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Bellcross Homes

South West Milton Keynes

ECOLOGICAL APPRAISAL: SCOPING REPORT

Survey Report

21st November 2014

FPCR Environment and Design Ltd

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1.0 INTRODUCTION

- 1.1 FPCR Environment and Design Ltd were commissioned by Hallam Land Management Ltd to undertake an ecological assessment of land at South West Milton Keynes. The objective of the study was to assess the potential ecological implications associated with development of the land.

Site Location and Context

- 1.2 The subject site is located south west of Milton Keynes on the south west edge of residential development of Bletchley. The parcel of land lies between Newton Longville to the south and the A421 Standing Way and B4034 Buckingham Road at its north boundary.
- 1.3 The surrounding landscape comprises mixed arable and pasture farmland to the south and west; established residential development to the north and east; and new development land adjacent to the A421 within Tattenhoe Park to the north, which also includes warehouse development and a network of ponds.
- 1.4 The following report was preceded by a detailed ecological assessment report undertaken for a larger site area, including all land within the current site boundary, by Aspect Ecology and submitted as an outline planning application in 2010.

2.0 METHODOLOGY

Desk Study

- 2.1 In order to compile existing baseline information, relevant ecological information was requested from both statutory and non-statutory nature conservation organisations for the purposes of this appraisal, including:
- Multi Agency Geographic Information for the Countryside (MAGIC) website¹
 - Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC)
 - Buckinghamshire Badger Group (BBG)
 - North Buckinghamshire Bat Group (NBBG)
- 2.2 Further inspection, using colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk) was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.
- 2.3 The search area for biodiversity information was related to the significance of sites and species and potential zones of influence, as follows:
- 5km around the subject site for sites of International Importance (e.g. Special Area of Conservation, Special Protection Area, Ramsar site)
 - 2km around the subject site for sites of National/ Regional importance (e.g. Sites of Special Scientific Interest)

¹ <http://www.magic.defra.gov.uk/>

- 1km around the subject site for sites or species of County Importance (e.g protected, Local Wildlife Sites or UK BAP and notable species).

Extended Phase 1 Survey

- 2.4 Survey methods followed the extended Phase 1 Survey technique as recommended by Natural England (JNCC, 2010). This involved a systematic walk over of the site mapping and broadly describing the principal habitat types and identifying the dominant plant species present within each habitat type, noting any features of interest. This was undertaken by experienced ecologists on 4th September, 27th September, 17th October and 21st November 2012. A survey of additional areas subsequently incorporated into the subject site boundary to accommodate proposed access infrastructure was undertaken on 9th January 2014.
- 2.5 Hedgerows were surveyed individually using the Hedgerow Evaluation and Grading System (HEGS) after Clements and Toft (1993) to enable identification and evaluation of hedgerows of nature conservation importance within the site. Hedgerows were graded on a scale of 1-4, within which grades 1 and 2 are generally considered to be of nature conservation priority (Table 1).

Table 1: Conservation Value of Hedgerows

Grade	Value of Hedgerow
-1, 1, 1+	High to Very High
-2, 2, 2+	Moderately High to High
-3, 3, 3+	Moderate
-4, 4, 4+	Low

- 2.6 Hedgerows were also assessed under the Wildlife and Landscape criteria of the Hedgerow Regulations 1997, Statutory Instrument No: 1160. This broadly follows the above methodology, although an average canopy species per 100 metres is calculated. Results are assessed against the set criteria laid out in the regulations to ascertain whether a hedgerow is classed as 'Important'.
- 2.7 It should be noted that hedgerows may also qualify as Important under the Archaeology and History criteria of this Act, which is outside the scope of this assessment.

Limitations of Survey

- 2.8 Though the survey was not undertaken entirely within the optimal time for Phase 1 (April-September) the key habitats were surveyed in this optimal period and it is considered that because of the nature of the habitats surveyed sufficient information was gained to make a thorough assessment.

Protected Species

Reptiles

- 2.9 An assessment of the suitability of the habitats present to support common reptile species was completed at the time of the habitat survey. This involved a review of habitats and habitat structure suitable for the shelter of reptiles such as areas of scrub and woodpiles, grassland with well developed, varied structure; and also the appropriate juxtaposition of areas suitable for

basking, shelter and forage/hunting. This assessment was based on the methodology detailed in the Herpetofauna Workers Manual (Gent and Gibson, 1998); the Froglife Advice Sheet 10 – Reptile Survey (Froglife 1999).

Great crested newts

Habitat Suitability Index

- 2.10 As part of the Phase 1 habitat survey a habitat suitability index (HSI) assessment was undertaken on all water-bodies within the site and up to 500m from its boundaries. In total 16 off-site ponds and three on-site ponds were assessed. This assessment provides a measure of the likely suitability that a water-body has for supporting newts (evaluating the suitability for the great crested newt, herpetological journal 10(4); Oldham et al., October 2000). Whilst not a direct indication of whether or not a pond will support great crested newts, generally, those with a higher score are more likely to support great crested newts (GCN) than those with a lower score and there is a positive correlation between HSI scores and ponds in which GCN are recorded. Ten separate attributes are assessed for each pond to calculate the suitability of the ponds to support GCN:
- Geographic location
 - Pond area
 - Pond drying
 - Water quality
 - Shade
 - Presence of water-fowl
 - Presence of fish
 - Number of linked ponds
 - Terrestrial habitat
 - Macrophytic coverage
- 2.11 A score is assigned according to the most appropriate criteria level set within each attribute and a total score calculated of between 0 and 1. Pond suitability is then determined according to the scale set out in Table 2 below. Using the index score the predicted presence of GCN being found within a pond can be made, based on the proportion of ponds typically occupied at that suitability level.

Table 2: HSI score and suitability for supporting great crested newts

HSI score	Pond Suitability
<0.5	Poor
0.5 - 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

- 2.12 An assessment of the suitability of the terrestrial habitats to support great crested newts was completed within the subject site. Suitable terrestrial habitat includes shelter habitat such as scrub and rank vegetation and habitat that could provide suitable hibernation sites such as rubble piles or tussock grassland.

Badgers

- 2.13 As part of the survey, scrub, hedgerows and other suitable habitats within and 30m beyond the site boundary were searched for evidence of badger activity. The standard methodology was used, as outlined by Harris, Creswell and Jefferies (1991). This involved a thorough search for evidence of the presence of badgers, including:
- Setts, including earth mounds, evidence of bedding and runways between setts;
 - Latrines, often located close to setts, at territory boundaries or adjacent to favoured feeding areas;
 - Prints and paths or trackways;
 - Hairs caught on rough wood or fencing;
 - Other evidence including snuffle holes, feeding and playing areas and scratching posts.
- 2.14 The identification of snuffle holes, scratching posts or feeding signs on their own are not necessarily conclusive evidence of the presence of badgers. A number of such signs need to be seen in conjunction before they can be said to be conclusive of badger activity.

