Protected and Notable Species

Badgers

8.7. No setts or other definitive evidence of badger activity are present on the site. However the site does have appropriate sett building and foraging habitat for badgers and their status can change rapidly.

8.8. It is therefore recommended that a badger survey is carried out three months prior to the commencement of any development works, to check that no badger setts have been dug on site or on adjacent land since the completion of the Phase 1 survey. Where necessary, suitable appropriate mitigation proposals would need to be devised. It is considered that given the current absence of badger setts within / adjacent to the site the above measures could be secured via a planning condition and further survey work should not be required prior to determination of a planning application.

Bats

8.9. The hedgerows and trees are likely to provide suitable foraging and commuting habitat for bats. They also provide a link to other habitats in the locality likely to be used by bats such as hedgerow networks present elsewhere within the wider area. The proposed site layout seeks to protect and maintain bat foraging habitat by:

- Retaining hedges likely to act as foraging habitat for bats; and
- Proposes habitat creation consisting of new hedges and ponds that wold provide abundant invertebrate prey for bats (see **Landscape Strategy Plan 2001/P23**).

8.10. Bat activity surveys are to be undertaken due course in the spring / summer of 2014 to inform detailed proposals for habitat enhancement for bats.

8.11. The proposed housing scheme will provide increased roosting opportunities for bats via the provision of bat boxes suitable for crevice dwelling species (e.g. the Ibstock 'Enclosed Bat Box B') which could be installed within some of the new commercial buildings again on south, southwest or southeast facing aspects. Integrated bat boxes have the advantage of offering a permanent space for bats with little maintenance and potentially better thermal properties. Bat access slates (e.g. Morris BatSlate) can be included on south, southwest or southeast facing pitches of new commercial units to provide access to crevices for roosting beneath roof tiles. Bat boxes will also be provided on mature trees within the site.

Breeding birds

8.12. New hedgerows are proposed to north of the development (see **Landscape Strategy Plan 2001/P23**). These will provide additional nesting habitat for birds and would more than compensate for the hedgerow losses within the site. Planting of native fruit bearing species and creation of wildflower habitat would provide additional feeding resources.Work to remove the sections of hedgerow or any other woody vegetation clearance should not be undertaken during the active bird nesting season, between March and August inclusive. If this is not possible then

works should be preceded by a check for active nests by an ecologist. If a nest is found an appropriate buffer will need to be left undisturbed until the chicks have fledged, as confirmed by an ecologist.

Great Crested Newt and other Amphibians

8.13. Detailed surveys conducted in accordance with the GCN Mitigation Guidelines to ascertain the actual presence / absence (and population size class if present), are currently in progress. If presence is confirmed this information would be required inform the implementation of the strategy outlined below and if GCN and used as the basis for a European Protected Species (EPS) licence application.

8.14. The **Habitat Enhancement for Great Crested Newts Plan (2001/P22)** shows habitats within the site which will be enhanced for GCN. They would also ensure that habitats for other amphibians is maintained and enhanced. Proposed enhancements will be designed in accordance with principles set out in the GCN Mitigation Guidelines:

- Creation of 2 new wildlife ponds to include suitable margins of the establishment of aquatic and emergent plants. Although not required for habitat loss the provision of new ponds will help to increase aquatic habitat resources of GCN and other amphibians and if colonised increase the amount of immediate terrestrial habitat within 50m of a pond. ;
- Creation of 0.071 ha m of new hedge with rough grass margins; and
- Creation of amphibian refuges.

8.15. Existing habitats will also be managed to improve their value for GCN and will consist of:

- Selected tree felling around pond margins to increase light incidence and reduce leaf deposition;
- Periodic cleaning out of ponds during the winter to remove leaf litter accumulations and ensure a healthy balance of open water, aquatic vegetation and emergent plants around pond margins;
- Gapping up and laying of hedges to provide dense growth along hedge bases likely to be used as terrestrial habitat for daytime refuge and hibernation by GCN; and
- Establishment of low intensity grazing on species poor semi-improved grassland which should increase the abundance of invertebrate prey for GCN.

Avoidance of Killing and Injury

8.16. If GCN presence is confirmed by surveys (currently underway) in order to avoid killing or injuring GCNs during the construction phase a strategy to translocate GCN areas of the site affected by development site into areas of retained habitat will be required. Capture of newts would be achieved by:

- Installing GCN exclusion fence to enclose the footprint of the development within 250m of the any breeding ponds;

- Installation of drift fencing, pitfall traps and refugia within the excluded site area will divide it into compartments in order to maximise the chances of catching newts that may be moving within the development area;
- Installation of fences would take place during the period mid-March to October (weather dependent) when newts are active, in order to avoid the possibility of disturbing hibernating newts;
- Daily checking of pitfall traps and refugia with all amphibians captured will be moved and released into the receptor area. . Trapping procedures and effort would be commensurate with the population size determined by surveys and would be in accordance with GCN Mitigation guidelines4 . Monthly checks of the exclusion and drift fences for the period of construction will be conducted with any damage repaired;
- Removal of drift fencing and pitfall traps on completion of the translocation and hand searches/destructive searches of any areas of high value habitat to be lost, mainly present along field margins and around the base of hedges under the supervision of a licensed ecologist; and
- Removal of the exclusion once construction is complete will be done between February and October to avoid harm to newts that can crawl into crevices along the fence line to hibernate.

