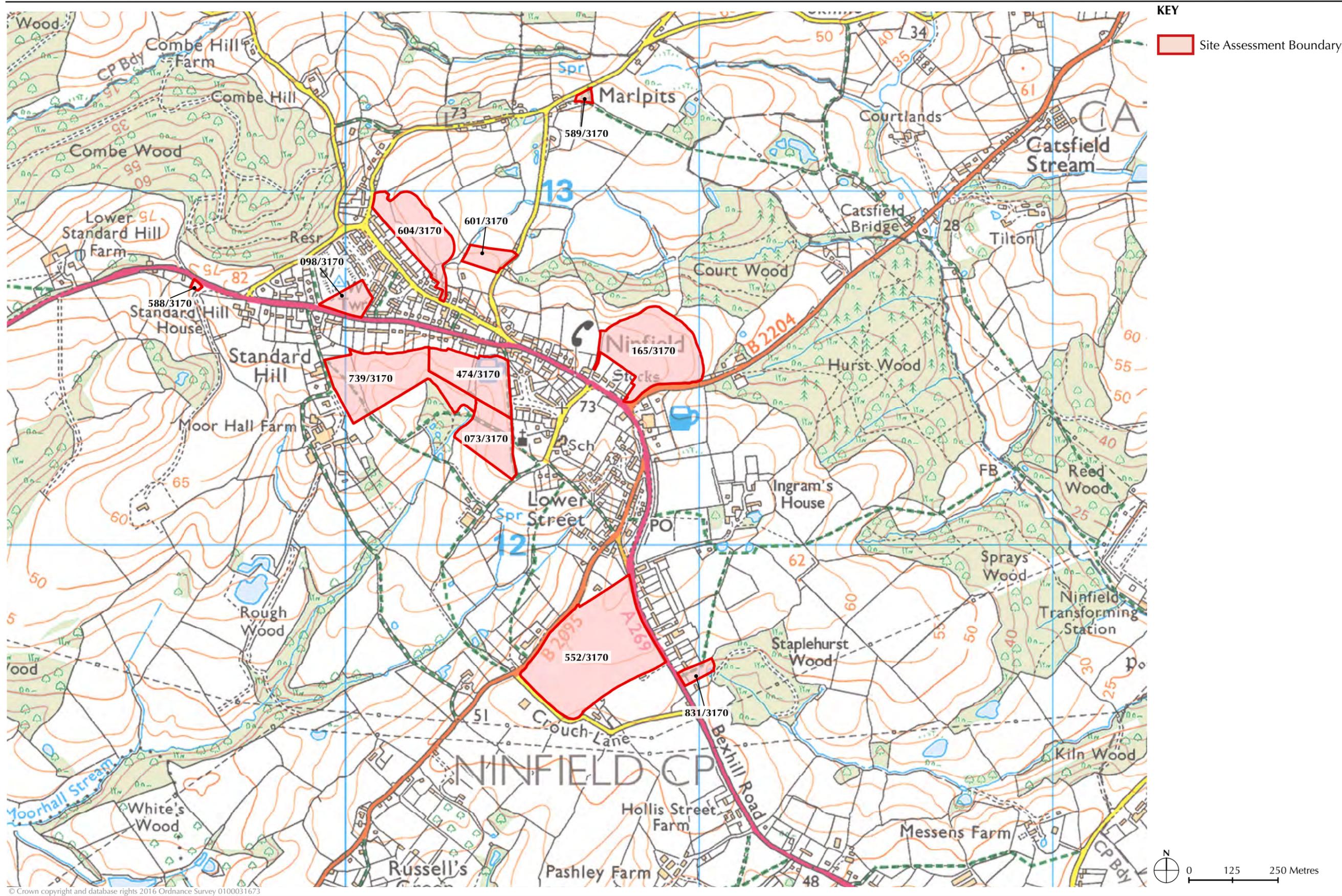
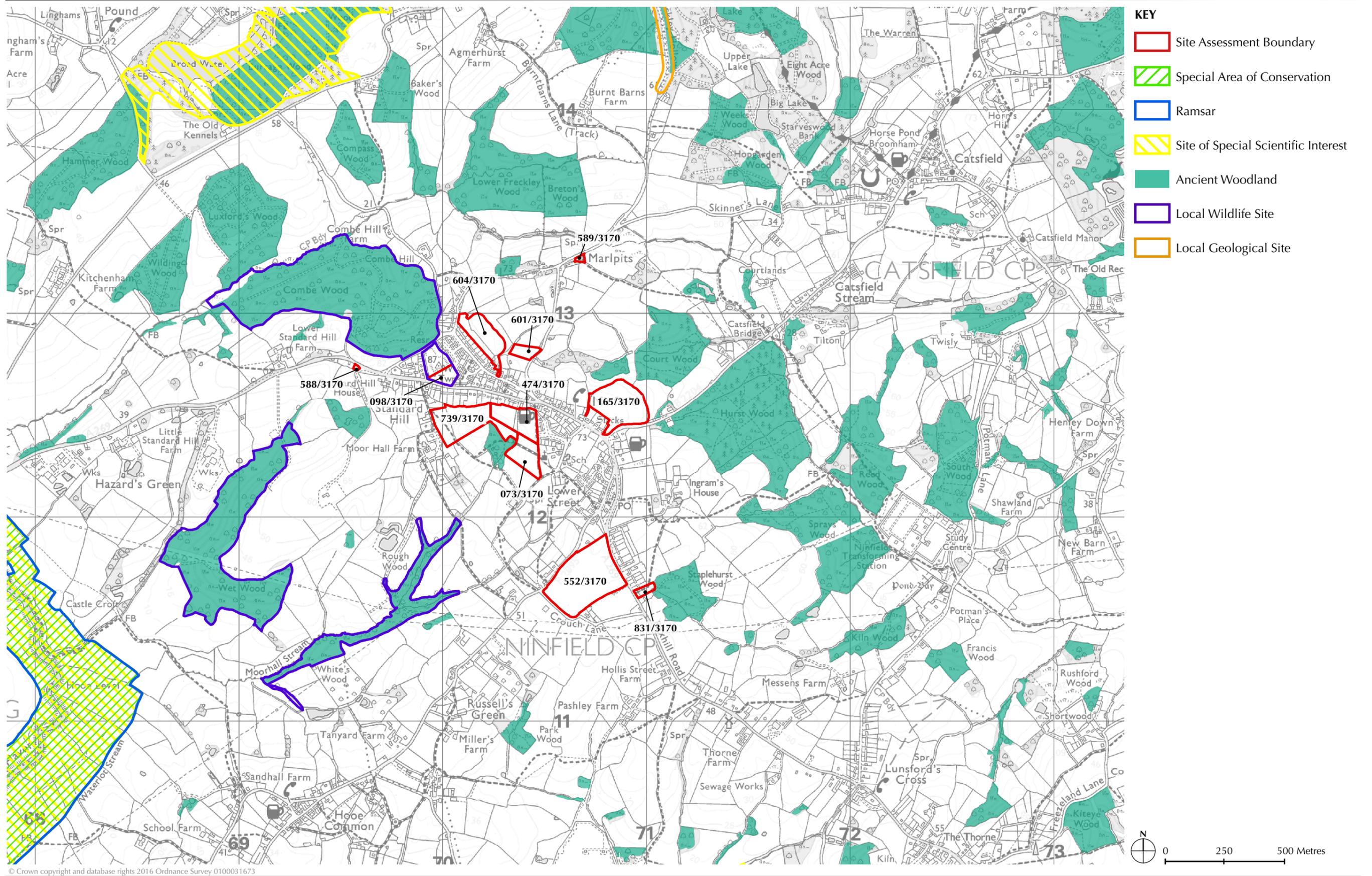


