

**PROPOSED DEVELOPMENT AT DEMON
TWEEDS, 75 ASH ROAD SOUTH, WREXHAM
INDUSTRIAL ESTATE, WREXHAM**

**ECOLOGICAL METHOD STATEMENT &
MANAGEMENT PLAN (2014)**



ces ecology
consultant ecologists

DEMON TWEEKS SITE,
ASH ROAD SOUTH,
WREXHAM INDUSTRIAL ESTATE,
WREXHAM

ECOLOGICAL METHOD STATEMENT
& MANAGEMENT PLAN (2014)

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September 2014

CES:813/09-14/DG

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1.0 INTRODUCTION

Cheshire Ecological Services Ltd (CES), the consultancy arm of the Cheshire Wildlife Trust to whom all profits are covenanted, was commissioned by Demon Tweeks to produce an ecological method statement and management plan in connection with the proposed development works at their Ash Road South site on Wrexham Industrial Estate, Wrexham (see Appendix A: Site Location Map). The development works are required so that the company can continue their association with Wrexham Industrial Estate by expanding their stock lines and continuing to trade in new, high-quality, 'fit-for-purpose' premises.

Great crested newts (GCN) are protected by both British and European legislation (see Appendix B: GCN Legislation). This ecological method statement and management plan is therefore required and details the measures proposed to mitigate and compensate for the predicted likely impact of the proposed development works upon the meta-population of GCN known to be associated with Wrexham Industrial Estate. This ecological method statement and management plan will also detail the practices required to manage suitable habitats created/enhanced/secured as compensation, for GCN and/or other wildlife potentially associated with the Demon Tweeks site, in respect of the development, and as detailed in the licensed Method Statement.

This ecological method statement and management plan should enable the Local Planning Authority (LPA) to make an informed decision as to whether or not Condition 13 of Planning application ISY P/20008/0771 submitted and granted in respect of these development works has been discharged, in accordance with the LPA responsibilities under TAN 5.

2.0 BACKGROUND

It should be noted that two separate developments were originally proposed within the Demon Tweeks site boundary (Area A and Area B). These works were originally proposed to be undertaken simultaneously under two separate planning permissions, DSW/JW/P/2008/0771 (Area A) and ISY P/2011/0231 (Area B).

As the Area A development was originally intended to be undertaken in conjunction with the Area B development it was also subject to the same amphibian clearance programme. The GCN licensed development was completed within Area B during 2013 to extend the existing

Demon Tweeks premises at the site. During this process both Areas A and B were subject to GCN trapping criteria (with no GCN captured/translocated from either of the development areas). However, due to the economic downturn it became necessary to delay commencement of the proposed development within Area A until 2014 and the original GCN mitigation licence (Licence Ref: GCN/2345/WG/IND) was allowed to expire.

The proposed 'Area A' development will involve the construction of a new building/associated infrastructure and an extension to the existing car park area.

3.0 SITE DESCRIPTION

Local Planning Guidance Note 29 - Wrexham Industrial Estate: Employment Development & Nature Conservation

This planning guidance note states that the following legally protected species are known to use the areas within Wrexham Industrial Estate: barn owl, kingfisher, fieldfare, peregrine falcon, redwing, bats, great crested newt, otter, water vole, lesser silver water beetle, grass snake, common lizard, polecat, skylark, grizzled skipper, white-letter hairstreak and dingy skipper butterflies, bullfinch, common toad, kestrel, lapwing and ground beetle.

The development area (Area A)

The proposed development footprint extends to a total of approximately 3,483m² at two distinct locations (Area A [this development] and Area B [already complete]) within the Demon Tweeks site adjacent the existing premises/showrooms. A site visit undertaken on 3rd September 2014 by Dawn Goodfellow BSc (Hons) MCIEEM established that Area A currently comprises mainly hard-standing and well compacted, close mown amenity grassland, offering GCN and other wildlife with relatively limited shelter opportunities but some foraging and dispersal habitat.

No suitable GCN breeding sites were found to be present within the proposed working area or the wider Demon Tweeks land ownership site. However, the development site is located approximately 353 metres from a known GCN breeding pond.

The proposed working area is currently considered to be of limited value to GCN and other amphibians/wildlife as it offers few shelter and limited foraging opportunities. However, GCN have been recorded ranging over a 1km from their breeding ponds (although distances of up to 500 metres are more common). Therefore, the proposed development site should be regarded as being within range as potential terrestrial habitat used by GCN.

Adjacent habitat/s - GCN

Two sections of dry ditch were found to be present along parts of the northern and western boundaries of the Demon Tweeks site. A paucity of aquatic vegetation indicated that these ditches remain dry for long periods of time, making them unsuitable as GCN breeding habitat. However, it is considered likely that these ditches act as dispersal corridors for GCN and other wildlife. A wooded embankment and boundary hedgerow located along the eastern and southern boundaries of the Demon Tweeks site and localised areas of rough grassland within the site boundary were considered likely to offer GCN/wildlife with suitable terrestrial shelter, foraging and dispersal habitat.

Adjacent habitat/s - Butterflies & other wildlife

It was considered that the wooded embankment, boundary hedgerow and the localised areas of rough grassland at the Demon Tweeks site offered amphibians, butterflies, birds, insects, mammals and other wildlife potentially associated with the site suitable shelter, foraging and dispersal opportunities.