Habitat Management and Preventing Disturbance

8.17. Once the development is completed habitats for GCN including ponds and surrounding terrestrial habitat will be managed to ensure they remain suitable. Where necessary, measures to guide public access away from sensitive GCN habitat and to prevent the colonisation of fish in GCN ponds will be implemented. These measures would be contained within an Ecological Management Plan (EcMP) for the site.

Licensing

8.18. GCN is a European Protected Species (EPS) so to allow the development to proceed a development licence from Natural England (NE) will be needed if surveys confirm that GCN are present.

Appendix 1: Site Photographs

Plate 1: Example of species-poor semi-improved grassland present within the site

Plate 2: Example of unmanaged hedgerow (H3)within the site

Plate 3: Example of managed hedgerow (H7) within the site

Plate 4: Example of trees present within the site

Plate 5: Example of potential bat roost feature (T22) present within the site

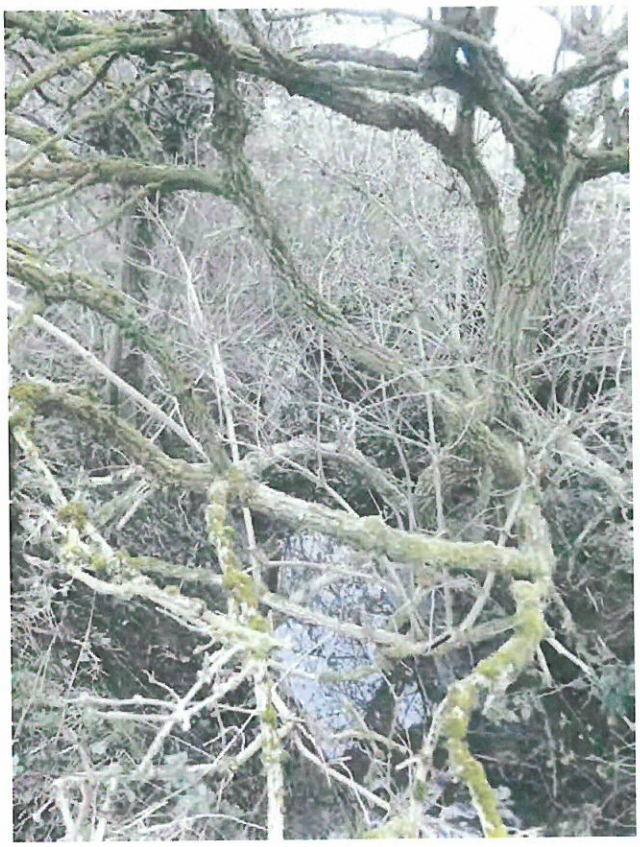

Plate 6: Example of ditch associated with H3

Plate 7: Pond 1

Plate 8: Pond 2

Plate 9: Pond 3

Plate 10: Pond 4

Plate 11: Short section of dry stone wall present to the north of the site

Appendix 2: GCN HSI Assessments for Ponds within 250m of the site

A2.1. A Habitat Suitability Index (HSI) was calculated for each waterbody in accordance with the methodology recommended by Natural England (NE)[7]. This assigns a score to the pond based upon various factors including, size of pond, aquatic vegetation, shading, geographic location, proximity to other ponds, and potential presence of fish. A score is given to each waterbody between 0 and 1, with scores closer to 0 having lower suitability for GCN. The HSI cannot be used as confirmation of GCN presence or absence, but is used as a guide to assess the habitat in terms of its potential to support great crested newts. It also provides useful information that can inform pond management and enhancement programmes.

A2.2. The NE HSI classifications are provided below:

- < 0.5 Poor;
- 0.5 – 0.59 Below average;
- 0.6 – 0.69 Average;
- 0.7 – 0.79 Good; and
- 0.8 Excellent.

Survey Limitations

A2.3. January is not the ideal time to conduct HSI assessments as macrophyte cover may not be readily evident. It is therefore possible that these ponds would receive a higher score if surveyed at a more optimal time of year. However Ponds 1, 2 and 4 are considered good by the HSI and will therefore be surveyed for GCN. The factor which is limiting Pond 3 for its suitability to support GCN is water quality, it had a high level of apparent hydrocarbon pollution, and low water levels which suggested that it dries on an annual basis. As the assessment of these factors is not dependant on the time of year, the timing of the HSI survey is not considered a major limitation.