Bats

Building Assessment

- 2.15 The exterior of the buildings were visually assessed by an experienced ecologist from FPCR on the 4th and 27th September 2012 for potential access points and evidence of bat activity. Detailed pictures were taken. Features such as the types of construction materials used/gaps in the exterior facade, which have potential as access points, were sought. Evidence that bats actively used potential access points includes staining within gaps and bat droppings or urine staining under gaps, a note being made wherever these were present. Indicators that potential access points had not recently been used included the presence of cobwebs and general detritus within potential access points. The visual assessment was carried out following periods of dry weather to maximise recording of visible evidence.

Tree Assessment

- 2.16 Tree assessments were undertaken from ground level, with the aid of a torch and binoculars where required, on all trees on site on the 4th September, 27th September, 17th October and 21st November 2012. During the survey features considered to provide suitable roost sites for bats such as the following were sought:
- Trunk cavity – Large hole in trunk caused by rot or injury.
 - Branch cavity - Large hole in branch caused by rot or injury.
 - Trunk split – Large split / fissure in trunk caused by rot or injury.

- Branch spilt – Large split / fissure in branch caused by rot or injury.
- Branch socket cavity – Where a branch has fallen from the tree and resulted in formation of an access point in to a cavity.
- Woodpecker hole – Hole created by nesting birds suitable for use by roosting bats.
- Lifted bark – Areas of bark which has rotted / lifted to form suitable access point/roost site for bats.
- Hollow trunk – Decay in heartwood leading to internal cavity in trunk.
- Hazard beam failure- Where a section of the tree stem/branch has failed causing collapse and leading to longitudinal fractures / splits / cracks along its length.
- Ivy cover – Dense / mature ivy cover where the woody stems could create small cavities / crevices.

2.17 The trees were classified into general bat roost potential groups based on the presence of features listed above. This assessment was completed by a licensed bat worker from FPCR.

2.18 Table 1 below classifies the potential categories as accurately as possible. This table is based upon Table 8.4 in Bat Surveys- Good Practice Guidelines (Bat Conservation Trust, 2012). The table within the guidelines has been designed to inform assessments completed prior to the completion of arboricultural works. Consequently, the suggested survey methods have been refined to suit development works and considers the definition of a breeding site or resting place as described in the Habitat Regulations.

Table 1- Bat Survey Protocol for Trees

Tree category and description	Survey requirements prior to determination.	Recommended mitigation works and/or further surveys.
Category 1 Confirmed bat roost with field evidence of the presence of bats, e.g. live / dead bats, droppings, scratch marks, grease marks and / or urine staining.	Identified on a plan and in the field. Further assessment such as climb and inspect and/or dusk/dawn surveys should be undertaken, if the trees are affected by the development, to provide an assessment on the likely use of the roost, numbers and species of bat present.	Avoid disturbance where possible. Felling or other works that would affect the roost would require an EPS licence with like for like roost replacement as a minimum. Works may also be subject to timing constraints.
Category 2a Trees that have a high / moderate potential to support bat roosts.	Identified on a plan and in the field to assess the potential use of suitable cavities, based on the habitat preferences of bats. Where the tree(s) will be affected by the proposed development, further assessment such as climb and inspect and/or dusk/dawn surveys (up to 2/3 nocturnal surveys) should be undertaken (as appropriate), to ascertain presence/absence of	Trees where no bat roost confirmed after further surveys: Avoid disturbance where possible. In situations where disturbance cannot be avoided and where no evidence of occupation of suitable cavities has been confirmed during the initial surveys or nocturnal surveys (as appropriate), further precautionary survey work

Tree category and description	Survey requirements prior to determination.	Recommended mitigation works and/or further surveys.
	<p>roosting bats. Trees may be upgraded if presence of roosting bats is confirmed or downgraded following further surveys if features present are of low suitability and / or no evidence of a breeding site or resting place * is found within features that can be assessed fully.</p>	<p>following the granting of planning permission and prior to works being completed is recommended to ensure features have not been occupied by bats. The additional precautionary survey work could comprise further nocturnal surveys during the active bat season immediately prior to felling or management works or the completion of additional aerial inspections. Use "soft felling" techniques, removing ivy cover by hand and avoid cutting through tree cavities is recommended once the presence of a roost has been discounted.</p>
<p>Category 2b Trees with a low potential to support bat roosts.</p>	<p>Identified on a plan and in the field to assess the potential use of suitable cavities, based on the habitat preferences of bats. Where the tree(s) will be affected by the proposed development, further assessment such as climb and inspect and/or dusk/dawn surveys (one nocturnal survey) should be undertaken (as appropriate), to ascertain presence/absence of roosting bats. Trees may be upgraded if presence of roosting bats is confirmed or downgraded following further surveys if features present are not suitable for bats and / or no evidence of a breeding site or resting place* is found within features that can be assessed fully.</p>	<p>Trees where no bat roost confirmed after further surveys: Avoid disturbance where possible. In situations where disturbance cannot be avoided and where no evidence of occupation of suitable cavities has been confirmed during the initial surveys or nocturnal surveys (as appropriate), further precautionary survey work following the granting of planning permission and prior to works being completed is recommended to ensure features have not been occupied by bats. The additional precautionary survey work could comprise further nocturnal surveys during the active bat season immediately prior to felling or management works or the completion of additional aerial inspections. Use "soft felling" techniques, removing ivy cover by hand and avoid cutting through tree cavities is recommended once the presence of a roost has been discounted.</p>

Tree category and description	Survey requirements prior to determination.	Recommended mitigation works and/or further surveys.
Category 3 Trees with no / negligible potential to support bat roosts.	Identified on a plan and in the field to assess the potential use of suitable cavities, based on the habitat preferences of bats.	None.