16.0 NINFIELD SITES





ECOLOGICAL ASSESSMENT	
Area:	Ninfield
Site Name:	Land at Church Barn Farm, Ninfield
Site Reference Number:	073/3170
Site Summary Description	
A 2.07ha area of species poor grassland subdivided by fences. There is a short section of species-rich hedge with trees on the northern part of the western boundary of the Site.	
Green Infrastructure Context (see Figure 19.1)	
ECOLOGICAL BASELINE	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site is located on the southern fringes of Ninfield To the north is a grassland field, beyond which is the Ninfield itself. To the east is Ninfield church and churchyard. Church Wood Ancient Woodland adjoins the Site to the west and to the south is open country of fields with hedges and woodland.	
Desk Study : Designated Sites within 1km (See Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland overdifferent soil compositions including peat. Notable botanical interest.”</i> • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. 	<ul style="list-style-type: none"> • 400m NW • 620m NW • 520m SSW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Un-named • Ancient & semi-natural woodland – Hurst Wood • Ancient & semi-natural woodland – Staplehurst Wood • Ancient & semi-natural woodland – Un-named 	<ul style="list-style-type: none"> • Adjacent West • 420m NE • 600m NW • 720m West • 580m NE • 470m SSW • 580m ENE • 770m N • 660m East • 830m SE • 900m SW

Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

<i>Triturus cristatus</i>	Great crested newt
Chiroptera	unidentified bat species
<i>Pipistrellus</i> sp.	Pipistrelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat
<i>Plecotus auritus</i>	Brown long-eared bat
<i>Plecotus</i> sp.	Long-eared bat species

Sussex Rare Species

<i>Misopates orontium</i>	Weasel's-snout
<i>Mespilus germanica</i>	Medlar
<i>Metriopectera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Tyria jacobaeae</i>	Cinnabar

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey Heron
<i>Hirundo rustica</i>	Swallow
<i>Delichon urbicum</i>	House Martin

Invasive Alien Species Inventory

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Crassula helmsii</i>	New Zealand Pigmyweed
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Fallopia japonica</i>	Japanese knotweed
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron</i> sp.	Rhododendron

Field Survey: Habitat Descriptions (See Figure 19/073)

Poor semi-improved grassland – subdivided by fences and appears to be subject to different management. A large part is grazed by horses, part has been recently cut and a small part in the east is regularly mown and used as a Certified Location caravan site. However, despite the differences in management, variation in sward structure and species composition is limited. The sward varies from very short to moderate (<5 – approx.. 15cm) and is species poor throughout. It is dominated by Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris*, but perennial rye-grass *Lolium perenne* and cocksfoot *Dactylis glomerata* are frequent and common couch *Elytrigia repens* locally abundant. Forb content is low, 10% or less, with only occasional creeping and meadow buttercup *Ranunculus repens* and *acris*, red and white clover *Trifolium pratense* and *repens*, common sorrel *Rumex acetosa*, lesser stitchwort *Stellaria graminea*, plantains *Plantago* spp. and greater bird's foot trefoil *Lotus pedunculatus*. Docks, nettle and common ragwort are also occasional, particularly in the most northerly section.

Species-rich hedge with trees – the northern part of the western boundary with mature oaks, hazel and grey willow *Salix cinerea*. This merges with Church Wood Ancient Woodland to the south, which forms the rest of the western boundary of the field. Probably due to its proximity to the wood the hedge has a moderately species-rich field layer including a range of woodland species, including male and broad buckler ferns *Dryopteris felix-mas* and *dilatata*, pendulous sedge *Carex pendula*, enchanters nightshade *Circea lutetiana* and tutsan *Hypericum androseanum*.

Field Survey: Protected and Notable Species
Grass snake at TN1 .
Field Survey: Invasive Non-native Species
No invasive non-native species recorded within the Site.
Assessment of Potential for Protected and Notable Species
<p>Great crested newts – There are no ponds within the Site. However, there are ponds in Church Wood approximately 100m to the south west of the Site. However, there is currently relatively little suitable habitat for great crested newts within the Site, apart from the hedge and hedge/woodland edge and any great crested newts that may be present are likely to be limited to this area.</p> <p>Reptiles – confirmed present (grass snake) along western boundary. Based on the current management and condition of the Site any reptiles present are likely to be limited the more structurally diverse grassland on the western boundary.</p> <p>Breeding birds – In hedge and woodland edge.</p> <p>Bats – Trees and mature trees in particular, with features such as cracks and cavities, for example in the hedge and woodland edge, have potential to be used as roosts. Activity throughout but especially along hedge and woodland edge.</p> <p>Dormice – Moderate potential in hedge and adjoining woodland. Hedge forms dead end but there is connectivity especially to the south/south west.</p> <p>Badgers – Potential for setts within the hedge and adjoining woodland, but with or without setts badgers may also use any part of the Site for foraging. However, neither setts nor foraging signs are recorded during the survey.</p>
Recommendations for Further Survey (and optimal survey timings)
<p>Amphibian (including great crested newt) – (March – June) of the ponds in Church wood.</p> <p>Reptiles – (May – June, September – October) in suitable habitat if present.</p> <p>Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.</p> <p>Dormice – (April – November) – in suitable habitat.</p> <p>Badgers – (Year round but Spring / Autumn optimal) – of whole site.</p>
INDICATIVE ECOLOGICAL APPRAISAL
<p>Low value – species poor and quite structurally homogenous grassland. The hedge, including mature trees, on part of the western boundary has value.</p> <p>The Sites location, adjacent to Church Wood Ancient Woodland increases its value and sensitivity.</p> <p>The Site has low to moderate potential to support notable/protected species.</p>
Impact Avoidance
<p>In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:</p> <ul style="list-style-type: none"> • Buffering Church Wood Ancient Woodland. • Retaining and buffering the hedges and mature trees and their features. • As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Timing of vegetation clearance works to avoid the bird breeding season (March – August inclusive).
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents;
- On-site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- If great crested newts are found to be present in the ponds in Curch Wood, measures should be put in place to prevent harming or killing them, including for example the erection of herptile fencing to exclude them from work areas, and possibly trapping and translocation to suitable receptor areas elsewhere.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedge and woodland.
- Development should avoid construction works within at least 30m of the nearest badger setts and seek to avoid prime foraging grounds identified through the badger survey and severance of commuting corridors within territories.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedge and mature trees.
- Strengthen boundary vegetation by planting appropriate native species, for example on the northern and southern boundaries.
- Habitat creation, ideally located adjacent to retained or adjoining habitat, for example adjacent to the woodland and/or hedge on the western boundary, or to form habitat corridors or links. To include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into

buildings where they will remain unlit.

- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Incorporate features to SuDS scheme(s), such as the use of native wetland plant species, to enhance their value.

ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Ninfield Reservoir Adjoining the High Street, Ninfield
Site Reference Number:	098/3170
Site Summary Description	
An area of frequently mown rather species-poor grassland beside Ninfield Reservoir with a hedge on one boundary and scattered trees. Forms a part of Ninfield Reservoir LWS.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south west a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensey Levels. The Site is situated towards the western end of Ninfield, bordered to the south by the A269, east and west by residential development. The covered reservoir lies immediately to the north.	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. • Long Wood and Wet Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of hornbeam coppice and wet wood and hornbeam coppice, alder and willow with sedge ground flora”</i>. 	<ul style="list-style-type: none"> • Within Site • 150m NW • 660m South • 690m WSW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – un-named • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – un-named • Ancient & semi-natural woodland – un-named • Ancient & semi-natural woodland – Hurst Shaw 	<ul style="list-style-type: none"> • 130m NW • 260m South • 330m WSW • 480m N • 600m SSW • 650m E • 660m West • 730m N • 870m ENE • 880m SW • 930m NE • 990m East

Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

<i>Chiroptera</i>	unidentified bat species
<i>Pipistrellus</i> sp.	Pipistelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat

Sussex Rare Species

<i>Misopates orontium</i>	Weasel's-snout
<i>Mespilus germanica</i>	Medlar
<i>Metriopectera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Tyria jacobaeae</i>	Cinnabar

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey Heron
<i>Hirundo rustica</i>	Swallow
<i>Delichon urbicum</i>	House Martin

Invasive Alien Species Inventory

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Crassula helmsii</i>	New Zealand Pigmyweed
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Crocsmia aurea</i>	Montbretia
<i>Fallopia japonica</i>	Japanese knotweed
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron</i> sp.	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/098)

Poor semi-improved grassland – mown monthly and comprising a rather coarse and species-poor sward dominated by a small number of grass species, of which cocksfoot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris* are the most abundant but in which false oat-grass *Arrhenatherum elatius* and tall fescue *Schedonorus arundinaceus* are occasional. Forb content is generally low though a number of species, including field buttercup *Ranunculus acris*, common sorrel *Rumex acetosa*, ribwort plantain *Plantago lanceolata*, hogweed *Heracleum sphodyllium*, dandelion *Taraxacum officinale* agg. and common knapweed *Centaurea nigra* are frequent. A number of other species, including bird's foot trefoil *Lotus corniculatus*, red and white clover *Trifolium pratense* and *repens*, cinquefoil and silverweed *Potentilla reptans* and *anserina*, germander speedwell *Veronica chamaedrys*, cat's ear *Hypochaeris radicata* and common ragwort are occasional.

Species-rich hedge – on the southern boundary this hedge is regularly cut and comprises hazel, holly, hawthorn, rose, ash and honeysuckle.

Scattered trees – including mature pines and a beech beside the southern boundary and a line of mature birches, on part of the eastern boundary.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. And it appears from OS maps that the nearest pond is in Church Wood, at least 300m from the Site on the far side of a busy road and residential areas. There is little or no suitable terrestrial habitat for great crested newts within the Site and it is considered there is a very low probability of great crested newts being present.

Breeding birds – in hedges and trees.

Bats – Trees and mature trees in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is possible throughout, but especially in and around the trees and along the hedge.

Dormice – very low potential in hedge.

Badgers – very low potential in hedge, but may also use the Site foraging. No signs recorded.

Recommendations for Further Survey (and optimal survey timings)

Bats – (inspections: year round) in the first instance inspection of trees to determine the scope for further survey.

INDICATIVE ECOLOGICAL APPRAISAL

Low value – a small relatively species poor grassland, although the hedge and trees have some value. The habitats and features present have some potential to support some protected species. Although forming part of a LWS designated for its species-rich grassland, this appears to be associated with the reservoirs themselves, and the grassland within the Site is, as noted, relatively species poor.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining hedge and mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

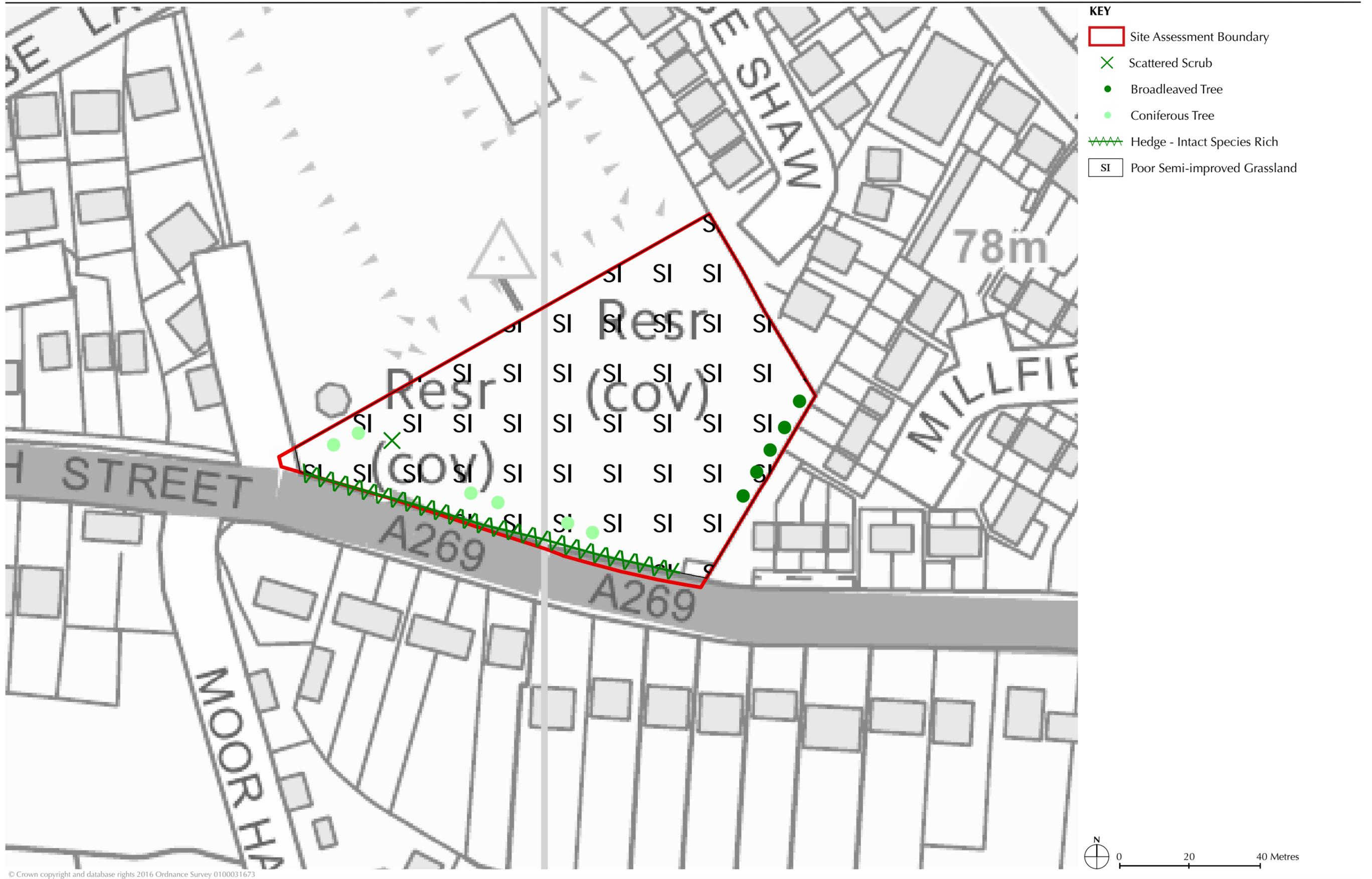
- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents;
- On-site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer hedge and mature trees and their features.

- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including the hedges and mature trees.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen site boundary vegetation, for example where it adjoins residential properties, the A269 and to delineate the operational area of the covered reservoir, to link to adjoining habitat and incorporating retained trees where relevant.
- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings;
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



- KEY**
- Site Assessment Boundary
 - X Scattered Scrub
 - Broadleaved Tree
 - Coniferous Tree
 - ⚡ Hedge - Intact Species Rich
 - SI Poor Semi-improved Grassland

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ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Land at Rear of Ninfield Road, Ninfield
Site Reference Number:	165/3170
Site Summary Description	
<p>A 4.85ha moderately large rather species-poor grassland field enclosed by a hedge, a section of which includes mature trees. There is a grassy access track between double hedges on the western boundary. There was also tall ruderal and bracken beside the hedges and small stands of bramble and scattered scrub. The Site is less than 50m from an Ancient Woodland (Court Wood) to the north.</p>	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
<p>The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south west a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensey Levels. The Site lies towards the eastern end of Ninfield, bordered to the south by residential development and the B2204, and to the north by Court Wood Ancient Woodland.</p>	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. 	<ul style="list-style-type: none"> • 650m WNW • 790m NW • 890m SW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Hurst Wood • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland – Staplehurst Wood 	<ul style="list-style-type: none"> • 35m East • 35m North • 35m North • 110m East • 340m WSW • 520m NNE • 690m NW • 780m West • 790m SSW • 820m NW • 840m SSE

Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

<i>Triturus cristatus</i>	Great crested newt
Chiroptera	unidentified bat species
<i>Pipistrellus</i> sp.	Pipistrelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat
<i>Plecotus auritus</i>	Brown long-eared bat
<i>Plecotus</i> sp.	Long-eared bat species

Sussex Rare Species

<i>Misopates orontium</i>	Weasel's-snout
<i>Mespilus germanica</i>	Medlar
<i>Metriopectera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Pyrgus malvae</i>	Grizzled Skipper
<i>Coenonympha pamphilus</i>	Small Heath
<i>Tyria jacobaeae</i>	Cinnabar

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey Heron
<i>Hirundo rustica</i>	Swallow
<i>Delichon urbicum</i>	House Martin

Invasive Alien Species Inventory

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Crassula helmsii</i>	New Zealand Pigmyweed
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Fallopia japonica</i>	Japanese knotweed
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron</i> sp.	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/165)

Poor semi-improved grassland – Tall and uncut at the time of the survey. Somewhat variable in structure and species composition. Taller parts are species-poor with low forb content. Shorter areas support a somewhat richer sward. Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and sweet vernal-grass *Anthoxanthum odoratum* are the most abundant and frequent grasses. Forbs include frequent field and creeping buttercup *Ranunculus acris* and *repens*, red and white clover *Trifolium pratense* and *repens*, and bird's foot trefoil *Lotus corniculatus* and greater bird's foot trefoil *Lotus pedunculatus*, as well as occasional self-heal *Prunella vulgaris*, black medick *Medicago lupulina* and cat's ear *Hypochaeris radicata*. A fenced off section in the south of the Site appears not to have been managed for some time, based on sward structure and the presence of scattered and dense scrub.

The access track on the western boundary of the Site comprises species-poor grassland dominated by bulky grasses such as false oat-grass *Arrhenatherum elatius*.

Tall ruderal and bracken – Patchily present as a generally narrow strip beside the hedges.

Hedges – Mostly species-rich, with holly, hazel, blackthorn, hawthorn, ash and oak. A section of hedge, on top of the bank above the B2204/Catsfield Road also includes mature trees of oak, ash and hornbeam. This bank now comprises a narrow woodland strip. There are short sections of species-poor hedge, for example of hawthorn and developing sycamore in the south of the Site and on the boundary with an

adjoining garden.

Scrub – There are small stands of bramble and scattered scrub in the southern part of the Site.

Field Survey: Protected and Notable Species

Grass snake at TN1

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of a pond just over 100m to the east of the Site. There are also records of great crested newts from near Ingram’s House, approximately 400m south of the Site. Habitats within the Site, including hedges, woodland, scrub and unmanaged grassland represent suitable terrestrial habitat for great crested newts.

Reptiles – Confirmed present (grass snake). Potential alongside hedges and among unmanaged grassland in the south of the Site.

Breeding birds – Especially hedges and woodland, though the field may also be suitable for ground nesting species such as skylark.

Wintering birds – The size of the field may make it suitable, for example, to wintering lapwing.

Bats – Trees and mature trees in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially in and around woodland and trees, scrub and hedges.

Dormice – High potential potential in woodland, scrub and hedges.

Badgers – Potential for setts within the woodland, scrub and hedgerows, but with or without setts badgers may also use any or the entire site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the pond to the east of the Site.

Reptiles – (May – June, September – October) in suitable habitat along boundaries and the southern part of the Site.