4.0 LEGISLATION & EXISTING SURVEY DATA

Table 1: Statutory protected species recorded within one kilometre of the Demon Tweeks site:

Species		Legislation
Scientific name	Common name	
<i>Anguis fragilis</i>	Slow worm	S42, UKBAP, WCA5
<i>Chiasmia clathrata</i>	Latticed heath	S42, UKBAP
<i>Coenonympha pamphilus</i>	Small heath	S42, UKBAP
<i>Ecliptopera silaceata</i>	Small phoenix	S42, UKBAP
<i>Erynnis tages</i>	Dingy skipper	S42, UKBAP
<i>Hemistola chrysoprasaria</i>	Small emerald	S42, UKBAP
<i>Lissotriton vulgaris</i>	Smooth newt	WCA5
<i>Meles meles</i>	Badger	BA, LBAP
<i>Myotis mystacinus</i>	Whiskered bat	Bern, Bonn, EPS, HDir., WCA5
<i>Pipistrellus pipistrellus</i>	Pipistrelle bat	Bonn, EPS, WCA5
<i>Pyrgus malvae</i>	Grizzled skipper	S42, UKBAP
<i>Triturus cristatus</i>	Great crested newt	Bern, EPS, HDir., S42, UKBAP, WCA5, LBAP
<i>Vipera berus</i>	Adder	S42, UKBAP, WCA5
<i>Watsonalla binaria</i>	Oak Hook-tip	S42, UKBAP

Key:

BA – Protection of Badgers Act, Bern – The Bern Convention on the Conservation of European Wildlife and Natural Habitats, Bonn – The Bonn Convention on the Conservation of Migratory Species of Wild Animals, EPS – European Protected Species, HDir – EU Habitats Directive, S42 – Natural Environment and Rural Communities Act 2006 (Section 42), UKBAP – UK Biodiversity Action Plan Priority Species, WCA5 – Wildlife and Countryside Act 1981, Schedule 5

Great crested newts

As part of both developments at the site, within Areas A and B, no ponds will be lost and less than 0.5ha of terrestrial habitat between 100-250 metres from the nearest pond (and 353 metres from the nearest known GCN breeding pond will be lost or damaged. Therefore current Natural England guidance, also used by Natural Resources Wales (NRW), indicates that presence/likely absence GCN survey data would be appropriate and relevant in this instance.

In April 2007 ecologists from Marches Ecology surveyed five water-bodies within 650m of the proposed development site at Demon Tweeks. Great crested newts were found to be utilising four out of these five ponds surveyed in 2007. The closest of these ponds found to support great crested newts is located 353 metres from the proposed development site (this information was supplied courtesy of Waste Recycling Group and Marches Ecology). These survey results confirm the presence of this species indicating that GCN could potentially range across the proposed development site.

Additionally, both Areas A and B were previously subject to an amphibian clearance programme, although no GCN were found within either of the development areas during this process.

As a GCN meta-population is known to be associated with Wrexham Industrial Estate, a NRW licence needs to be obtained to allow the proposed development and associated GCN mitigation works (capture, translocation and exclusion) to proceed lawfully.

Butterflies & other wildlife: Local Planning Guidance Note 29 - Wrexham Industrial Estate: Employment Development and Nature Conservation

This planning guidance note states that the following legally protected species are known to use the areas within Wrexham Industrial Estate: barn owl, kingfisher, fieldfare, peregrine, redwing, bats, great crested newt, otter, water vole, lesser silver water beetle, grass snake, common lizard, polecat, skylark, common lizard, grizzled skipper, white-letter hairstreak and dingy skipper, bullfinch, common toad, kestrel, lapwing and ground beetle. As such developments within Wrexham Industrial Estate should consider their potential presence and the appropriateness of any mitigation and habitat compensation measures formulated.

5.0 WORKS TO BE UNDERTAKEN UNDER LICENCE FROM NATURAL RESOURCES WALES

Great crested newts

Actions requiring licence potentially affecting GCN will include: Capture, transport, disturb, damage a breeding site/resting place, destroy a breeding site/resting place. The actions are required to ensure that the proposed development site is successfully cleared of GCN to enable the development to proceed lawfully. The majority of works to be undertaken in connection with the proposed development in Area A will be undertaken using the methods detailed within the licensed Method Statement for the development.

6.0 REASONABLE AVOIDANCE MEASURES

Great crested newts

The following measures are considered appropriate for works not covered by the NRW licence for the development site and will be implemented as deemed applicable by the appointed ecologist.

Reasonable Avoidance Measures:

1. Prior to commencing development at the site a suitably experienced and GCN licensed consultant ecologist should be appointed by the developer to ensure that the RAM are successfully implemented.
2. The RAM will be implemented as deemed appropriate by the appointed ecologist. A copy of this report and supporting materials including GCN/amphibian identification

sheets and 'on call' ecologist contact details should be kept on-site and available for inspection during development related works at the site.

3. Prior to any development related works commencing at the site the developer/contractors should undergo a site induction/tool box talk where the implications arising from the presence of GCN/amphibians within the local area and the need to implement the RAM detailed in this report should be fully explained by the appointed ecologist.
4. The timing of the development works and implementation of RAM will, where practicable to do so, encompass daylight hours and the period when the majority of GCN/amphibians are considered likely to be at their breeding sites and/or not active above ground. Consequently the risk of GCN/amphibians being adversely impacted by the works will be minimised.
5. Prior to any vegetation clearance and/or ground disturbance works commencing at the site, the extent of works should be agreed by the appointed ecologist and the developer/contractors.
6. All trees and hedgerows that are required to be retained at or neighbouring the development site should be protected from direct impact and severance or asphyxiation of root systems. Any ground disturbance works should only take place at a minimum distance from individual trees of branch spread or half-tree height, (whichever is the greater).
7. Any required tree and hedgerow protection measures should be implemented in accordance with current best practice recommendations and guidance.
8. Terrestrial habitat protection measures, including the use of exclusion zones, should be implemented as deemed appropriate. The appointed ecologist and the developer/contractors should identify, agree and appropriately secure any required terrestrial habitat exclusion zones prior to the commencement of development works at the site.
9. Vegetation removal/management may be used to discourage GCN/amphibians from entering areas of the development site that are to be subject to significant ground disturbance works.
10. Where vegetation removal/management works, with the potential to disturb nesting birds, including the required removal of trees and/or hedgerows at the development site, cannot be scheduled outside of the bird nesting season (March to September) the appointed ecologist or their accredited agent should carry out a nesting bird survey at, and neighbouring, the proposed area of works.
11. A nesting bird survey should be undertaken immediately prior to the commencement of any significant vegetation/tree/shrub/bramble removal works at the development site between March and September.
12. In the event that nesting birds are found to be present at the development site, it will be necessary to formulate and implement a mitigation strategy (dependent on the bird species) to address their presence and prevent any disturbance to the nest site and a breach of wildlife legislation.
13. To minimise the risk to GCN/amphibians during vegetation removal/management works hand-held trimmers and/or brush-cutters or low ground impact machinery, i.e. quad and flail should be used. This will prevent ground compaction and any inadvertent damage to the areas of terrestrial habitat/vegetation at and adjacent the development site that is to be retained.