[7] Natural England Licensing Advice great crested newts: http://www.naturalengland.org.uk/conservation/wildlife-management-licencing/docs/WML-A14-2.xls

Results

Pond 1		
Indices		
Grid Reference	SD 6039 3818	
Distance to Site	On site	
Description	Field pond/marl pit, partially shaded by willows and alder, fringed with soft rush, some floating sweet grass and fools water cress.	
Photograph		
SI_1- Location	Zone A, optimal	1
SI_2- Pond area	350 m^2	0.7
SI_3 - Pond drying	Sometimes	0.5
SI_4 - Water quality	Moderate	0.67
SI_5 - Shade	5%	1
SI_6 - Fowl	Absent	1
SI_7 - Fish	Absent	1
SI_8 - Ponds	9	0.95
SI_9 – Terrestrial habitat	Moderate	0.67
SI_{10} - Macrophytes	10%	0.4
HSI Scores	**Good**	**0.75**

Pond 2		
Indices		
Grid Reference	SD 6048 3815	
Distance to Site	On site	
Description	Field Pond/marl pit. Partially shaded by willows. Soft rush, reed canary grass, fools water cress, marsh marigold and floating sweet grass present in margins.	
Photograph		
SI_1- Location	Zone A, optimal	1
SI_2- Pond area	100 m^2	0.2
SI_3 - Pond drying	Sometimes	0.5
SI_4 - Water quality	Moderate	0.67
SI_5 - Shade	50%	1
SI_6 - Fowl	Absent	1
SI_7 - Fish	Absent	1
SI_8 - Ponds	9	0.95
SI_9 – Terrestrial habitat	Moderate	0.67
SI_{10} - Macrophytes	50%	0.8
HSI Scores	**Good**	**0.71**

Pond 3		
Indices		
Grid Reference	SD 6059 3794	
Distance to Site	on site	
Description	Flooded area along hedgerow, large amount of hydrocarbon pollution evident.	
Photograph		
SI_1- Location	Zone A, optimal	1
SI_2- Pond area	$14m^2$	0.05
SI_3 - Pond drying	Annually	0.1
SI_4 - Water quality	Poor	0.33
SI_5 - Shade	80%	0.6
SI_6 - Fowl	Absent	1
SI_7 - Fish	Absent	1
SI_8 - Ponds	9	0.95
SI_9 – Terrestrial habitat	Moderate	0.67
SI_{10} - Macrophytes	0%	0.3
HSI Scores	**Poor**	**0.42**

Pond 4		
Indices		
Grid Reference	SD 6022 3828	
Distance to Site	0m	
Description	Shallow pond at edge of field, partially shaded by trees, some reed canary grass, soft rush and floating sweet grass present in margins.	
Photograph		
SI_1- Location	Zone A, optimal	1
SI_2- Pond area	$150m^2$	0.3
SI_3 - Pond drying	Sometimes	0.5
SI_4 - Water quality	Moderate	0.67
SI_5 - Shade	15%	1
SI_6 - Fowl	Absent	1
SI_7 - Fish	Absent	1
SI_8 - Ponds	9	0.95
SI_9 – Terrestrial habitat	Moderate	0.67
SI_{10} - Macrophytes	15%	0.45
HSI Scores	**Good**	**0.7**

Appendix 3: Hedgerows Regulations Assessment Estimate

A3.1. Hedgerow surveys were conducted on all hedgerows on 29th November 2013 by Paul Moody (Ecologist, Tyler Grange) an experienced field ecologist and Hayley Care (Graduate Ecologist Tyler Grange) a graduate member of the Chartered Institute of Ecology and Environmental Management (CIEEM). The methodology employed followed the requirements of the Hedgerows Regulations 1997 as outlined below:

1) Each hedgerow was surveyed as follows:

   a. If it did not exceed 30 metres, the whole hedgerow was surveyed; or

   b. If it exceeded 30 metres, but did not exceed 100 metres, the central stretch of 30 metres was surveyed; or

   c. If it exceeded 100 metres, but did not exceed 200 metres, the central stretch of 30 metres within each half of the hedgerow (the aggregate of woody species recorded was later divided by two) was surveyed; or

   d. If it exceeded 200 metres, the central stretch of 30 metres within each third of the hedgerow was surveyed (the aggregate of woody species recorded was later divided by three).

2) For each hedgerow, the number of woody species was recorded;

3) For each hedgerow the number of 'additional features' present was recorded namely:

   a. a bank or wall which supports the hedgerow along at least one half of its length;

   b. gaps which in aggregate do not exceed 10% of the length of the hedgerow;

   c. where the length of the hedgerow does not exceed 50 metres, at least one standard tree;

   d. where the length of the hedgerow exceeds 50 metres but does not exceed 100 metres, at least 2 standard trees;

   e. where the length of the hedgerow exceeds 100 metres, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50 metres;

   f. at least 3 woodland species within one metre, in any direction, of the outermost edges of the hedgerow;

   g. a ditch along at least one half of the length of the hedgerow;

   h. connections to other hedgerows (1 point) and pond or broadleaved woodland (2 points) with a summed score of 4 points or more; and

i. a parallel hedge within 15 metres of the hedgerow.

A3.2. Each hedgerow was then classified as 'important', 'borderline' or not important based on the following criteria:

1) An Important hedgerow:

   a. includes at least 7 woody species; or

   b. includes at least 6 woody species, and has associated with it at least 3 of the additional features; or

   c. includes at least 6 woody species, including one of the following—black-poplar tree; large-leaved lime; small-leaved lime; wild service-tree; or

   d. includes at least 5 woody species, and has associated with it at least 4 additional features; or

   e. includes at least 4 woody species and at least 2 additional features and is adjacent to a bridleway or footpath, a road used as a public path, or a byway open to all traffic.