- 2.19 * The Conservation of Habitats & Species Regulations 2010 (as amended) affords protection to breeding sites or resting places at all times. For an area to be classified as a breeding site or resting place, the Regulations require there to be a reasonably high probability that the species will return to the sites and / or place.
- 2.20 Confirmation of a breeding site or resting place in trees can be established through the completion of aerial inspection and / or nocturnal surveys (as appropriate). In situations where nocturnal surveys are completed and a breeding site or resting site is not confirmed, the survey effort is considered to be sufficient to reasonably discount the presence of roosting bats (for a period of time as defined in Natural England's current Standing Advice). However, further precautionary works may be recommended if the trees is affected by works.
- 2.21 Where features of a tree are identified as providing potential to be used as a breeding site or resting place, evidence of current or previous use of the feature should be identified during an aerial inspection to necessitate the completion of further detailed nocturnal survey work prior to the granting of planning permission. In situations where no evidence of use is identified it is reasonable to conclude that a feature is not being used as a breeding site or resting place as defined by the Regulations but further precautionary measures maybe recommended if a tree is affected by development to ensure occupation has not occurred following completion of the survey. If the presence of a breeding site or resting place cannot be discounted from ground level or aerial inspections, nocturnal survey work to confirm the presence of a breeding site or resting place should be completed.

3.0 RESULTS

Desk Study

Statutory Designations (see Figure 1)

- 3.1 No nature conservation designations of international importance are present within 5km. One Sites of Special Scientific Interest (SSSI) is present within 2km. Howe Park Wood SSSI is approximately 1.2km north of the subject site and designated for its semi-natural woodland.
- 3.2 Data obtained from Buckinghamshire and Milton Keynes Environmental Records Centre noted the presence of two non-statutory Local Wildlife Sites (LWS) within 1km of the subject site; Broadway and Thrift Wood/83B16; and Railway siding east of Salden Wood 83F01. A single Biological Notification Site (BNS), which has not been assessed against current LWS selection criteria, is also present in the search area. Three Milton Keynes Wildlife Corridor sites for woodland, wetland and railways are also present within the 1km search area and the woodland

and wetland corridors fall partially within the subject sites northwest boundary. These non-statutory sites are detailed in Table 4 below.

Table 4: Non-statutory Designated Sites within 1km

Site Name/Reference	Designation	Habitat/Feature	Approximate Distance and Orientation from Subject Site
Railway sidings east of Salden Wood/83F08	Local Wildlife Site (LWS)	Species-rich grassland and scrub mosaic	7m west
Milton Keynes Wildlife Corridor	Wildlife Corridor	Wetland	Within the northwest site boundary
Milton Keynes Wildlife Corridor	Wildlife Corridor	Woodland	Within the northwest site boundary
Milton Keynes Wildlife Corridor	Wildlife Corridor	Railway	300m east
Broadway and Thrift Wood/83B16	Local Wildlife Site (LWS)	Mixed replanted ancient woodland	200m west

Flora/Species

- 3.3 A number of records for protected and notable species were returned by Buckinghamshire and Milton Keynes Environmental Records Centre for the vicinity of the site and these are detailed in Table 5 below. For conciseness only records for the last 20 years have been detailed though records received went back to 1982.

Table 5: Protected and Notable Species within 1km

Species	Location	Date of Record	Approximate Distance and Orientation from Site
Swift <i>Apus apus</i>	Newton Longville Loughton Brook, Tattenhoe	2011 1998	Within the site 360m north
Kingfisher <i>Alcedo atthis</i>	Newton Longville Landfill Tattenhoe	1994 2010	120m southeast 320m north
Bullfinch <i>Pyrrula pyrrhula</i>	Railway siding east Salden Wood	2008	350m southwest
Song Thrush <i>Turdus philomelos</i>	Railway siding east Salden Wood	2008	350m southwest
Whitethroat <i>Sylvia communis</i>	Railway siding east Salden Wood	2008	350m southwest
Tufted Duck <i>Aythya fuligula</i>	Newton Longville	2011	170m south
Little Grebe <i>Tachybaptus ruficollis</i>	Newton Longville	2011	170m south

Starling <i>Sturnus vulgaris</i>	Loughton Brook, Tattenhoe	2002 1998	170m south 360m north
Great Crested Newt <i>Triturus cristatus</i>	Snelshall Pond Snelshall Pond Snelshall Pond Snelshall Pond Snelshall Pond Pond east Tattenhoe Church	2007 2002 2007 2002 2005 2002	60m north 150m north 200m north 250m north 300m north 850m north 1km north
Grass snake <i>Natrix natrix</i> Grass snake <i>Natrix natrix</i> Common Lizard <i>Zootoca vivipara</i>	Tattenhoe Park Snelshall east wildlife corridor Disused railway	2010 2002 2010	Within the site 550m north 850m southwest
Badger <i>Meles meles</i>	Tattenhoe Park Railway siding A421 Milton Keynes Tattenhoe Park Thrift Wood A321	2008 2011 2008 2011 2004 2011	100m north 350m southwest 400m north 450m northwest 550m west 700m northeast
Grizzled Skipper <i>Pyrgus malvae</i> Wood White <i>Leptidea sinapis</i> Wall <i>Lasiommata megera</i>	Newton Longville, disused railway Disused railway Newton Longville	2010 2001	350m southwest 850m southwest 1km south
Common Pipistrelle <i>Pipistrellus pipistrellus</i> <i>Pipistrellus pipistrellus</i> <i>Pipistrellus pipistrellus</i> Brown Long-eared <i>Plecotus auritus</i> Brown Long-eared <i>Plecotus auritus</i> Daubenton's Bat <i>Myotis daubentonii</i> Noctule <i>Nyctalus noctula</i> Natterer's Bat <i>Myotis nattereri</i> Unidentified Roost Unidentified Roost	North Newton Longville Snelshall west Snelshall East Tattenhoe Park Tattenhoe Park Tattenhoe Park Bottledump Roundabout Newton Longville Newton Longville	2007 2006 2003 2006 2006 2010 2007 2002	100m southwest 300m north 350m north 300m north 500m north 300m north 300m east Within north site 350m north 650m southeast 1km southeast

Brown Hare <i>Lepus europaeus</i>	Tattenhoe Park	2010	750m north
Common Gromwell <i>Lithospermum officinale</i>	Railway sidings	2008	350m southwest
Green-winged Orchid <i>Orchis morio</i>	Loughton Brook, Tattenhoe	1998	600m north

Field Survey

Habitats/Flora (see Figure 2)

- 3.4 Table 6 below details notable features identified during the survey, all of which are shown on Figure 2 together with the locations of the broad habitat types described below.