14. In accordance with best practice recommendations all vegetation removal works should ideally be undertaken in stages and under the supervision of the appointed ecologist or their accredited agent to limit disturbance and allow animals to safely vacate the area.
15. The appointed ecologist and the developer/contractors should ensure that no areas of aquatic or terrestrial habitat that is to be retained at/adjacent/neighbouring the development site are inadvertently lost or damaged as a consequence of the development works.
16. A search of potential places of refuge within the development site should be carried out (where practicable to do so) by the appointed ecologist or their accredited agent immediately prior to the commencement of any significant ground disturbance works at the site in order to check for sheltering GCN/amphibians. The search must be undertaken under the terms/conditions of a current GCN class licence.
17. As deemed appropriate by the appointed ecologist, items of potential refuge should be removed from the development site immediately following the search to prevent GCN/amphibians from seeking shelter either beneath or within them.
18. The development site, together with any on-site storage/lay down areas, should be kept clear of debris and, where practicable; stored materials should be kept off the ground on stillages or pallets, so as to prevent GCN/amphibians from seeking shelter or protection under/within them.
19. Where materials need to be delivered to the development site for immediate use and/or temporary storage, directly on the ground, care should be taken not to cause unnecessary or inadvertent damage or disturbance to neighbouring terrestrial habitat.
20. Any skips or bins, if used, should ideally be stored on baulks of timber to keep them off the ground so as to prevent GCN/amphibians from seeking shelter under them.
21. In the event that spoil needs to be removed from the development site, it should be taken off-site at the earliest opportunity for appropriate disposal.
22. The appointed ecologist should advise the developer/contractor to consider potential bio-security issues relating to the import and removal of material at the development site and the need to undertake a bio-security risk assessment and/or implement measures to prevent the inadvertent spread of non-native species, disease and biological pathogens.
23. Should any excavation/s be left open overnight for any reason, the excavation/s should be searched and checked for sheltering GCN/amphibians. The search should be carried out by the appointed ecologist or their accredited agent before works recommence.
24. All open excavations should ideally incorporate soil 'ramps' at either end to allow GCN/amphibians and small mammals falling into them to escape.
25. Wherever practicable, excavations should be in-filled and made good to ground level at the earliest opportunity so as to remove any hazard to GCN/amphibians.
26. Should spoil/materials be left on the ground overnight they may require searching for sheltering GCN/amphibians by the appointed ecologist or their accredited agent before they are moved.
27. Temporary Amphibian Fencing (TAF) may be used at the development site in order to discourage GCN/amphibians from entering the working area and taking shelter

within open excavations, disturbed ground and/or brick rubble/spoil mounds created as a consequence of the demolition and construction works.

28. In accordance with current Natural England and best practice guidance, the use of TAF (upright and/or one-way) at the development site will be at the discretion of the appointed ecologist and for a limited period until the works are complete.
29. TAF should be used as a short term measure only if it is considered likely to reduce the risk of injury to GCN/amphibians and where its use would have no significant impact on their ability to migrate/disperse and reach their breeding/shelter sites.
30. TAF installation, inspections, maintenance and removal should be carried out by the appointed ecologist or their accredited agent in accordance with current Natural England and best practice guidance.
31. In respect of the proposed development, the short term installation of TAF (upright and/or one-way) at the development site would, in the view of CES, not result in substantial interference to the dispersal routes of GCN/amphibians and would be unlikely to result in a breach of current legislation relating to GCN.
32. The TAF should be inspected on a regular basis and maintained in good order. A detailed record should be kept of the TAF installation date, rationale for its use, the dates of the inspection visits and any repairs undertaken.
33. Should amphibians (other than GCN) be found terrestrially at the development site they will be captured by hand and may be held captive for a short period in secure, clean container/s lined with damp moss prior to their release into suitable cover within the wooded bund located along the south-eastern boundary of the Demon Tweeks site, as deemed appropriate by the appointed ecologist.
34. If more than one amphibian species is found (other than GCN) they should be kept in separate secure, clean container/s lined with damp moss to avoid injury and/or predation. Amphibian capture should be carried out by the appointed ecologist or their accredited agent.
35. In the event that ecological supervision is not present on-site when an amphibian is found terrestrially the developer/contractor should place the amphibian/s into the secure, clean container/s lined with damp moss provided by the appointed ecologist and to be kept on-site for such an eventuality. The appointed ecologist or their accredited agent should be contacted immediately (using the 'on call' service, if appropriate) for advice on release and to ensure that the amphibian species is correctly identified/recorded.
36. The winter hibernation/dormancy period for amphibians is generally accepted to run from November to February, with hibernation/dormancy for individual amphibians usually commencing following the first hard winter frost. Consequently, any work which is likely to result in the disturbance of a potential amphibian hibernation site should not be scheduled or undertaken between November and February or during any periods of cold or frosty weather outside of this period when amphibians are likely to be hibernating/dormant. Should such works be required the appointed ecologist will formulate and implement appropriate measures to minimise the risks to hibernating amphibians and ensure their safety.
37. The implementation of the mitigation strategy detailed in this report should be undertaken with due regard and consideration for the potential presence of other species at or neighbouring the development site.