2) Borderline hedgerows:

   a. have one less woody species and/or additional feature than required to meet the qualifying criteria as 'important'.

3) Not important hedgerows:

   a. Do not meet the qualifying criteria as important or borderline hedgerows.

Limitations

A3.3. January is not the ideal time to conduct a Hedgerows Regulations assessment as it is not possible to assess to fully assess plant species due to seasonal dieback, especially, woodland herbs present within the hedgerow. As such the following results represent an approximation of hedgerow importance.

Results

Hedgerow Number	Length (m) *	Height and width (m)	Woody Species Present**	Woodland and Understory Species Present**	Additional Features	Management	Approximation of Importance of Hedge under Hedgerow Regs. 1997
H1	100m	3m x 2 m	• Hawthorn • Blackthorn • Dog rose • Elder	• Common nettle • Bramble • Holly	• Dry ditch (D1) on eastern length	• Unmanaged • Grazed at base • Gappy	Unimportant
H2	100m	3.5m x 3.5m	• Hawthorn • Blackthorn • Hazel • Holly • Crab apple • Elder	• Male fern • Common nettle • Bramble • Cleavers • Soft rush • Bitter sweet • Creeping buttercup	• Damp ditch (D2) along base • Connects with H1 and H3	• Unmanaged • Laid >10yrs past • Untrimmed with outgrowth • Grazed at base • Gappy	Borderline importance
H3	316m	4m x 4m	• Hawthorn • Beech • Ash • Blackthorn • Hazel • Holly • Alder	• Common nettle • Bramble • Thistle • Fern • Soft rush • Reed canary grass	• 6 standard trees present • Wet ditch (D3) running along whole length • Connects with H2, H4, H6, H9 & H10	• Unmanaged • Untrimmed with outgrowth	Important
H4	180m	4m x 2m	• Alder • Hawthorn • Holly • Rose Spp.	• Bramble • Soft rush	• Hedge on bank • Dry ditch (D4) along base • Connect to H3 & H10 • Connects to pond P1	• Unmanaged • Tall and leggy • Laid >10yrs past	Unimportant

Hedgerow Number	Length (m) *	Height and width (m)	Woody Species Present**	Woodland and Understory Species Present**	Additional Features	Management	Approximation of Importance of Hedge under Hedgerow Regs. 1997
H5	367m	3m x 3m	• Hawthorn • Beech • Ash	• Grassland understory (as field)	• Defunct • Connects to pond P4 • Connects with H4 • At least 7 standard trees present	• Tall and leggy • Unmanaged • Grazing of hedge base	Unimportant
H6	150m	3m x 3m	• Alder • Hazel • Hawthorn • Blackthorn • Elder	• Ferns • Bramble • Nettle • Common sorrel • Hogweed • Red campion • Creeping buttercup • Cocksfoot • Perennial rye grass	• No gaps in aggregate >10% of hedgerow length • Ditch present along half of length • Connects to H3	• Untrimmed with outgrowth • Unmanaged • Hedge bottoms grazed	Unimportant
H7	10m	1.5m x 1m	• Hawthorn •	• Ivy • Cleavers		• Trimmed and dense • Flail cut	Unimportant
H8	170m	1m x 1m	• Hawthorn • Ash • Holly • Sycamore	• Bramble • Ivy • Common nettle • Cleavers • Cocksfoot	• No gaps in aggregate >10% of hedgerow length • Parallel hedge present within 15m • Adjacent to public road	• Flail cut • Laid >10 yrs ago • Trimmed and dense	Borderline importance

Hedgerow Number	Length (m) *	Height and width (m)	Woody Species Present**	Woodland and Understory Species Present**	Additional Features	Management	Approximation of Importance of Hedge under Hedgerow Regs. 1997
H9	132m	3m x 2m	• Alder • Hawthorn • Ash • Holly • Blackthorn • Elder	• Common nettle • Thistle • Bramble • Cocksfoot	• No gaps in aggregate >10% of hedgerow length • At least 1 standard tree per 50m of hedgerow • Wet ditch present • Connects to H3 • Inundation area present	• Untrimmed with outgrowth • Laid >10 yrs ago • Hedge bottoms grazed 2 – 10 yrs ago •	Important
H10	350m	1.5m x 1m	• Hazel • Hawthorn • Ash • Holly • Blackthorn	• Soft rush • Common nettle • Thistle • Bramble • Cocksfoot •	• Wet ditch present • Connects to H4 and H11	• ?	Borderline importance)
H11	150m	1m x 1m	• Hawthorn • Ash • Holly • Hazel	• Common nettle • Cocksfoot • Bramble	• Drainage ditch on west side • Connects to H10 and H12	• Grazed base • Defunct • Gappy • Trimmed and laid in the past	Unimportant
H12	200m	2m x 1m	• Hawthorn • Holly • Hazel • Dog rose • Pedunculate oak	• Common nettle • Bramble • Great willowherb • Soft rush	• Drainage ditch on south side • Connects to H11 • Standard trees present	• Managed • Flail trimmed • Defunct	Borderline importance