Table 6: Target Notes

No.	Description
1	Worn path through 1-1.5m margin of coarse vegetation adjacent to wet ditch providing limited potentially suitable habitat for common reptile
2	Railway bridge of brick construction with limited areas of loose mortar with negligible potential to support roosting bats
3	Badger path with badger hairs noted running parallel with south site boundary
4	Mammal push-throughs at south site boundary
5	Rubble heap providing limited potential refuge habitat for amphibians and reptiles
6	Partially collapsed mammal holes scrubbed over, no badger evidence
7	Small patch of scrap tin sheeting with limited potential refuge habitat for amphibians and reptiles
8	Course grassland, scrub and bare path of Weasel Lane providing suitable potential reptile habitat

Arable

- 3.5 The majority of the site was dominated by large, intensively managed arable fields supporting narrow margins of tall ruderal and grasses including common nettle *Urtica dioica*, broadleaved dock *Rumex obtusifolius*, cocksfoot *Dactylis glomerata* and barren brome *Anisantha sterilis*. Weed species within the arable crop included cut-leaved crane's-bill *Geranium dissectum* and common field speedwell *Veronica persica*.

Poor Semi-improved Grassland

- 3.6 Several fields in the north of the site were colonised by grassland indicative of agricultural improvement and were largely isolated within arable fields. The more dominant and widespread species included common bent *Agrostis capillaries*, timothy *Pleum pratense* and Yorkshire fog *Holcus lanatus*. Creeping buttercup *Ranunculus repens*, cow parsley *Anthriscus sylvestris*, creeping cinquefoil *Potentilla reptans* and false oat-grass *Arrhenatherum elatius* were frequent; creeping thistle *Cirsium arvense*, perennial sow-thistle *Sonchus arvensis*, ribwort plantain *Plantago lanceolata* and common sorrel *Rumex acetosa* were occasional; hard rush *Juncus inflexus*, red clover *Trifolium pratense*, bristly oxtongue *Helminthotheca echioides* and common bird's-foot trefoil *Lotus corniculatus* were rare.

- 3.7 A section of short-grazed semi-improved grassland field to the south of Whaddon Road is within the subject site and supports a sward dominated by perennial rye-grass with a low diversity of forbs including creeping buttercup and white clover.
- 3.8 A margin of coarse grasses and herbs were present flanking Weasel Lane and encroaching scrub was also noted here. Species present included: false oat-grass, timothy, common couch *Elytrigia repens*, black knapweed *Centaurea nigra*, common nettle *Urtica dioica* and silverweed *Potentilla anserina*.
- 3.9 Where sections of the site boundary extend to meet Buckingham Road and Standing Way some limited areas of semi-improved grassland and tall herb margin were noted. False oat-grass *Arrhenatherum elatius* dominated and stands of great willowherb *Epilobium hirsutum* were locally dominant; dove's-foot crane's-bill *Geranium molle* was occasional and hairy st john's-wort *hypericum hirsutum* was rare.



Photograph 1: Poor semi-improved grassland

Amenity Grassland

- 3.10 Amenity grassland was noted within the north east bordering the B4034 Buckingham Road up to and including the roundabout onto the A421 Standing Way; a section of the A421 Standing Way verge in the north; a section of verge in the south west bordering Whaddon Road; and a section of verge at the north extent of Whaddon Road in the north west of the site including the roundabout with Standing Way. The sward adjacent the Buckingham Road and Standing Way was dominated by perennial rye-grass *Lolium perenne*; creeping buttercup *Ranunculus repens* and white clover *Trifolium repens* were frequent; and hop trefoil *Trifolium campestre* was rare. The sward adjacent Whaddon Road was dominated by red fescue *Festuca rubra*; cocksfoot

Dactylis glomerata and creeping buttercup were frequent; and curled dock *Rumex crispus* and yarrow *Achillea millefolium* were occasional.

Mature Trees

- 3.11 Mature trees were recorded throughout the boundary hedgerows and concentrated in the north. Many showed signs of decay and damage including rot holes, dead branches and hollow cavities. These features are detailed below in Table 8 Tree Inspection Results below and annotated on Figure 2 as scattered trees. Species composition was dominated by ash *Fraxinus excelsior* but also included pedunculate oak *Quercus rubur*, horse chestnut *Aesculus hippocastanum*, poplar *Populus sp.*

Semi-natural Woodland

- 3.12 A small pocket of semi-natural woodland dominated by pedunculate oak and grey poplar *Populus canescens* was located in the north. The ground flora was of limited diversity and dominated by bramble with frequent rough meadow-grass *Poa trivialis*.
- 3.13 Further parcels of woodland were noted associated with the Whaddon Road/Standing Way roundabout in the northwest and adjacent the amenity grassland verge of Standing Way and incorporated into the north site boundary. These stands were dominated by grey poplar and frequent ash and field maple *Acer campestre* were noted in the canopy. The understorey comprised hawthorn *Crataegus monogyna*, suspected red-osier dogwood *Cornus sericea* and blackthorn *Prunus spinosa*. The ground flora was dominated by ivy *Hedra helix* with frequent cow parsley *anthriscus sylvestris* and rare wood false brome *Brachypodium sylvaticum*. A limited area of woodland west of Whaddon Road was inundated, likely due to flooding from an adjacent river in spate at the time of survey. The water was turbid and no aquatic vegetation was noted.

Scrub

- 3.14 Continuous scrub was confined to the south site boundary adjacent to the disused railway and flanking Weasel Lane which bisects the site. At the south site boundary scrub was mature and dominated by hawthorn and other canopy species included ash, buckthorn *Rhamnus catharticus*, elder *Sambucus nigra* and bramble *Rubus fruticosus*. Ground flora was of limited species diversity and included common nettle, bittersweet *Solanum dulcamara* and herb-robert *Geranium robertianum*. Scrub flanking Weasel Lane was less well developed and dominated by bramble; frequent dogwood *Cornus sanguinea* and elder.

Introduced Shrub

- 3.15 Discrete areas of ornamental shrub species were noted in association with the roundabout verges and roundabout centres of Standing Way and included cherry laurel *Prunus laurocerasus* red-osier dogwood, white dogwood *Cornus alba* and yew *Taxus baccata*. A small number of semi-mature trees including silver birch *Betula pendula* and horse chestnut were also noted in the central roundabout sections.

Hedgerows

- 3.16 A good number of hedgerows were present and largely concentrated in the north of the site. All are detailed in Table 7 below. Over half were assessed being of moderately high to high value under the HEGS assessment making them of conservation priority. Additionally over half were assessed under the Hedgerow Regulations 1997 as being 'important'. This reflects their general high structural and species diversity and good connectivity features.