Breeding birds – (April – June) especially woodland, scrub, and hedges.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Moderate value – a relatively large grassland field with some diversity and species rich hedges including mature trees. The habitats and features present have potential to support notable/protected species. Also close to Ancient Woodland.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedges and woodland, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer the hedges and woodland, including the mature trees and their features
- If great crested newts are found in the pond to the east of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development site and possibly trapping and translocation to a suitable receptor site.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows, as well as disturbance of areas of arable, grassland or ruderal, should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation/areas should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges and woodland (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

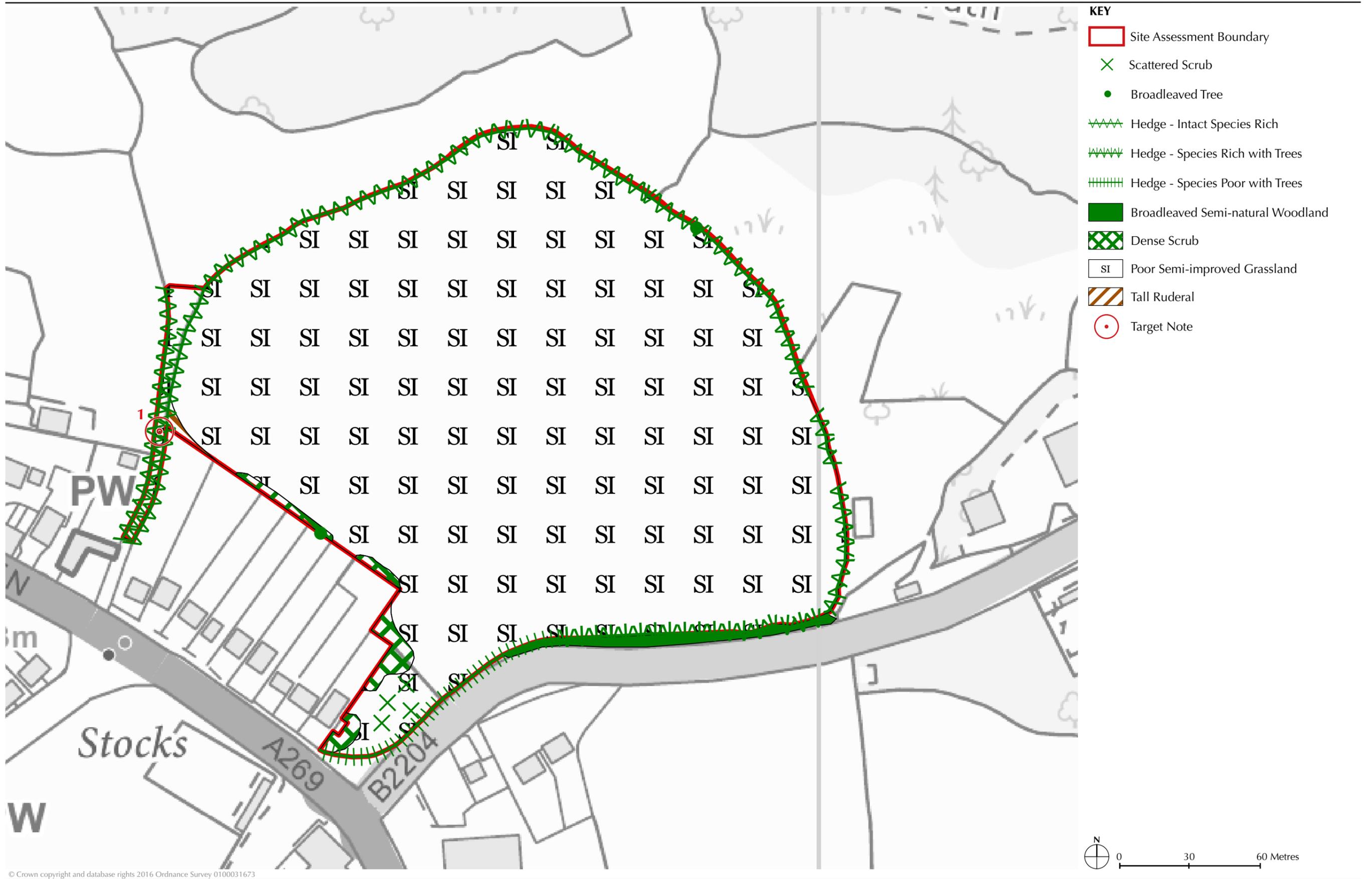
Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including woodland, scrub, hedges, mature trees and grassland.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen site boundary vegetation, for example where it adjoins residential properties, the B2204 and boundaries with the

ancient woodland to the north, to link to adjoining habitat, and incorporating retained trees where relevant.

- Habitat creation, ideally located adjacent to retained or adjoining habitat (such as Court Wood Ancient Woodland) or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit;
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings;
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



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ECOLOGICAL ASSESSMENT	
Settlement Area:	Ninfield
Site Address:	Land Adjoining Downs View, Ninfield
Site Reference Number:	474/3170
Site Description	
Two rather species poor fields separated by a species rich hedge with mature oak trees totalling 2.61ha. The fields also include stands of tall ruderal as well as scattered and dense scrub on their boundaries	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site is located on the southern fringes of Ninfield, bordered to the north and east by residential development. Pasture lies to the west and south of the Site, with Church Wood Ancient Woodland lying less than 50m from the southern boundary.	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. • Long Wood and Wet Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of hornbeam coppice and wet wood and hornbeam coppice, alder and willow with sedge ground flora”</i>. 	<ul style="list-style-type: none"> • 210m NW • 420m NW • 530m SSW • 940m West
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Hurst Wood • Ancient & semi-natural woodland – Staplehurst Wood • Ancient & semi-natural woodland 	<ul style="list-style-type: none"> • <50m South • 330m NE • 410m NW • 480m West • 510m ENE • 530m SSW • 580m East • 630m N • 660m East • 880m SE • 880m SW

<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods 	<ul style="list-style-type: none"> • 900m West • 930m NE • 960m N
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Desk Study: Protected and Notable Species within 1km

Protected Species Inventory	
Triturus cristatus	Great crested newt
Chiroptera	unidentified bat species
Pipistrellus sp.	Pipistelle species bat
Pipistrellus pipistrellus	Common pipistrelle bat
Myotis daubentonii	Daubentons bat
Nyctalus noctula	Noctule Bat
Plecotus auritus	Brown long-eared bat
Plecotus sp.	Long-eared bat species
Sussex Rare Species	
Misopates orontium	Weasel's-snout
Mespilus germanica	Medlar
Metrioptera roeselii	Roesel's Bush-cricket
Conocephalus fuscus	Long-winged Cone-head
Coenonympha pamphilus	Small Heath
Tyria jacobaeae	Cinnabar
Notable Bird Inventory	
Ardea cinerea	Grey Heron
Hirundo rustica	Swallow
Delichon urbicum	House Martin
Invasive Alien Species Inventory	
Cameraria ohridella	Horse Chestnut Leaf-miner
Myriophyllum aquaticum	Parrot's-feather
Crassula helmsii	New Zealand Pigmyweed
Cotoneaster horizontalis	Wall cotoneaster
Fallopia japonica	Japanese knotweed
Impatiens glandulifera	Indian balsam
Petasites fragrans	Winter Heliotrope
Prunus laurocerasus	Cherry Laurel
Rhododendron sp.	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/474)

Poor semi-improved grassland –Both fields are unmanaged at the time of the survey with tall and in parts coarse swards. In both fields Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and sweet vernal-grass *Anthoxanthum odoratum* are the most abundant and frequent grasses, although in the eastern field common couch *Elytrigia repens* is locally abundant, Timothy *Phleum pratense* frequent and red fescue *Festuca rubra* occasional. Forb content is low but included occasional greater bird's foot trefoil *Lotus pedunculatus*, common vetch *Vicia sativa* and cut-leaved cranesbill *Geranium dissectum* (both frequent in the western field), common sorrel *Rumex acetosa* (more frequent in the eastern field) and ribwort plantain *Plantago lanceolata* (especially the western field). Ragwort is present throughout but especially abundant in the western field and docks and hogweed *Heracleum sphodyllium* occasional.