Hedgerow Number	Length (m) *	Height and width (m)	Woody Species Present**	Woodland and Understory Species Present**	Additional Features	Management	Approximation of Importance of Hedge under Hedgerow Regs. 1997
			• Ash				
H13	300m	1.5m x 1m	• Hawthorn • Ash • Holly • Pedunculate oak • Blackthorn	• Bramble • Soft rush	• No gaps in aggregate >10% of hedgerow length • Wet ditch present • Connects to H11 • Inundation area present •	• Intensively managed • Flail trimmed • Laid in past 2 to 10 yrs • Hedge bottom grazed	Unimportant
H14	25m	1.5m x 1m	• Hawthorn	• Common nettle • Bramble •	•	• Intensively managed • Flail cut	Unimportant
H15	100m	1.5m x 1m	• Hawthorn	• Common nettle • Bramble	•	• Defunct	Unimportant

• * Measured using Google earth
• ** Due to time of year (Nov) all species may not be picked up due to seasonal dieback (esp. woodland species)

Appendix 4: Assessment of Trees for Bat Roost Potential

A4.1. Trees on site were assessed for their potential to support bat roosts during the Phase 1 survey. Assessment comprised a ground based visual inspection using binoculars to identify any features potentially suitable for roosting bats. Such features may include woodpecker holes, frost cracks and hazard beams.

A4.2. The potential of trees within the site to support roosting bats was assessed using professional judgement, in accordance with best practice guidelines (Hundt, 2012[8]; Mitchell-Jones, 2004[9]). Table A4.2 below shows the criteria that were used to inform the assessment.

A4.3. The assessment involved a ground based inspection of trees using binoculars and a high powered torch.

A4.4. Trees assessed as potentially suitable for roosting bats were subject to a detailed climb-and-inspect survey on 30 January 2014. This allowed more detailed roost potential assessments to be made. The detailed survey was undertaken by John Moorcroft MCIEEM (Ecology Associate, Tyler Grange) and Simon Holden MCIEEM (Senior Ecologist, Tyler Grange; bat survey licence CLS00773).

Features of trees used as bat roosts	Signs indicating possible use by bats
Natural holes Woodpecker holes Cracks/splits in major limbs Loose bark Hollows/cavities Dense epicormic growth Bird/bat boxes	Scratches around entry point Staining around entry point Bat droppings in, around or below entrance Audible squeaking at dusk or in warm weather Flies around entry point Distinctive smell Smoothing of surfaces around cavity

Table A4.1: Features of trees commonly used by bats for roosting and shelter and field signs that may indicate use of trees by bats (reproduced from Hundt, 2012)

Tree category	Description
Known/confirmed roost	Bats found through inspections or detailed work or up to date records exist.
Category 1*	Trees with multiple highly suitable features capable of supporting larger roosts.
Category 1	Trees with definite bat potential, supporting fewer suitable features than 1* or with potential for use by single bats.
Category 2	Trees with no obvious potential but given the size and age of the tree, elevated survey effort may find cracks or crevices which may have limited potential to support bats.

[8] Hundt, L. (2012). Bat Surveys-good practice guidelines 2nd Ed. Bat Conservation Trust, London.
[9] Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

Tree category	Description
Category 3	Trees with no potential to support bats.

Table A4.2: Tree classification when assessing for bat roost potential (adapted from Hundt, 2012)

Tree Reference	Species	Description	Bat Roost Assessment Category
T1	Alder	Semi-mature alder no obvious potential roost features (PRFs) but with ivy cover.	3
T2	Alder	Mature alder with a damaged stem and possible bat access hole.	2
T3	Ash	Double stemmed mature ash knot holes present but appear blind	3
T4	Ash	Mature ash, no obvious PRFs	3
T5	Alder	Mature alder with three knot holes. These were found to be exposed with remains of starling nests inside.	3
T6	Ash	Mature ash with knot holes and a damaged stem; however these are blind and exposed.	3
T7	Willow species	Group of four mature willows with no obvious PRFs.	3
T8	Alder	Mature alder, no obvious PRFs, some blind knot holes on main stem.	3
T9	Alder	Mature alder with knot hole about 1.5m high, facing south. Inside is shallow and full of debris.	3
T10	Alder	Mature alder with split stem, however open and exposed from above.	3
T11	Alder	Mature alder with split limb to the south, however this appears blind.	3
T12	Alder	Alder with knot hole; however this appears blind.	3
T13	Alder	Mature alder with good knot hole approximately 3m up main stem to the south. This opens into a dry, smooth sided cavity extending up into the main stem.	1