- 38. The RAM proposed do not allow GCN to be captured or removed from the working area and released at another location. In the unlikely event that GCN are found within the RAM working area work must stop and the appointed ecologist immediately contacted for advice on how to proceed.**

Butterflies & other wildlife

As the majority of the 'Area A' development site is currently unsuitable for most wildlife species, i.e. hard-standing and well compacted amenity grassland, it is considered highly unlikely that the proposed development will have any adverse effect on the species identified as potentially present at the site in the data-search received from Cofnod or Wrexham County Borough Council's Local Planning Guidance Note 29. However, proposed compensation measures to appropriately and proportionately redress potential development impacts on such species are outlined below in Section 7.0.

7.0 PROPOSED MITIGATION & COMPENSATION MEASURES

Great crested newts

The following mitigation and compensation measures have been formulated to appropriately address the impacts on GCN at the site level.

In accordance with Guidance Note 29 it is necessary to obtain a NRW GCN development licence to allow the proposed development and the associated GCN mitigation and compensation works at the Demon Tweeks site to proceed lawfully. No development works should commence on site until the NRW GCN development licence has been received and all necessary mitigation measures have been implemented to the satisfaction of the appointed ecologist. This will aim to ensure that the features identified as having wildlife importance are protected and maintained in the long term.

GCN - Proposed Mitigation Measures

Upon receipt of the necessary NRW licence, the development area would be cleared of GCN using the agreed licensed methods. The GCN clearance methods proposed in respect of these works would include the installation of upright and one-way temporary amphibian fencing (TAF) drift fencing, pitfall traps, carpet tile refugia, and the implementation of a programme of night-torch searches and careful hand/destructive searches to clear the working area of GCN and other amphibians.

It is likely that, for this relatively small site, with relatively few shelter opportunities for GCN, an intensive trapping effort encompassing a minimum period of 15 trapping days would be sufficient.

Only suitable trapping nights would be counted against the trapping effort. Trapping nights are nights when newts could reasonably be presumed to have moved (overnight temperature of $>5^{\circ}\text{C}$, within a few days of recent rainfall or thorough artificial watering, i.e. when the ground is damp).

NB: Detailed plans of TAF/trap/refugia layout, trapping effort and bio-security measures to be implemented are provided in the method statement for the NRW licence application.

Once the working area has been cleared of GCN (in accordance with the licensed method statement and to the satisfaction of the appointed ecologist) development works can commence. GCN will continue to be excluded from the working area whilst works are ongoing by exclusion TAF installed around the perimeter of the development site. The TAF will be inspected and maintained in good order on a regular basis, and a record kept to log inspection visits. TAF installation, verification inspections and maintenance will be undertaken by trained amphibian workers.

Once all construction and any associated landscaping works are completed to the satisfaction of the appointed ecologist, the exclusion TAF will be removed. TAF will only be removed in accordance with the licence conditions and by trained amphibian workers so that the back-fill can be checked for any sheltering amphibians.

N.B. Implementation of the above GCN clearance strategy will also allow any reptiles to be captured and moved to safety, in the unlikely event that they are found to be present within the working area.

GCN - Proposed Compensation Measures

The impact of the proposed development works on the GCN population associated with Wrexham Industrial Estate has been classified as 'low' and no ponds are to be lost to the development. Therefore, no specific monitoring of the GCN population is required or considered appropriate in connection with these works. However, the following compensatory measures to address the low impact of the development within Areas A and B

have been suggested/will be implemented (refer to Appendix C: Habitat Compensation Plan).

Securing a 'Wildlife Area' adjacent the site/s

The landscaped boundary of the Demon Tweeks site was created in approximately 1992 and the southern boundary currently comprises a wooded embankment dominated by blackthorn and hawthorn amongst other species such as Scots pine and oak. The future management of this area was not currently secure, therefore as compensation for the loss of terrestrial habitat at the site to the proposed development in Areas A and B it was proposed that this wooded embankment (extending to approximately 8,000m²) be brought into secure management as a designated 'Wildlife Area'. This is well in excess of the total area that will be lost to the development/s footprint (approximately 3,483m²) and represents a significant gain for wildlife associated with the site.

The creation of a 'ride' within the 'Wildlife Area'

The designated 'Wildlife Area' will be enhanced for the benefit of all wildlife, in particular, the butterflies named on the local Biodiversity Action Plan (LBAP). This will be achieved by the creation of a widened (approximately four metres wide) 'ride' and glades through the trees on the top of the wooded embankment to create a sheltered 'flight' path around the edge of the Demon Tweeks site and allow sunlight to enter the under-storey which is likely to benefit biodiversity in general.

The creation of nine habitat piles within the 'Wildlife Area'

Additionally, in order to compensate GCN for the loss of, and disturbance to, relatively low grade terrestrial habitat to the development footprint in Areas A and B it is proposed that nine habitat piles comprising cut logs will be created within the 'Wildlife Area'. The creation of the nine habitat piles would result in a net gain of good GCN terrestrial refuge habitat within the Demon Tweeks site boundary.

In this instance, given the scale and limited impact of the proposed development works, it can be reasonably concluded that the establishment of the 'Wildlife Area' and the creation of nine habitat piles, offering GCN with additional shelter and foraging habitat, would be adequate and proportionate compensation to redress the loss of any potential GCN refuge habitat associated with the development footprint.

Additionally, Demon Tweeks (or any future owner of the site) undertake not to pursue any future development proposals at the site that would adversely impact on any part of the designated 'Wildlife Area'.