Table 7: Hedgerow Descriptions

Hedge ref.	Species	Notes	Qualification as Important under the Hedgerow Regulations	HEGS Score
H1	Fe, Sf, Ac, Cm, Up	Defunct garden hedge, dry ditch. 5 trees/100m	No	3
H2	Ac, Qr, Up, Cm, Ros, Sn	Defunct short section of hedge. 5 trees/100m	No	3+
H3	Vo, Ros, Fe, Cm, Sn	Trimmed, short and thinning hedge.	No	3+
H4	Cm, Sn, Rc, Ps, Rf, Up, Fe, Ros	Trimmed, thinning hedge, wet ditch. 3 trees/100m	No	3+
H5	Cm, Rf, Ps, Sn, Ros	Trimmed hedge, wet ditch.	No	3
H6	Cm, Fe, Ros, Sn, Rf, Rc	Trimmed hedge, wet ditch. 4 trees/100m.	No	3
H7	Cm, Ps, Lv, Ros, Fe, Rf, Sn, Cos	Trimmed, dense hedge, dry ditch. 7 trees/100m	Yes	2+
H8	Ros, Cm, Sn, Ac, Ps, Sf, Fe	Trimmed, dense hedge, dry ditch. 7 trees/100m	No	2+
H9	Cm, Ac, Cos, Ros, Rf, Fe, Lv, Ps	Dense, varied structure, dry ditch. 7 trees/100m	Yes	-1
H10	Ac, Rf, Fe, Ps, Up, Ros	Dense, bushy hedge, dry ditch. 1 tree/100m	No	-2
H11	Cm, Fe, Lv, Rf, Ros, Pd, Sn	Short, trimmed, no trees.	No	3
H12	Up, Sn, Ac, Cm, Ros, Pd, Rf	Trimmed, leggy hedge, no trees.	Yes	3+
H13	Cm, Fe, Lv, Rf, Ros, Pd, Sn	Trimmed, dense hedge. 1 tree/100m	Yes	3+
H14	Ros, Cm, Sn, Ac, Up, Fe, Cos	Trimmed, thinning. 13 trees/100m. Adjacent footpath.	Yes	-2
H15	Cm, Up, Lv, Ps, Ac, Ros, Sc	Bushy, 2 trees/100m. Adjacent footpath.	Yes	2+
H16	Fe, Ros, Ms, Ac, Rf, Ps, Rc, Cm	Trackside hedge, bushy, varied structure, many trees, dry ditch.	Yes	-1
H17	Fe, Ps, Rf, S, Cm, Ros, Ac, Cos, Sn, P.	Low, thinning, species diverse, many trees, dry ditch.	Yes	3+

Hedge ref.	Species	Notes	Qualification as Important under the Hedgerow Regulations	HEGS Score
H18	Ps, Ros, Cos, Rf, Ac, Up, Tv, Cm, Sn	Bushy outgrown hedge, species diverse hedge, dry ditch. Many trees/100m.	Yes	2+
H19	Up, Ps, Fe, Ros, Lv, Rf, Cm, Cos	Trimmed, species diverse, dense roadside hedge. No trees.	Yes	-2
H20	Ros, Cm, Up, Ps, Rf, Sn, Fe	Trimmed, species diverse, roadside hedge. 2 trees/100m.	Yes	-1
H21	Ros, Cm, Up, Ps, Rf, Sn, Fe	Trimmed, species diverse, bushy, trackside hedge. 2 trees/100m.	Yes	3
H22	Up, Ros, Ps, Cm, Ap, Sn, Rf, Fe, Lv	Bushy, species diverse, trackside hedge. 2 trees/100m.	Yes	-2
H23	Cm, Rf, Sn, Pot, Ah, Fe, Up, Ros, Ps	Varied structure, species diverse, dry ditch. 2 trees/100m.	Yes	-2
H24	Ah, Sn, Ps, Cm, Rf, Ros, Up, Lv	Trimmed, species diverse hedge. Many trees/100m.	Yes	-2
H25	Ac, Ps, Cm, Rf, Ros, Fe, Lv	Trimmed, species diverse, trackside hedge, many trees/100m.	Yes	-2
H26	Cm, Rf, Ps, Ac, Lv, Ug, Ros, Ms	Trimmed, species diverse hedge. Many trees/100m.	Yes	-1
H27	Cm, Qr, Ac, Pop, Rf, Sn, Ps, Fe, Ros	Broad, trimmed, varied structure, species diverse hedge. Many trees/100m	Yes	-1
H28	Rf, Ros, Cos, Lv, Cm, Fe, Ac, Ug, Ps	Trimmed, trackside, species diverse hedge. Many trees/100m	Yes	-2
H29	Cm, Rf, S, Up, Qr, Lv, Ac, Fe, Ros, Ps	Outgrown, trackside, species diverse hedge. Many trees/100m	Yes	2+
H30	Cos, Ros, Fe, Sn, Ps, Cm	Trimmed, dense hedge. No trees.	No	-2
H31	Rf, Ros, Fe, Cm, Ps, Fe, Sn, Pd	Trimmed, dense hedge. Approximately 4 trees/100m	No	-2
H32	Ros, Lv, Sn, Cm, Ps, Fe, Rf	Trimmed, dense hedge. Approximately 3 trees/100m	No	-2

Hedge ref.	Species	Notes	Qualification as Important under the Hedgerow Regulations	HEGS Score
H33	S, Fe, Sn, Ug, Ps, Ros, Rc, Cos, Ac, Cm, Lv	Trimmed, trackside, species diverse. Approximately 4 trees/100m	Yes	-2
H34	Ps, Ros, Cm, Rf, Ac, Fe	Trimmed, dense hedge, dry ditch. Approximately 1.5 trees/100m	Yes	-2
H35	Cm, Ps, Ros, Sn	Short section of gappy hedge. 1 tree.	No	-3
H36	Cm, Ps, Ac, Fe, Ros, Cos, Lv, Up, Sn	Dense, trimmed, species diverse, roadside hedge.	Yes	-2
H37	S, Fe, Ug, Ps, Ros, Cm, Lv	Bushy, trimmed, species diverse, trackside hedge. Many trees/100m.	Yes	-2
H38	Cm, Cos, Ros, Ac, Lv, Ps, Sn, Rf, Fe	Trimmed hedge. No trees	No	-2
H39	Ps, Ros, Cm, Rf, Fe	Trimmed, thinning hedge. Many trees/100m	No	3+
H40	Cm, Ps, Rf, Lv, Sn, Ros	Excessively trimmed, thinning hedge, wet ditch. Approximately 2.5 trees/100m	No	3
H41	Lv, Up, Ac, Ps, Cos, Pop, Cm, Ros, Rf, Rc	Excessively trimmed, low, roadside hedge. Approximately 1.3 trees/100m	Yes	2
H42	Ps, Lv, Sn, Ros, Cos, Up, Rf	Trimmed, thinning hedge. Approximately 2.5 trees/100m	No	3
H43	Ug, Lv, Fe, Ps, Rf	Trimmed roadside hedge with dry ditch. Approximately 1 tree/100m	Yes	-2
H44	Ps, Lv, Cm, Ug, Fe, S,	Bushy roadside hedge with dry ditch. Approximately 2 trees/100m	Yes	2+
H45	Lv, U, Cos, Ps, Rf, Cm	Heavily trimmed roadside hedge with dry ditch. No trees	Yes	-2

Key Ac Acer campestre Ah Aesculus hippocastanum, Ap Acer pseudoplatanus, Cm, Crataegus monogyna, Cos Cornus sanguinea, Fe Fraxinus excelsior, Lv Ligustrum vulgare, Ms Malus sylvestris, Pd Prunus domestica, Pot Populus tremula, Qr Quercus robur, Rc Rhamnus catharticus, Rf Rubus fruticosus, Ros Rosa canina, Sf Salix fragilis, S Salix sp., P Prunus sp., Pop Populus sp., Sn Sambucus nigra, Up Ulmus procera, Ug Ulmus glabra.

