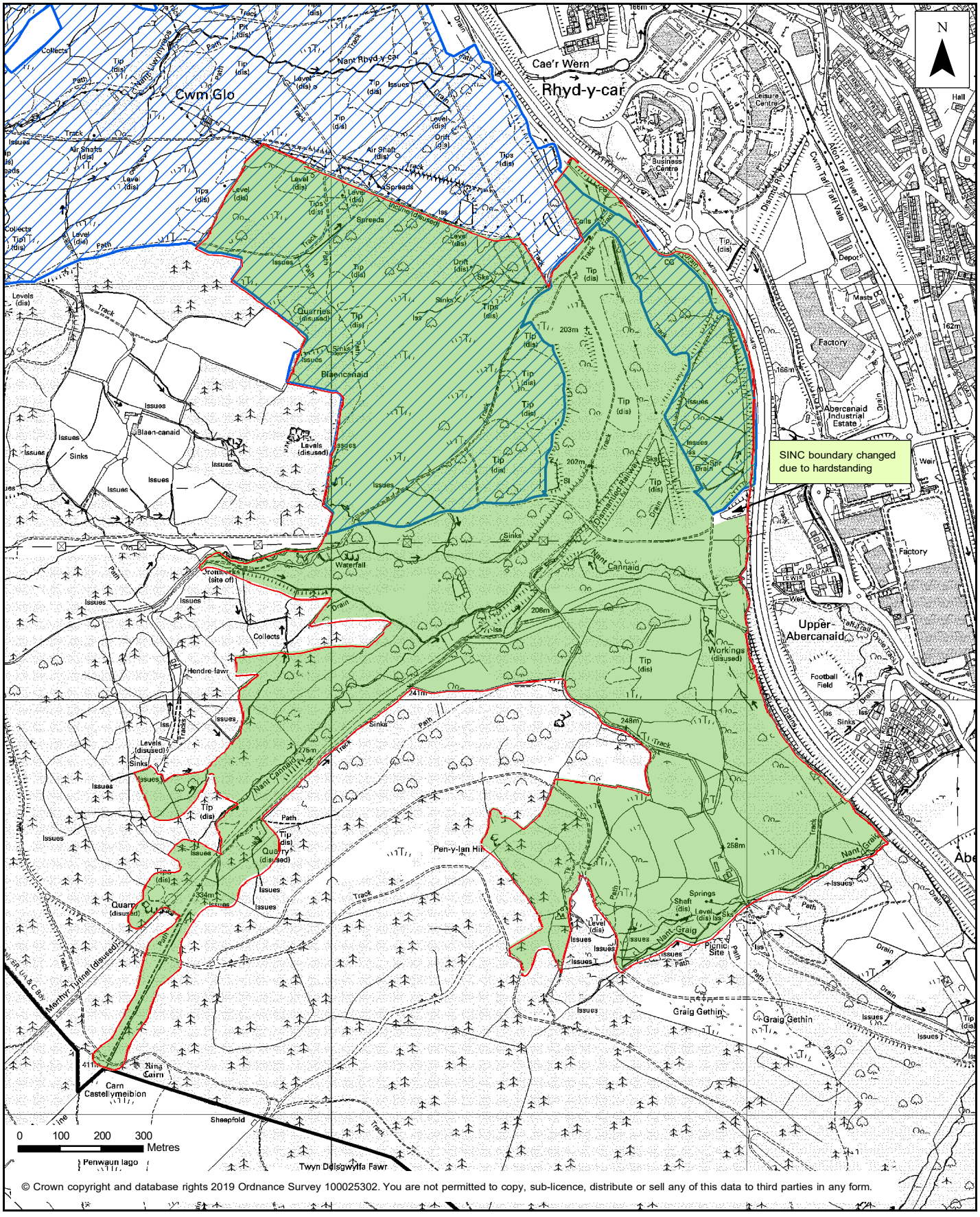
Merthyr Tydfil CBC boundary

Appendix 8 – Boundary Plan for the Rhydycar West (SINC 36)

Merthyr Tydfil Local Development Plan 2016-2031

Site of Importance for Nature Conservation (SINC)

Ref: SINC 36 **Name:** Rhydycar West **Site Size:** 177.68



Existing adopted LDP SINC boundary

Site of Special Scientific Interest (SSSI) boundary

Replacement LDP SINC boundary

Merthyr Tydfil CBC boundary