GCN – Implementation of Proposed Compensation Measures

The creation of the nine habitat piles within the 'Wildlife Area' has already been completed by staff at the Demon Tweeks site. This feature was inspected and considered suitable for GCN and/or other wildlife by the previous appointed ecologist for the site, James Grundy, Principal Ecologist at CES, as part of the previous GCN development licence for the site.

Demon Tweeks (or any future owner of the site) will be responsible for funding recommended habitat management works within the 'Wildlife Area'.

NB: As the proposed development is of such a low impact to GCN (as shown by the lack of amphibians captured during the previously licensed works) it has been concluded that external monitoring/auditing of this development is not appropriate in this instance.

Butterflies and/or other wildlife

Table 4 - Butterflies & other wildlife – Habitat types preferred/tolerated

Species		
Scientific name	Common name	Examples of habitat types preferred/tolerated
<i>Alauda arvensis</i>	Skylark	Open countryside, lowland farmland, etc.
<i>Alcedo atthis</i>	Kingfisher	Lakes, canals, rivers, estuaries, coast
<i>Anguis fragilis</i>	Slow worm	Allotments, open woods, under rocks, under stones, etc.
<i>Arvicola amphibius</i>	Water vole	Rough grassland, slow-flowing waters, ponds, ditches
<i>Bufo bufo</i>	Common toad	Woodlands, fairly tolerant of dry habitats
<i>Carabidae</i>	Ground beetle	Under stones, tree bark, logs, other ground debris
<i>Chiasmia clathrata</i>	Latticed heath	Open habitats, also likes open woodland and waste ground
<i>Chiroptera</i>	Bats	Woodland edges, tree lines, mature trees buildings
<i>Coenonympha pamphilus</i>	Small heath	Dry well drained places with fine grasses and sparse sward, also likes woodland rides and glades
<i>Ecliptopera silaceata</i>	Small phoenix	Areas with willowherb, also likes a range of woodland and open

		habitats
<i>Erynnis tages</i>	Dingy skipper	Rough ground, woodland edges, unimproved grassland
<i>Falco peregrinus</i>	Peregrine	Rocky cliffs, UK uplands, marshes
<i>Falco tinnunculus</i>	Kestrel	Wide variety of habitats
<i>Hemistola chrysoprasaria</i>	Small emerald	Woodland edges, hedgerows
<i>Hydrochara caraboides</i>	Lesser silver water beetle	Ponds (especially those that are cattle-poached), ditches, small standing waterbodies
<i>Lacerta vivipara</i>	Common lizard	Wooded glades
<i>Lissotriton vulgaris</i>	Smooth newt	Woodlands, rough grassland, hedgerows, ponds, slow-flowing waterbodies
<i>Lutra lutra</i>	Otter	UK rivers, coastal areas
<i>Meles meles</i>	Badger	Varied but including scrub, woodland, grassland, arable, etc.
<i>Mustela putorius</i>	Polecat	Woodlands, tree roots
<i>Myotis mystacinus</i>	Whiskered bat	Woodland edges, tree lines, mature trees, buildings, often seen near water
<i>Natrix natrix</i>	Grass snake	Open woodland, woodland edge habitat, lakes, ponds, etc.
<i>Pipistrellus pipistrellus</i>	Pipistrelle bat	Woodland edges, tree lines, mature trees, buildings, often seen near water
<i>Pyrgus malvae</i>	Grizzled skipper	Woodland edges, woodland clearings, large woodland rides, unimproved grassland
<i>Pyrrhula pyrrhula</i>	Bullfinch	Woodlands, woodland edges, hedgerows
<i>Satyrion w-album</i>	White-letter hairstreak	Edges of deciduous woodland (esp. with Wych elm/other elms)
<i>Triturus cristatus</i>	Great crested newt	Woodlands, rough grassland, hedgerows, ponds, slow-flowing waterbodies
<i>Turdus iliacus</i>	Redwing	Hedgerows, fields, orchards
<i>Turdus pilaris</i>	Fieldfare	Hedgerows (esp. hawthorn), fields, trees, orchards
<i>Tyto alba</i>	Barn owl	Rough grassland, hedgerows, etc.
<i>Vanellus vanellus</i>	Lapwing	Farmland
<i>Vipera berus</i>	Adder	Rough open countryside, woodlands (esp. with areas of younger trees)
<i>Watsonalla binaria</i>	Oak Hook-tip	Woodland (esp. oak)

Butterflies and/or other wildlife - Proposed Mitigation Measures

As the majority of the 'Area A' development site is currently unsuitable for butterflies and/or other wildlife, i.e. hard-standing and well compacted amenity grassland, it is considered highly unlikely that the proposed development will have any adverse effect on the species in the table above identified as potentially present within Wrexham Industrial Estate.

Butterflies and/or other wildlife - Proposed Compensation Measures

The species detailed in Table 4 have been identified either on a data search from Cofnod or from Wrexham County Borough Council's Local Planning Guidance Note 29. However, as can be seen from the habitats preferred/tolerated column above, many of these species would appear to benefit from the proposed enhancement of the wooded embankment by the creation of additional woodland edge habitat (by creating a widened woodland 'ride' along the top of the embankment and the provision of nine habitat piles within the woodland areas, refer to Appendix C: Habitat Compensation Plan).

Butterflies and/or other wildlife – Implementation of Proposed Compensation Measures

The creation of the woodland 'ride' has already been completed by staff at the Demon Tweeks site. This feature was inspected and considered suitable for butterflies and/or other wildlife by the previous appointed ecologist for the site, James Grundy, Principal Ecologist at CES, as part of the previous GCN development licence for the site.