Tree Reference	Species	Description	Bat Roost Assessment Category
T14	Alder	Mature alder with long frost crack extending up main stem.	2
T15	Alder	Two stemmed alder with two knot holes to south and west. Cavities are damp inside. One stem has butt rot and the top of the stem is open to the elements.	3
T16	Alder	Mature alder with no obvious PRFs.	3
T17	Ash	Mature ash, no obvious PRFs.	3
T18	Sycamore	Mature sycamore, some old ivy cover (ivy has been cut) one knot hole is present to the west but appears blind.	3
T19	Ash	Mature ash with old dead ivy cover and a damaged limb, however this appears to be exposed and not lead to a cavity.	3
T20	Ash	Semi-mature ash with no obvious PRFs.	3
T21	Ash	Mature multi-stemmed ash, no obvious PRFs.	3
T22	Ash	Mature ash with three shallow knot holes.	3
T23	Alder	Alder with single woodpecker hole which extends upwards into the stem.	2
T24	Sycamore	Mature sycamore, no obvious PRFs.	3
T25	Alder	Multi stemmed alder, no obvious PRFs.	3
T26	Alder	Multi stemmed alder, no obvious PRFs.	3
T27	Ash	Mature ash, no obvious PRFs.	3
T28	Oak	Mature oak with a long split along a limb. This extends into a dry cavity.	2
T29	Willow species	Willow at edge of Pond 2, no obvious PRFs.	3
T30	Willow species	Willow at edge of Pond 2, no obvious PRF's.	3

Tree Reference	Species	Description	Bat Roost Assessment Category
T31	Willow species	Willow at edge of Pond 2, no obvious PRF's.	3
T32	Willow species	Willow at edge of Pond 2. Three knot holes on main stem plus a hazard beam. One of knot holes extends upwards towards the pond.	1
T33	Willow species	Willow at edge of Pond 2, no obvious PRFs.	3
T34	Willow species	Willow at edge of Pond 2, no obvious PFs.	3
T35	Willow species	Willow at edge of Pond 2, no obvious PRFs.	3
T36	Oak	Several splits in main stem but these are open and exposed.	3
T37	Oak	Several splits in main stem but these are open and exposed trunk but is very exposed from above.	3
T38	Oak	Multiple splits along limbs. Large cavity which is dry but open at the top. May be suitable for owls	2
T39	Oak	No obvious PRFs.	3
T40	Oak	Mature oak with snag end on broken limb. Cavity is shallow and exposed.	3
T41	Oak	Dead oak with numerous areas of lifted bark.	2

Appendix 5: Badger Survey Information

A5.1. A badger survey was conducted during the Phase 1 Habitat Survey. The survey followed standard methodology (Harris *et al* 1989). A thorough search for badger activity was carried out. The survey area covered the site and extended to the accessible land within a radius of 100 metres from the site boundary. Particular attention was given to Harper Woods situated immediately to the south of the site. Private gardens were excluded from the survey.

A5.2. The following signs of badger activity were searched for: -

- 'D' shaped sett entrances at least 0.25 metre wide and wider than they are high with large spoil mounds;
- Discarded bedding at sett entrances (this includes grass and leaves);
- Scratching posts on shrubs and trees close to a sett entrance;
- The presence of badger hairs which are coarse, up to 0.1 metre long with a long black section and a white tip;
- Dung pit latrines and footprints;
- Trampled pathways through vegetation and beneath fences; and
- Feeding signs.

Results

A5.3. No evidence of badger was recorded during the survey.

Appendix 6: Relevant Planning Policy

National Planning Policy Framework 2012

A6.1. Relevant information within the new National Planning Policy Framework is summarised below.

A6.2. The planning system should contribute to and enhance the natural and local environment by:

- Protecting and enhancing valued landscapes, geological conservation interests and soils;
- Recognising the wider benefits of ecosystem services;
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

A6.3. The planning system is required to contribute to protecting and enhancing the natural environment; and, as part of this, helping to improve biodiversity. When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Proposed development on land within or outside a site of Special Scientific Interest likely to have an adverse effect on a site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of sites of Special Scientific Interest;
- Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- Opportunities to incorporate biodiversity in and around developments should be encouraged;
- Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found

outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and

- The following wildlife sites should be given the same protection as European sites:
  - Potential Special Protection Areas and possible Special Areas of Conservation;
  - Listed or proposed Ramsar sites; and
  - sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

A6.4. To minimise impacts on biodiversity and geodiversity, planning policies should:

- Plan for biodiversity at a landscape-scale across local authority boundaries;
- Identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
- Promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
- Aim to prevent harm to geological conservation interests;
- Where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas; and
- The presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.

Local Planning Policy – Ribble Valley Countywide Local Plan

POLICY ENV3 – Open Countryside **In the open countryside outside the AONB and areas immediately adjacent to it, development will be required to be in keeping with the character of the landscape area and should reflect local vernacular, scale, style, features and building materials. Proposals to conserve, renew and enhance landscape features, will be permitted, providing regard has been given for the characteristic landscape features of the area.**
Although the Bowland area has received national recognition the adjacent area of countryside is also of high quality, in places matching that of the Area of Outstanding Natural Beauty. This policy recognises that the open countryside is all worthy of conservation and enhancement. The detailed landscape assessment included in Appendix 2 will be used in the determination of any planning application. Whilst the Borough Council has no wish to unnecessarily restrict development it is essential that only development which has benefits to the area is allowed. Even when such development is accepted it must acknowledge the special qualities of the area by virtue of its size, design, use of materials, landscaping and siting.