Tall ruderal – There are quite extensive areas of tall ruderal vegetation, comprising nettle, docks, hogweed, bramble etc. especially along the northern boundaries of the fields, on the eastern side of the hedge and on a bank at the southern end of the eastern field.

Hedge – Between the two fields is species rich with hazel, holly, willows, and mature oak trees. There are some gaps in the northern part.

Scrub – Stands of bramble and scrub, including developing ash trees and willows along fence lines, especially the western and southern boundary of the western field.
Scattered trees – There are a number of mature oak trees on or close to the northern boundary of the western field.

Field Survey: Notable and Protected Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Notable and Protected Species

Great crested newts – There are no ponds within the Site. However, there are ponds in Church Wood approximately 100m to the south west of the Site. Currently the whole Site, but especially the hedge and boundary vegetation represent suitable habitat for great crested newts.
Reptiles – Potential throughout Site and grass snake recorded less than 50m to the south.
Breeding birds – especially hedges and trees.
Bats – Trees and mature trees in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially in and around woodland and trees, scrub and hedges.
Dormice – High potential in hedge, especially given connection to woodland.
Badgers – Potential for setts within the woodland, scrub and hedgerows, but with or without setts badgers may also use any or the entire site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds in Church Wood.
Reptiles – (May – June, September – October) throughout the Site.
Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.
Dormice – (April – November) in hedge.
Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – rather species poor grassland but the hedge and mature trees are of value and the habitats and features present have potential to support notable/protected species. Also close to Ancient Woodland.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedge, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents;
- On-site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer the hedge, including the mature trees and their features.
- If great crested newts are found in the ponds in Church Wood appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development site and possibly trapping and translocation to a suitable receptor site.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedge (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

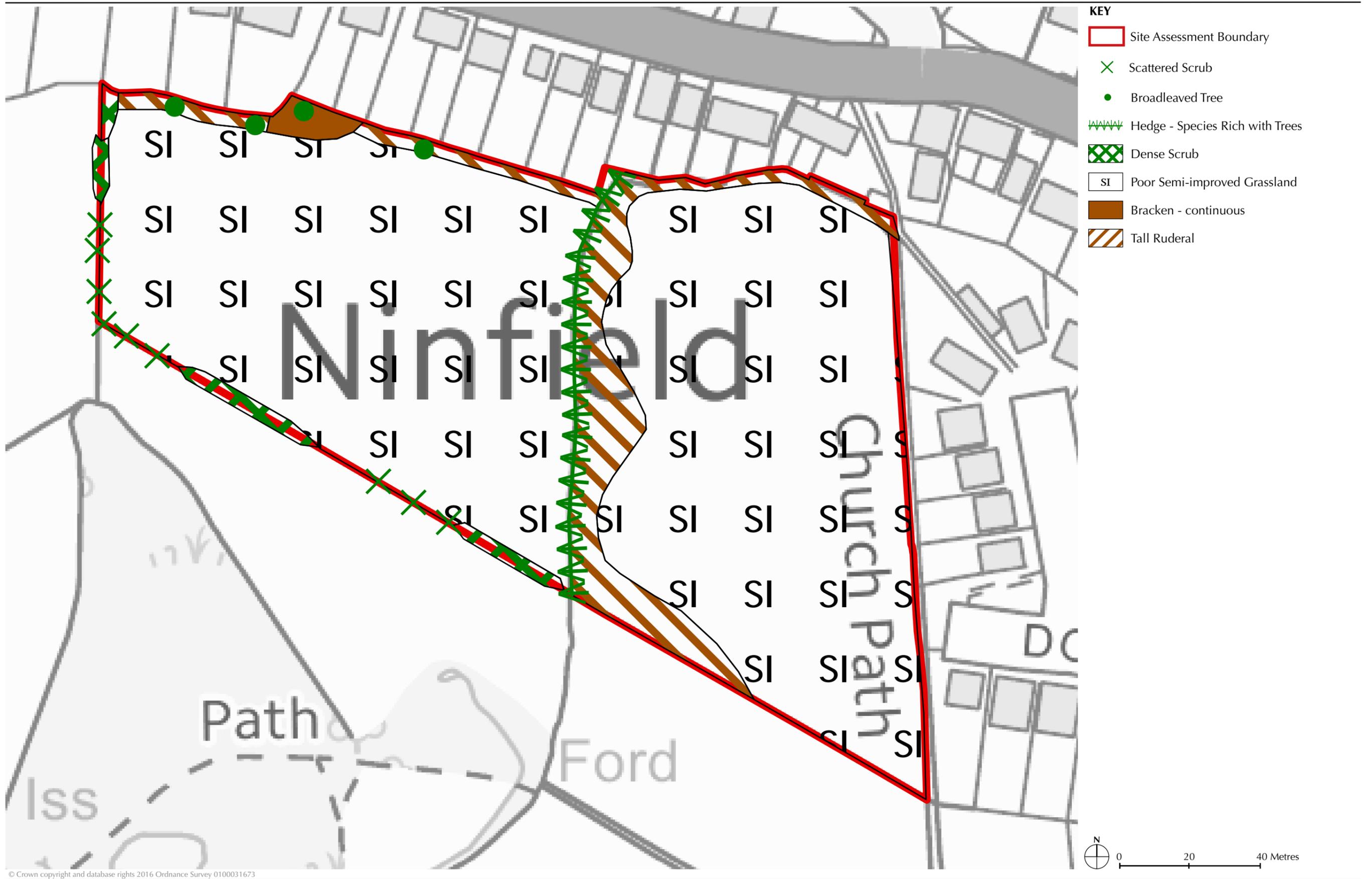
Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including woodland, scrub, hedges and mature trees.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen site boundary vegetation, for example where it adjoins residential properties and to link to adjoining habitat, and incorporating retained trees where relevant.
- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors

or links, to include for example:

- Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit;
 - Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings;
 - Implementation of good management practices for retained habitats, notably hedgerow and tree management.