8.0 TIMETABLE OF WORKS

GCN clearance works at the site are expected to commence in September/October 2014 (assuming the licence is granted). It is anticipated, given favourable weather conditions and no unforeseen delays, that the working area would be cleared of GCN by the end of October 2014.

The proposed development works are expected to take 12-18 months to complete. However, to accommodate any unforeseen delays or additional works that may be necessary once the development works start, a licence from NRW covering a two year period has been requested.

INDICATIVE TIMETABLE		2014				2015												2016 - onwards			
Phase/Month		09	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	01			
1	*Installation of TAF																				
2	**GCN clearance																				
3	Development works																				
4	Connection to services																				
5	Removal of TAF on completion of works																				
6	Management 'Wildlife Area'																				

*Dependent on the issue date of the licence, the development commencement date will be within the period indicated.

** GCN clearance will commence after the TAF has been installed.

9.0 FUTURE MANAGEMENT RECOMMENDATIONS

Habitat Compensation Features (in respect of Areas A & B) – responsibilities/schedule			
Feature	Created /secured? *(Y/N)	When will feature be created?	Monitoring/ Audit schedule**
'Wildlife Area'	Yes	Complete	N/a
'Ride'	Yes	Complete	N/a
'9 Habitat Piles'	Yes	Complete	N/a

* Demon Tweeks are responsible for adequately resourcing and ensuring the successful implementation of the GCN mitigation and monitoring strategy and habitat compensation measures detailed above. Appropriate resources will be made available by Demon Tweeks to ensure that the required future habitat management works at the site are successfully delivered.

** As the proposed development is of such a low impact to GCN (as shown by the lack of amphibians captured during the previously licensed works) it has been concluded that external monitoring/auditing of this development is not appropriate in this instance.

The 'Wildlife Area'

It is recommended that the 'Wildlife Area' (wooded embankment) should require minimal management and should be left undisturbed apart from the maintenance of the 'ride' created for the benefit of wildlife. The trees within the vicinity of the new building are currently quite immature, (less than 25 years old), so should not require any maintenance in the short term. However, in the long term they may require some management in the future to safeguard the new premises, e.g. pollarding, thinning, coppicing, felling. If these type of works are required then cut or fallen timbers and brash should be left in-situ or used to create log piles/habitat mounds in order to provide GCN and other wildlife with additional shelter and foraging opportunities.

On completion of the proposed development works at the site Demon Tweeks will ensure the successful implementation of appropriate management of the 'Wildlife Area'.

Future habitat management works within the 'Wildlife Area' will be carried out in accordance with current best practice relating to the long-term management of GCN habitats as detailed in the EN GCN MG and the Amphibian Habitat Management Handbook (2011), which has been provided to Demon Tweeks by CES.

Habitat Piles within the 'Wildlife Area'

It is recommended that the nine habitat piles created within the 'Wildlife Area' be left undisturbed (they should not require any future maintenance).

Site Management

Post-development, the 'Wildlife Area' will remain connected to other areas of habitat within the Demon Tweeks site. These areas include the dry ditch system/rough grassland along the sites northern and western boundaries and the hedgerow/rough grassland along the eastern boundary of the site. These areas will continue to be managed in order to ensure the maintenance of a continuous wildlife dispersal corridor (also providing shelter and foraging opportunities) around the Demon Tweeks site.

If required, the guidance contained within the Amphibian Habitat Management Handbook (2011) may also be used for routine grounds maintenance and management works within the Demon Tweeks site as a whole. This will help to maximise opportunities for habitat enhancement at the site level.

Advice and recommendations will be in accordance with the aims and objectives of Local Planning Guidance Note 29: Wrexham Industrial Estate: Employment Development & Nature Conservation.

10.0 SUMMARY

It has been established that a GCN meta-population is associated with the Wrexham Industrial Estate site. The proposed development area currently offers GCN limited shelter, foraging, and dispersal opportunities.

It is considered that the unmitigated commencement of proposed development works at the Demon Tweeks site could result in the disturbance, injury or death of GCN. The proposed development works would also result in the permanent loss and temporary disturbance of some potential GCN terrestrial habitat.

The unmitigated commencement of the proposed development works at the Demon Tweeks site could result a breach of current wildlife legislation. Therefore, it is necessary to obtain a NRW development licence to allow the proposed development and mitigation/compensation works to proceed lawfully.

No development works should commence until a GCN development licence has been received from NRW and all necessary mitigation measures have been implemented to the satisfaction of the appointed ecologist. This aims to ensure that the features identified as having wildlife importance are protected and maintained in the long term. The terms and conditions of the licence should be followed throughout the proposed works. The NRW licence application cannot be submitted until full planning permission has been granted by the LPA and/or relevant conditions discharged.

Mitigation measures should be implemented to protect GCN before, during and after the proposed development works. These measures would include the clearance of GCN from the working area by the appropriate methods, i.e. installation of TAF, pitfall traps/carpet refugia, torch searches, hand/destructive searches and their exclusion from the working area until all works on the site are complete.