The Council will ensure the protection and enhancement of those areas outside both the AONB and areas immediately adjacent to it with an approach to conservation which gives a high priority to the protection and conservation of natural habitats and traditional landscape features. It will protect statutory designated areas and sites of biological interest and ancient woodland sites throughout open countryside areas. It will continue to improve the extent and quality of the tree cover and associated flora/fauna throughout the open countryside. It will determine and identify landscape character in relationship to the future landscape potential and will act to enhance landscape character of the open countryside. The Borough Council is also committed to protecting key elements of the landscape character of any site affected by proposed development and would make the siting, scale and form of any landscape proposal that forms part of any planning application a priority.

Open recreational uses will be assessed in terms of their impact on the site and on the wider value of the landscape, together with any social benefits arising.

This policy will be implemented through the development control process

POLICY ENV7 - SPECIES PROTECTION

Development proposals which would have an adverse effect on wildlife species protected by law will not be granted planning permission, unless arrangements can be made through planning conditions or agreements to secure the protection of the species.

The presence of a protected species is a material consideration when a local planning authority is appraising a development proposal which if carried out would be likely to result in harm to the species or its habitat. Matters likely to be of concern to the Borough Council in implementing the policy, if development is considered possible, will be to facilitate the survival of individual members of the species, to reduce disturbance to a minimum, and to provide adequate habitats to sustain at least the current levels of populations.

POLICY ENV9 - OTHER IMPORTANT WILDLIFE SITES

Development proposals within or adjacent to a County Biological Heritage Site or other site of local nature conservation importance identified on the proposals map will be permitted, provided the development would not significantly harm the features of interest which led to the identification of the site or other material factors outweigh the conservation interests of the site.

The County Biological Heritage Sites have been identified jointly by Lancashire County Council, English Nature and the Lancashire Wildlife Trust. They are shown on the proposals map and listed in Appendix 3.

Wildlife corridors and links are shown on the proposals map. They are linear areas of countryside which are usually sandwiched between built-up areas, or follow geographical features such as rivers and streams, or man-made features such as railway lines. They provide important resources for wildlife; links that allow movement of wildlife between town and country and important educational and recreational resources. The Council recognises that other linear areas of countryside such as those associated with streams and rivers shown as wildlife corridors/links in Appendix 4 provide important resources for wildlife. It also recognises the need to protect wildlife corridors/links from any development which may cause harm or damage to a species/habitat. It will also protect against a reduction in the length of, against any new obstacles and against the contamination of any wildlife corridors/links.

These designations represent an important part of the Borough's heritage, which it is necessary to protect. They are valuable both as habitats for plants and animals. There is sufficient land available for all uses without the need to damage such sites.

There may be occasions where some development associated to these sites may be justified. This may be a reflection of a clear local need which can be identified and justified.

The designation of sites protected by this policy is not comprehensive, and it is possible that other sites will be discovered and possibly created in the plan period. The Borough Council will consult with the relevant organisations on all applications. Where new sites are identified they will be protected by this policy and incorporated into the plan at the earliest opportunity. This policy will be implemented through the development control process and by negotiation with English Nature and the Lancashire Wildlife Trust.

POLICY ENV10 – NATURE CONSERVATION

Where permission is granted for development affecting the nature conservation value of sites, including those referred to in Policies ENV8 and ENV9, conditions may be imposed or agreements sought:

- **(a) to avoid damage to wildlife habitats or physical features of the nature conservation interest;**
- **(b) to secure the retention or enhancement of wildlife habitats; and**
- **(c) in appropriate cases, to require the re-creation of habitats once the development has ceased.**

Where such development is allowed, damage to nature conservation interests must be kept to a minimum. The most sensitive areas of any site must be protected in the long term, and any valuable areas of habitat must be re-created elsewhere on site wherever possible. In cases where development proposals are considered to possibly affect such sites, the Council will require a full detailed flora and fauna survey. These bodies may be particularly useful; Lancashire County Council Ecology Unit; or bona fide professional landscape/wildlife consultants. The costs of survey works will be met by the applicants. There may be occasions where development of part of the whole of these sites may be justified and in such cases the Council will ensure that damage to the nature conservation interest of the site or feature be kept to a minimum. Where possible the Council will seek to negotiate with the developer to preserve the nature conservation interest, and will consider using conditions and/or planning agreements to provide appropriate compensatory measures.

POLICY ENV13 - LANDSCAPE PROTECTION

The Borough Council will refuse development proposals which harm important landscape features including traditional stone walls, ponds, characteristic herb rich meadows and pastures, woodlands, copses, hedgerows and individual trees other than in exceptional circumstances where satisfactory works of mitigation or enhancement would be achieved, including rebuilding, replanting and landscape management.

It is important to protect the existing landscape features which add to the character of the Borough. The woodland coverage of the borough whether large woods, small groups, or individual trees, together with hedgerow coverage forms an important part of the landscape quality. In addition valuable ecological, recreational and economic functions arise from these features.