Pond

- 3.17 A single pond (P1) was noted within the site and comprised a small pool of water connected to a flowing ditch. The water body was partially covered with debris and the bank sides were dominated by scrub.



Photograph 2: Pond P1

Brook

- 3.18 A narrow channel (approximately 0.3m wide) of flowing water was noted bisecting an arable field in the north of the site during a period of heavy rain. The feature was culverted at the south west boundary where it joined Whaddon Road. The banks were exposed, set at a 45° angle and colonised by coarse grasses and herbs including tufted hair-grass *Deschampsia flexuosa*, cow parsley, common nettle and creeping thistle *Cirsium arvense*.

Hard standing

- 3.19 Several discrete areas were associated with agricultural sheds. They were poorly maintained and colonised by grasses and ruderal species including bristly oxtongue, false oat-grass, cocksfoot, common nettle and nipplewort *Lapsana communis*.
- 3.20 Sections of Buckingham Road, Standing Way and Whaddon Road fall within the site and comprise well-maintained tarmacked highway free from weeds. A small section of tarmacked footpath in the north of the site between farmland and semi-natural woodland is used as a farm access track and encroached by woodland and the semi-improved grassland verge.

Buildings

- 3.21 See descriptions in section 3.30 and 3.31 below.

Fauna

Reptiles

- 3.22 The majority of the site comprised intensively managed arable and grassland with very limited suitable habitat for this group. Some features provided sub-optimal potential to support common reptiles and these are detailed in Table 6 above (target notes 1, 5, 7 and 8).
- 3.23 Previous reptile surveys undertaken at the site in 2008 recorded no reptiles.
- 3.24 Several reptile records have been returned for the vicinity of the site including grass snake adjacent to the north and common lizard in the railway verge to the south west, both from 2010.

Great Crested Newt

- 3.25 No evidence of great crested newts (GCN) was found during the site survey. The majority of the site comprised intensively managed fields with very limited potential to support sheltering GCN (including target notes 5 and 7). The scrub, hedgerows and marginal areas of course grassland provided some limited sub-optimal suitability for foraging and sheltering GCN and were confined largely to boundary features.
- 3.26 Three ponds (P1, PA and PB) were present within the site, these together with 16 off-site ponds were assessed against the HSI criteria, for detailed results see Appendix 1. P1 was assessed as having poor suitability to support GCN largely because it was densely shaded and possessed poor water quality.
- 3.27 GCN surveys were undertaken at the site by Aspect Ecology in 2006, 2007 and 2008 and though not all the off-site ponds (P2 – P18, Appendix 1) were identified several on-site and off-site ponds were surveyed including P1 and P9. No GCN were recorded within the site however a maximum count of 3 individuals were recorded for P9.
- 3.28 Ponds have been identified within Tattenhoe Park north of the site and beyond the A421 Standing Way with the only connectivity to the site being from a tarmacked and artificially lit underpass. These ponds are known to support large populations of GCN.



Photograph 3: A421 Standing Way underpass between the subject site and Tattenhoe Park

- 3.29 Pond P8 comprised a large water-body with extensive emergent vegetation within an amenity park approximately 200m from the subject site. It was assessed as having excellent suitability to support GCN.
- 3.30 Ponds PA and PB were dry throughout the aquatic survey and comprised sections of shaded ditch. Ponds P2, P3 and P4 are separated from the site by Whaddon Road. Pond P2, approximately 7m from the site, comprised an artificially lined, ornamental garden pond assessed as having below average suitability to support GCN due largely to its heavy shading and dominance by common duckweed *Lemna minor*. Pond P3, approximately 300m from the site, was a farm pond bordering pony grazed pasture and comprised an open water body with a good amount of macrophyte cover. This was assessed as having below average suitability to support GCN due to its poor water quality and limited terrestrial habitat. P4, approximately 300m from the site, comprised a shaded farm pond with limited marginal and aquatic vegetation and adjacent areas dominated by bramble scrub. This was assessed as having below average suitability for GCN because of shading.
- 3.31 Ponds P5, P6 and P7 are separated from the site by an unnamed book forming a barrier to dispersal of GCN. P5, approximately 350m from the site was assessed as having average suitability for GCN due to shading and comprised a flooded pond set within woodland. P6, approximately 250m from the site, comprised a fishing pond with limited vegetation cover and was assessed as having poor suitability for GCN because it supports good populations of fish. P7, also approximately 250m from the site, comprised a small farm pond within grazed pasture and was assessed as having average suitability for GCN due to the limited vegetation cover.
- 3.32 P9 is part within the site and part within an adjacent amenity area and comprises a series of water-bodies including: a linear drainage ditch of standing water within the site boundary in heavy shade supporting no aquatic vegetation, assessed as having below average suitability for

GCN; another outside the site comprising a linear feature with a broad margin of reedmace and a good amount of open water adjacent trees and scrub, assessed as having good suitability for GCN; the remaining comprising shallow scrapes within amenity grassland with short cropped vegetation with below average suitability for GCN.

Badgers

- 3.33 No evidence of badger activity was noted within the site boundaries during surveys in 2012. Surveys preceding this in 2006 and 2008 by Aspect ecology recorded former setts adjacent the north site boundary and along Weasel Lane. The former was not found during the most recent survey and the latter was noted to be collapsed and overgrown.
- 3.34 During recent surveys a badger path marked by hairs was noted within the disused railway verge adjacent to the south of the site with push-throughs noted leading into the site along this boundary. Previous surveys in 2008 noted a badger latrine at the north site boundary and an individual was recorded in the vicinity of Weasel Lane.
- 3.35 The site offers suitable potential foraging habitat for badger *Meles meles* and limited potential sett creation habitat which is largely confined to boundary features such as hedge bottoms and scrub.
- 3.36 Badgers have been recorded in the vicinity of the site to the north beyond the A421 Standing Way (2008); as road traffic casualties on this road (2008); to the west in Thrift Wood beyond Whaddon Road (2011); and at railway sidings to the south west also beyond Whaddon Road (2008).