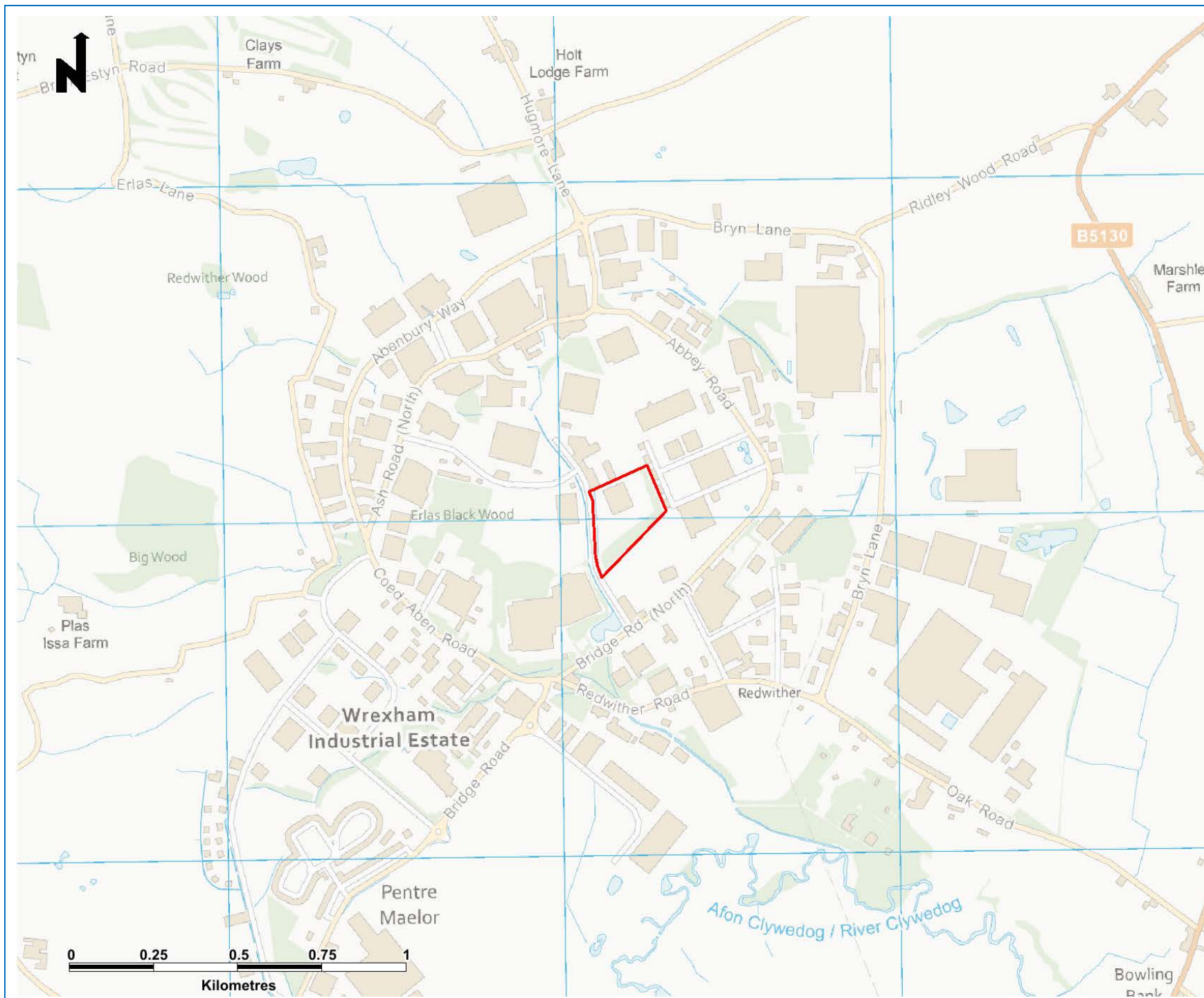
To compensate GCN for the loss of terrestrial habitat within Areas A and B to the development it is proposed to establish a designated 'Wildlife Area' extending to approximately 8,000m². This area will be enhanced for the benefit of all wildlife via the provision of a 'ride' and nine habitat piles. The 'Wildlife Area' will be brought into secure management.

The ecological impacts of the proposed development at the Demon Tweeks site have previously been carefully assessed and the appropriate and proportionate GCN mitigation and habitat compensation measures have been formulated. It can therefore be concluded that, if these measures are implemented in full, the favourable conservation status of the GCN meta-population known to be associated with the Wrexham Industrial Estate site would be maintained. The measures proposed are also likely to satisfy the habitat requirements of many of the other wildlife species associated with Wrexham Industrial Estate.

This ecological method statement and management plan should enable the Local Planning Authority (LPA) to make an informed decision as to whether or not Condition 13 of Planning application ISY P/20008/0771 submitted and granted in respect of these development works has been discharged, in accordance with the LPA responsibilities under TAN 5.

APPENDICES

Appendix A: Site Location Map (OS)



LEGEND

Site boundary

Client:	Demon Tweeks
Project:	Demon Tweeks Development
Map:	Site Location Plan
Revision:	
Date:	September 2014
CES Reference:	CES/813/PS
Scale:	NOT TO SCALE

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Appendix B: GCN Legislation

Species/Habitat	Protected by:	UK BAP
Great crested newt	Regulation 41 of <i>The Conservation of Habitats and Species (Amendment) Regulations</i> , 2012 Section 9 of the <i>Wildlife and Countryside Act</i> , 1981 (as amended) Section 41 of the <i>Natural Environment and Rural Communities (NERC) Act</i> , 2006	Yes

The Conservation of Habitats and Species Regulations, 2010

European protected species are listed on Schedule 2 of the *Conservation of Habitats and Species Regulations* 2010. Those species listed on Schedule 2 are protected under Regulation 41, which refers to the protection of wild animals of a European Protected Species. The following is a summary of the offences listed under Regulation 41, however, the *Conservation Regulations* should always be referred to for the exact and current wording:

Under Regulation 41 of the *Conservation of Habitats and Species Regulations*, 2010 it is an offence to –

- deliberately capture or kill a wild animal of a European protected species;
- deliberately disturb wild animals, in particular any disturbance which is likely:
 - o to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or
 - o to impair their ability, in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - o to affect significantly the local distribution or abundance of the species to which they belong
- deliberately take or destroy the eggs of such an animal; or
- damage or destroy a breeding site or resting place of such an animal.
- keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European protected species, or any part of, or anything derived from, such an animal.