Appendix 7: Protected Site Locations and Protected Species Records Provided by Lern

Legend

- Longridge 2km Buffer
- Longridge
- Lancs_Key_Species_20131106
- Biological Heritage Sites

N

1:26,500 Date: 03/01/2014

LERN Species Records within 2km of the Site Boundary within the last 10 years

England NERC S.41	Taxon group	Taxon Status Kind	Taxon Status Constraint	Taxon Latin Name	Taxon Common Name	Sample Year
	flowering plant	UK BAP	In respect of section 13(2) only	Hyacinthoides non-scripta	Bluebell	2013.00
	flowering plant	UK BAP	In respect of section 13(2) only	Hyacinthoides non-scripta	Bluebell	2013.00
	flowering plant	UK BAP	In respect of section 13(2) only	Hyacinthoides non-scripta	Bluebell	2013.00
	flowering plant	UK BAP	In respect of section 13(2) only	Hyacinthoides non-scripta	Bluebell	2013.00
	bird	International	Lancs BAP Provisional Long List	Prunella modularis	Dunnock	2013.00
	bird	Red Data List	Lancs BAP Provisional Long List	Haematopus ostralegus	Oystercatcher	2013.00
Yes	bird	Other rare/scarce	Lancs BAP Provisional Long List	Numenius arquata	Curlew	2013.00
Yes	bird	Other rare/scarce	Lancs BAP Provisional Long List	Numenius arquata	Curlew	2013.00
Yes	bird	Other rare/scarce	Lancs BAP Provisional Long List	Numenius arquata	Curlew	2013.00
Yes	bird	Other rare/scarce	Lancs BAP Provisional Long List	Numenius arquata	Curlew	2013.00
Yes	bird	Other rare/scarce	Lancs BAP Provisional Long List	Numenius arquata	Curlew	2013.00
	bird	Nat Legislation	Lancs BAP Provisional Long List	Sturnus vulgaris	Starling	2013.00
Yes	bird	UK BAP	Lancs BAP Provisional Long List	Passer domesticus	House Sparrow	2013.00
Yes	bird	UK BAP	Lancs BAP Provisional Long List	Passer domesticus	House Sparrow	2013.00
Yes	bird	UK BAP	Lancs BAP Provisional Long List	Passer domesticus	House Sparrow	2013.00
Yes	bird	Nat Legislation	Lancs BAP Provisional Long List	Vanellus vanellus	Lapwing	2013.00
Yes	bird	Nat Legislation	Lancs BAP Provisional Long List	Vanellus vanellus	Lapwing	2013.00
Yes	bird	Nat Legislation	Lancs BAP Provisional Long List	Vanellus vanellus	Lapwing	2013.00
	bird	International		Tyto alba	Barn Owl	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00

	flowering plant	International		Galanthus nivalis	Snowdrop	2013.00
	flowering plant	Nat Legislation		Fallopia japonica	Japanese Knotweed	2013.00
	flowering plant	Nat Legislation		Fallopia japonica	Japanese Knotweed	2013.00
	flowering plant	Nat Legislation		Fallopia japonica	Japanese Knotweed	2013.00
	flowering plant	Nat Legislation		Fallopia japonica	Japanese Knotweed	2013.00
Yes	bird	Other rare/scarce	Lancs BAP Provisional Long List	Numenius arquata	Curlew	2012.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2012.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2012.00
Yes	amphibian	UK BAP	Lancs BAP Provisional Long List	Bufo bufo	Common Toad	2011.00
Yes	amphibian	UK BAP	Lancs BAP Provisional Long List	Bufo bufo	Common Toad	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
	amphibian	Nat Legislation	Lancs BAP Provisional Long List	Rana temporaria	Common Frog	2011.00
Yes	amphibian	International	Lancs BAP Provisional Long List	Triturus cristatus	Great Crested Newt	2011.00
Yes	amphibian	International	Lancs BAP Provisional Long List	Triturus cristatus	Great Crested Newt	2011.00
Yes	amphibian	International	Lancs BAP Provisional Long List	Triturus cristatus	Great Crested Newt	2011.00
	terrestrial mammal	UK BAP	Lancs BAP Provisional Long List	Pipistrellus pipistrellus	Pipistrelle	2011.00
Yes	terrestrial mammal	UK BAP	Lancs BAP Provisional Long List	Erinaceus europaeus	Hedgehog	2011.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2011.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2011.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2011.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2011.00
	amphibian	UK BAP		Triturus vulgaris	Smooth Newt	2011.00
	flowering plant	UK BAP	In respect of section 13(2) only	Hyacinthoides non-scripta	Bluebell	2010.00
	bird	Nat Legislation	Lancs BAP Provisional Long List	Sturnus vulgaris	Starling	2010.00
Yes	bird	UK BAP	Lancs BAP Provisional Long List	Passer domesticus	House Sparrow	2010.00
Yes	bird	Nat Legislation	Lancs BAP Provisional Long List	Vanellus vanellus	Lapwing	2010.00
	terrestrial mammal	UK BAP	Lancs BAP Provisional Long List	Pipistrellus pipistrellus	Pipistrelle	2009.00