Bats

- 3.37 The boundary hedgerows and associated mature trees provide linear features suitable for commuting and foraging bats. The larger fields with fewer linking hedgerows in the south of the site provide more limited opportunities while the features associated with Weasel Lane; the south boundary adjacent a disused railway; and the north boundary provide stronger linear features for bats.

Building Assessment

- 3.38 Two agricultural sheds were noted at the south west site boundary adjacent to Whaddon Road. B1 comprised a single agricultural shed of breeze block and corrugated asbestos construction with a small lean-to housing a generator. B2 comprised a single agricultural shed of corrugated steel construction. Both structures were constructed of a single skin of material.
- 3.39 B3 comprised derelict cattle sheds constructed of corrugated steel, brick and wood comprising a single skin and were open to the sunlight
- 3.40 No evidence of roosting bats or features with the potential to support them were found in any of the buildings.

Tree Assessment

- 3.41 None of the trees assessed were found to have any evidence of use by bats though many supported features with bat roost potential. Table 7 below details the tree inspection results. Table 8: Tree Inspection Results

Tree reference number	Species	Potential bat roost features (distance above ground and aspect)	Potential for roosting bats (Category 1, 2a, 2b, 3)	Evidence of roosting bats?
1	Ash	Dense ivy growth possibly obscuring potential bat roost features	2b	No
2	Ash	Large rot hole and loose bark	2a	No
3	Ash	Large rot hole	2a	No
4	Poplar species	Broken limb and small fissures	2a	No
5	Poplar species	Large broken branch and dead sections of trunk with deep cracks	2a	No
6	Ash	Single partially healed rot hole	2a	No
7	Ash	Dead crown, several partially healed rot holes	2a	No
8	Ash	Woodpecker hole, hollow trunk, dead branches and peeling bark	2a	No
9	Ash group	Moderate ivy cover	2b	No
10	Ash group of 3	Woodpecker holes, hollow trunk	2a	No
11	Ash	Broken upper branch and dense ivy cover possibly obscuring potential bat roost features	2a	No
12	Field Maple	Dense ivy cover possibly obscuring potential bat roost features	2b	No
13	Ash	Hollow stem and partially healed rot hole	2a	No
14	Ash	Broken upper stem and hollow trunk	2a	No
15	Dead Horse Chestnut	Flaking bark and many small cracks	2a	No
16	Ash group	Small rot hole, adjacent trees ivy cover possibly obscuring potential bat roost features	2a	No
17	Ash	Several rot holes and woodpecker hole	2a	No
18	Ash group	Woodpecker hole, adjacent trees dense ivy cover possibly obscuring potential bat roost features	2a	No
19	Ash	Two cavities south east	2a	No

Tree reference number	Species	Potential bat roost features (distance above ground and aspect)	Potential for roosting bats (Category 1, 2a, 2b, 3)	Evidence of roosting bats?
		aspect		
20	Horse Chestnut	Loose bark, 20mm cavities, split branch	2a	No
21	Ash	Moderate ivy cover possibly obscuring potential bat roost features	2b	No
22	Ash	Several woodpecker holes south east aspect, broken branches, large rot hole	2a	No
23	Ash	Rotten trunk and crown, loose bark and small holes	2a	No
24	Ash	6m high rotten stump	2a	No
25	Pedunculate Oak	Stag-headed, several dead branches	2a	No
26	Ash	Two partially closed rot holes facing sky	2a	No
27	Ash	Rotten branches, loose bark, holes	2a	No
28	Ash	Large cavity and fissures south east aspect	2a	No
29	Ash	Many woodpecker holes north east aspect	2a	No
30	Pedunculate Oak	Two large rot holes facing skyward and north east aspect	2a	No
31	Ash group	Various features including rotten branches and rot holes	2a	No
32	Pedunculate Oak	Single rot hole north facing	2a	No
33	Poplar species	Fallen with rot hole	2a	No
34	Ash	Ivy cover possibly obscuring potential bat roost features	2b	No
35	Ash	Hollow trunk and several large splits	2a	No
36	Ash	Dead split large branches	2a	No
37	Ash	Ivy cover possibly obscuring potential bat roost features	2a	No
38	Ash	Limited areas of lifted bark with some woodpecker damage	2a	No
39	Horse Chestnut	Large upwards facing pruning wound 4m up, west aspect. Exposed heartwood with fissure 5 cm deep. Large upwards facing pruning	2b	No

Tree reference number	Species	Potential bat roost features (distance above ground and aspect)	Potential for roosting bats (Category 1, 2a, 2b, 3)	Evidence of roosting bats?
		wound 3m up west aspect. 15cm diameter, 15cm deep exposed heartwood.		
T40	Ash	Woodpecker hole 3cm deep.	C	No

Birds

- 3.42 The site provides suitable habitats for a range of common and widespread farmland birds including open arable fields, grassland, hedgerows and limited scrub.

4.0 DISCUSSION AND RECOMMENDATIONS**Statutory Designations**

- 4.1 No statutory nature conservation designations of international importance will be affected by proposed development.
- 4.2 The subject site is separated from Howe Park Wood SSSI by approximately 1.2km of residential and industrial development including the A421 Standing Way which is heavily used. It is designated for its semi-natural ancient woodland. The subject site supports no habitats for which the SSSI is designated and it is sufficiently remote from the application site to prevent significant impacts arising.

Non-statutory Designations

- 4.3 Two LWS are located in the vicinity of the site. Broadway and Thrift Wood LWS is separated from it by Whaddon Road and Bottle Dump Roundabout including Milton Keynes Wildlife Corridor woodland and wetland. Railway siding east of Salden Wood LWS is separated from the subject site by Whaddon Road. The subject site supports no habitats for which the above LWS are designated. Newton Longville Brickworks BNS is separated from the subject site by light industrial development and Bletchley Road, again the subject site supports no habitats for which this site is designated. Several linear features designated as wildlife corridor are also located close to the subject site. None of the above local designated sites will be affected by the proposed development of the subject site.