Wildlife and Countryside Act, 1981 (as amended)

British protected species of animal are listed on Schedule 5 of the *Wildlife and Countryside Act*, 1981 (as amended). Those species listed on Schedule 5 are protected under Part 1, Section 9, which refers to the protection of certain wild animals. The following is a summary of the offences listed under Section 9; however the Act should always be referred to for the exact and current wording:

Under Section 9 of the *Wildlife and Countryside Act*, 1981 (as amended) if any person –

- intentionally kills, injures or takes any wild animal included in Schedule 5;
- has in his possession or control any live or dead wild animal included in Schedule 5 or any part of, or anything derived from such an animal;
- intentionally or recklessly damages or destroys, or obstructs access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection;

- disturbs any such animal included in Schedule 5 while it is occupying a structure or place which it uses for that purpose;
- sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal; or,
- publishes or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things, he shall be guilty of an offence.

This legislation applies to all life stages of GCN. Heavy fines (up to £5,000 per incident) can be imposed for **each** offence, and a prison sentence of up to 6 months for each offence can be given to any person found guilty of an offence. In certain circumstances, any machine, tool or implement involved in an illegal act can also be seized.

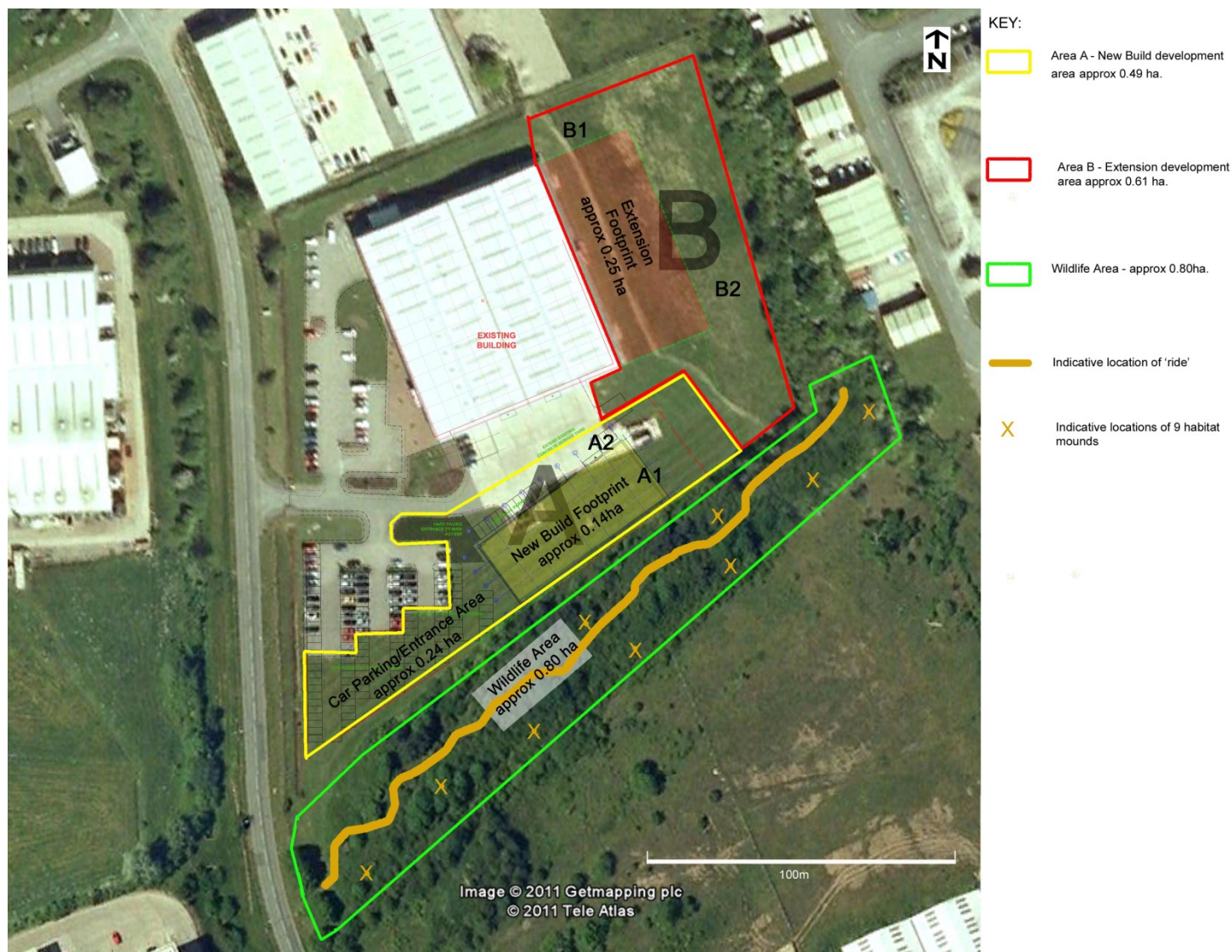
Natural England (NE) issue licences for the disturbance of European Protected Species including GCN, certain criteria must be met before a licence can be issued to enable otherwise prohibited works to proceed. Such criteria may be subject to change without notice. For further information please visit www.naturalengland.org.uk

The Natural Environment and Rural Communities (NERC) Act, 2006 (as amended)

The following is a summary of the *Natural Environment and Rural Communities (NERC)*, Act, 2006 (as amended), the *NERC Act* itself should be referred to for the exact and current wording:

- Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity;
- In complying with the above, a Minister of the Crown, government department or the National Assembly for Wales must in particular have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992;
- Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

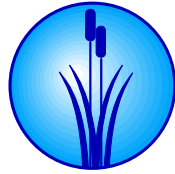
Appendix C: Habitat Compensation Plan



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Client:	Demon Tweaks
Project:	Proposed development/s at the Demon Tweaks site
Map:	Habitat Compensation Plan
Revision:	-
Date:	September 2014
CES Reference:	CES/813/09-14/PS
Scale:	NOT TO SCALE
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