Habitats

- 4.4 Habitats within the subject site are considered to be of low ecological value, they do not meet the LWS criteria for Buckinghamshire and Milton Keynes due to the lack of biological and structural diversity resulting from intensive agricultural management.
- 4.5 The hedgerows, comprising 80% native species are considered a habitat of principle importance under the NERC Act 2006. Many of these features have been assessed as being of nature conservation priority owing to their good species and structural diversity as well as good connective features, particularly in the north of the site. Many of these features also meet the criteria for 'important' hedgerows under the Hedgerow Regulations 1997.
- 4.6 A good number of mature trees were identified (identified in Table 8 above) which, due to their age support features of greater value to wildlife and though they have no statutory protection should be retained where feasible within the proposals.
- 4.7 Under the National Planning Policy Framework (NPPF) development should seek to contribute a net gain in biodiversity where possible.

- 4.8 The hedgerows should be retained where feasible within the scheme and connectivity through the site and to off-site features such as wildlife corridors maintained. Where gaps occur in the hedgerow network new hedgerows should be created at the boundary of the proposed development to provide improve connectivity and corridors of movement for flora and fauna. New hedgerows should comprise a minimum of five native shrub species per 30m length, planted in a staggered double row formation.
- 4.9 Proposals for balancing facilities within the scheme should be enhanced with species-rich grassland banks and native marginal vegetation as appropriate, which on maturity will provide an enhancement for local biodiversity.
- 4.10 Proposed landscaping will include native species wherever feasible. Where use of native species is not possible species will be selected for their general value to wildlife including supply of nectar, fruit and nuts. Planting will also be designed to provide a variety of structure such as shrubs and standard trees, tussock and short grassland. Where feasible opportunities will be taken to provide habitat linkage and stepping stone habitats across the site

Protected and or notable species

- 4.11 Consideration was given throughout the survey to the potential presence of protected species. Principal pieces of legislation protecting wild species to be considered are Part 1 of the Wildlife and Countryside Act 1981(as amended) (WCA) and the Conservation of Habitats and Species Regulations 2010 (as amended) (Habitats Regulations). Some species, for example badgers, also have their own protective legislation (Protection of Badger Act 1992) and are also considered. The impact that this legislation has on the Planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their Impact within the Planning System.
- 4.12 This guidance states that as the presence of protected species is a material consideration in any planning decision, it is essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions for example.
- 4.13 In addition to protected species, those of principal importance for the purpose of conserving biodiversity under the NERC Act 2006 (previously UK BAP priority species) should also be considered. These are recognised in the NPPF which advises that when determining planning applications, LPA's should aim to conserve and enhance biodiversity by applying a set of principles including:
- *If significant harm resulting from a development cannot be avoided....., adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
 - *Development proposals where the primary objective is to conserve or enhance biodiversity should be encouraged.*
- 4.14 The implications that various identified species or those that are thought reasonably likely to occur may have for development of the site are outlined below:

Reptiles

- 4.15 The site offers limited sub-optimal potential for this group which has been recorded within the vicinity of the site. Presence/absence surveys have been undertaken in suitable habitats throughout the site and recommendations will be made once the data is obtained.

Great Crested Newt

- 4.16 No GCN or signs of the species were noted during the survey. Two ponds were noted on site and assessed as having poor to below average suitability to support this species. GCN have been recorded within one off-site pond close to the north site boundary.
- 4.17 Natural England guidance suggests that all ponds within 500m of proposed development, particularly where GCN have been recorded in the vicinity, should be subject to further surveys including HSI. Ponds with a poor HSI score can still support GCN particularly if suitable ponds are present nearby. It is therefore recommended that further aquatic surveys are undertaken on ponds P1 – 3 and P8 and P9 which are all within 500m of the subject site and have suitable connectivity to it. Ponds P5 – P7 and P10 – P18 are separated from the subject by barriers to dispersal. Former ponds within the subject site should be checked for suitability during the GCN breeding season and surveyed if considered suitable.
- 4.18 Surveys will require 4 visits to each pond between mid-March to mid-June with 2 visits mid-April to mid-May; should GCN be found a further 2 survey visits would be required with 3 visits mid-April to mid-May.
- 4.19 Detailed recommendation for GCN will be made once data from the above surveys is obtained.

Badgers

- 4.20 Badger activity has been noted within the site during previous surveys and suitable potential foraging and limited sett creation habitat is present.
- 4.21 Recommendations will be made following further surveys.

Bats

- 4.22 Hedgerows and mature trees provide suitable linear features for foraging and commuting bats and further activity surveys will be undertaken through April – September to assess levels of bat activity across the site.
- 4.23 No evidence of roosting bats was found during surveys of potential features. Many of the mature hedgerow trees possess features suitable for roosting bats and further inspection will be required if these features are to be affected by the proposed development.
- 4.24 Buildings B1 – B3 do not provide potential to support roosting bats and are therefore not a constraint to development.
- 4.25 Detailed recommendations will be made once data from the above activity surveys is obtained.

Birds

- 4.26 The site provides suitable habitats for a range of common and widespread farmland birds. Further surveys have been conducted and the results and recommendations included in a separate report.

5.0 SUMMARY

- 5.1 FPCR Environment and Design Ltd were commissioned by Hallam Land Management to undertake an ecological assessment of land at Salden Chase, Southwest Milton Keynes to assess the potential ecological implications of development at the site.
- 5.2 The subject site is located south west of Milton Keynes on the edge of residential development between Newton Longville and the A421 Standing Way and B4034 Buckingham Road.
- 5.3 The surrounding landscape comprises mixed arable and pasture and residential development.
- 5.4 The following report was preceded by a detailed ecological assessment report undertaken for a larger site area by Aspect Ecology and submitted as an outline planning application in 2010.
- 5.5 The site comprises intensively managed arable and grassland fields divided by native hedgerows with mature trees, many of which have been assessed as being of nature conservation priority and are also 'Important' under the Hedgerow Regulations 1997.
- 5.6 A single SSSI Howe Park Wood is within the vicinity of the site and potential affects to it arising from increased recreation activity will be considered once the masterplan has been produced.
- 5.7 No non-statutory sites will be affected by the proposed development.
- 5.8 With the exception of hedgerows habitats within the site were considered to be of low ecological value and their loss is not considered to present a constraint to development.
- 5.9 Hedgerows and mature trees detailed in Table 8 should be retained where feasible within the proposals and new native hedgerows created where gaps exist. Wet / Dry balancing features should be enhanced for the benefit of wildlife. Landscape proposals should use native species and where this is not feasible species should be chosen which produce fruit, nuts and nectar to benefit wildlife.
- 5.10 The site provides some suitability for GCN, badgers, bats and birds and limited suitability for reptiles. Further species specific surveys are scheduled and detailed recommendations will follow this work.
- 5.11 A number of mature trees are noted within the site with potential bat roost features and further inspection will be required if these features are to be affected by the proposed development.