- KEY**
- Site Assessment Boundary
 - X Scattered Scrub
 - Broadleaved Tree
 - ~ Hedge - Species Rich with Trees
 - Dense Scrub
 - SI Poor Semi-improved Grassland
 - Bracken - continuous
 - Tall Ruderal

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ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Crouch Field, Bexhill Road, Ninfield
Site Reference Number:	552/3170
Site Summary Description	
An 8.62ha, relatively large arable field with grassy field margins and enclosed on all sides by hedges, including sections with mature trees.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
<p>The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site lies on the southern fringes of Ninfield, bordered in the main on three sides by the A269, Lower Street and Crouch Lane. The Site also borders a number of residential properties but is, in large part, connected to the open countryside to the south with large arable fields and small woodlands.</p>	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: “Woodland complex on steep sided stream valley with ancient woodland ground flora”. 	<ul style="list-style-type: none"> 410m West
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> Ancient & semi-natural woodland – Staplehurst Wood Ancient & semi-natural woodland – Rough Wood Ancient & semi-natural woodland – Park Wood Ancient & semi-natural woodland – Church Wood Ancient & semi-natural woodland Ancient & semi-natural woodland – Hurst Shaw Ancient & semi-natural woodland – Hurst Wood Ancient & semi-natural woodland – Sprays Wood Ancient & semi-natural woodland – Court Wood ext. Ancient & semi-natural woodland – Court Wood Ancient & semi-natural woodland 	<ul style="list-style-type: none"> 140m East 420m West 470m SSW 550m NW 580m SE 610m NNE 630m NE 640m ENE 750m North 770m North 790m South
Desk Study: Protected and Notable Species within 1km	
Protected Species Inventory	
<i>Triturus cristatus</i>	Great crested newt
<i>Zootoca vivipara</i>	Common Lizard
<i>Anguis fragilis</i>	Slow-worm
<i>Natrix natrix</i>	Grass snake
<i>Muscardinus avellanarius</i>	Hazel Dormouse
<i>Chiroptera</i>	unidentified bat species

<i>Pipistrellus</i> sp. <i>Pipistrellus pipistrellus</i> <i>Myotis daubentonii</i> <i>Nyctalus noctula</i> <i>Plecotus auritus</i> <i>Plecotus</i> sp.	Pipistelle species bat Common pipistrelle bat Daubentons bat Noctule Bat Brown long-eared bat Long-eared bat species
Sussex Rare Species <i>Misopates orontium</i> <i>Mespilus germanica</i> <i>Euphorbia platyphyllos</i> <i>Coenonympha pamphilus</i> <i>Tyria jacobaeae</i>	Weasel's-snout Medlar Broad-leaved Spurge Small Heath Cinnabar
Notable Bird Inventory <i>Tyto alba</i>	Barn Owl
Invasive Alien Species Inventory <i>Cameraria ohridella</i> <i>Fallopia japonica</i>	Horse Chestnut Leaf-miner Japanese knotweed
Field Survey: Habitat Descriptions (see Figure 19/552)	
<p>Arable – The vast majority of the Site comprises intensive arable. The weed flora is very limited in extent, being confined to areas of poor crop development on the edges of the field and is limited to a small number of common and widespread species, including annual meadow-grass <i>Poa annua</i>, black grass <i>Alopecurus myosuroides</i>, spear-leaved orache <i>Atriplex prostrata</i>, scarlet pimpernel <i>Anagallis arvensis</i> and wild radish <i>Raphanus raphanistrum</i>.</p> <p>Poor semi-improved grassland and tall ruderal – The field margins are approximately five metres wide and comprise species-poor grassland, tall ruderal and patchy bracken.</p> <p>Hedges – Most of the hedges are species-rich, with hazel, holly, hawthorn, blackthorn, field maple, ash, rose and rarely spindle. Sections also include mature trees, largely oak and ash. The hedge adjoining the A269/Bexhill Road is less rich, comprising privet <i>Ligustrum ovalifolium</i> and hawthorn, with small amounts of holly, hazel and sycamore. There is a further species poor section, comprising largely of privet, beside adjacent residential properties in the south of the Site.</p>	
Field Survey: Protected and Notable Species	
No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.	
Field Survey: Invasive Non-native Species	
No non-native invasive species recorded during the survey.	
Assessment of Potential for Protected and Notable Species	
<p>Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of ponds approximately 150m to the north of the north western corner of the Site. However, these lie on the far side of the B2095 and suitable terrestrial habitat for great crested newts within the Site, largely the hedges and field margins, is limited. There are records of great crested newts from among residential properties on the eastern (other) side of the A269 Bexhill Road, approximately 35m to the east of the Site, as well as from near Ingrams House, approximately 300m north east. However, the A269 would act as a significant barrier to dispersal for great crested newts from this direction. The probability of great crested newts being present within the Site is therefore considered to be relatively low.</p> <p>Reptiles – potential alongside hedges/field margins.</p>	

Breeding birds – especially hedges, though the field may also be suitable for ground nesting species such as skylark.

Wintering birds – the size of the field may make it suitable for, for example, wintering lapwing

Bats – Trees and mature trees in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially in the hedges.

Dormice – some potential in hedges.

Badgers – Potential for setts within the hedgerows, but with or without setts badgers may also use any or the entire Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the north of the Site and among residential to the east.

Reptiles – (May – June, September – October) in suitable habitat along field margins.

Breeding birds - (April – June) of whole site.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in hedges.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the main value lies in the hedges, including their mature trees. The arable is of relatively low value. The habitats and features present have some potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedges, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer the hedges, including the mature trees and their features.
- If great crested newts are found in the ponds north or east of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the

development Site and possibly trapping and translocation to a suitable receptor site.

- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows, as well as disturbance of areas of arable, grassland or ruderal, should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation/areas should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedges and mature trees.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen Site boundary vegetation, for example where it adjoins residential properties and to link to adjoining habitat, and incorporating retained trees where relevant.
- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit;
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings;
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Land at Standard Hill Yard North, Ninfield
Site Reference Number:	588/3170
Site Summary Description	
A small yard used to store materials and machinery, bare in the centre, ephemeral/short perennial grading to tall ruderal around the edges totalling 0.06ha. Two of the boundaries have species-poor non-native hedges and the other two dense scrub.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensey Levels. The Site is located on the western fringes of Ninfield on the south side of the A269. Small blocks of trees and residential properties are to the east and west, while the southern boundary of the Site opens onto hedge-lined fields and small woods, with larger arable fields beyond.	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. • Long Wood and Wet Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of hornbeam coppice and wet wood and hornbeam coppice, alder and willow with sedge ground flora”</i>. 	<ul style="list-style-type: none"> • 320m East • 70m North • 780m SSE • 410m WSW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Luxfords Wood • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Wilding Wood • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland – Hurst Shaw 	<ul style="list-style-type: none"> • 70m North • 180m WSW • 280m South • 650m NW • 690m South • 780m South • 800m NE • 840m West • 890m WNW • 910m N • 990m East

Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

<i>Chiroptera</i>	unidentified bat species
<i>Pipistrellus sp.</i>	Pipistrelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat

Sussex Rare Species

<i>Metrioptera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Tyria jacobaeae</i>	Cinnabar

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey Heron
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Invasive Alien Species Inventory

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Crocsmia aurea</i>	Montbretia
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron sp.</i>	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/588)

Ephemeral/short perennial – Including scattered grasses, and a range of annual and perennial species such as broad-leaved willowherb *Epilobium montanum*, sowthistles *Sonchus* spp., black nightshade *Solanum nigrum*, pearlwort *Sagina* sp., scarlet pimpernel *Anagallis arvensis*, field forget-me-not *Myosotis arvensis*, dandelion *Taraxacum officinalis* agg., hedge garlic *Alliaria petiolata*, herb Robert *Geranium robertianum*, greater plantain *Plantago major*, bristly ox-tongue *Picris echioides* and nipplewort *Lapsana communis*. Grading to bare ground and tall ruderal.

Tall ruderal – Including nettle, docks, thistles and bulky grasses such as false oat-grass *Arrhenatherum elatius*.

Dense scrub – On the southern and western boundaries, including holly, hazel, ivy and bramble.

Species poor hedge – Of non-native cypress on the northern and western boundaries.

Field Survey: Notable and Protected Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Notable and Protected Species

Reptiles – some potential around edges.

Breeding birds – some potential in scrub and hedges.

Recommendations for Further Survey (and optimal survey timings)

Reptile – (May – June, September – October) along the Site boundaries.

INDICATIVE ECOLOGICAL APPRAISAL

Low value – a very small Site with few habitats and species of value and limited potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining native scrub on boundaries.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

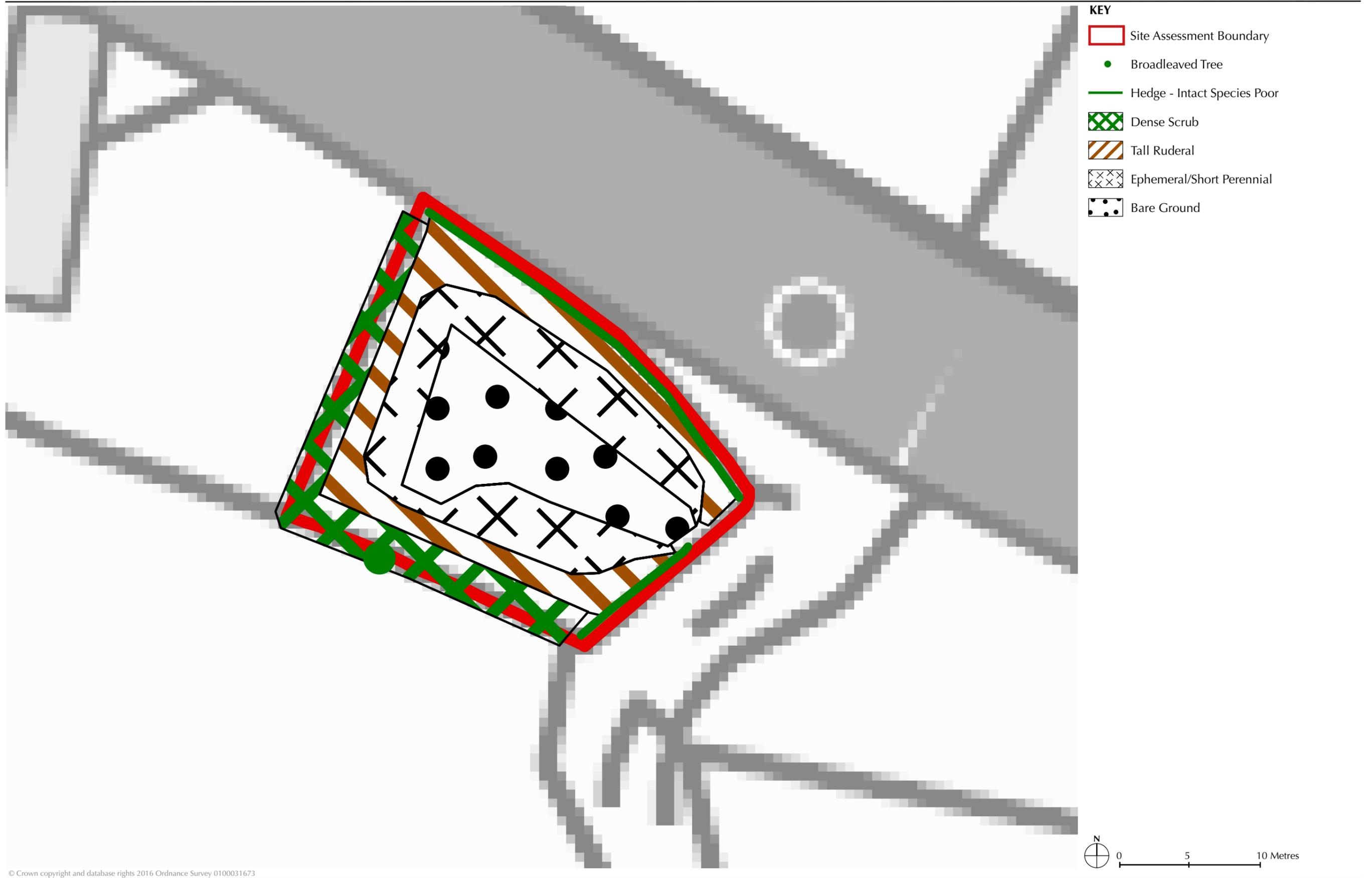
Outline Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Gap-up between native scrub on boundaries to form hedge
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site.
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.

Potential Enhancement Opportunities

Due to the very small size of the Site opportunities for Site Ecological Enhancement and Green Infrastructure are likely to be very limited.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Land at Marl pits Lane, Ninfield
Site Reference Number:	589/3170
Site Summary Description	
<p>A small, 0.19ha, yard used to store materials and machinery, bare in the centre, ephemeral/short perennial grading to tall ruderal. The banks around the edges of the yard woodland with mature trees. There is a species-poor non-native hedge on the northern boundary.</p>	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
<p>The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensey Levels. The Site lies approximately 700m north of the main settlement of Ninfield, on the south side of Marl pits Lane. It is surrounded by mature trees on all sides and there is a small amount of built development immediately to the west of the Site, it sits within an open farmed landscape of hedge-lined fields and woodlands.</p>	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. 	<ul style="list-style-type: none"> • 690m West • 780m SW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Little Hurst/ Bakers Wood • Ancient & semi-natural woodland – Hoptarden Wood • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Weeks Wood • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Hurst Wood • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Freckley Wood • Ancient & semi-natural woodland – Downland Wood 	<ul style="list-style-type: none"> • 200m NW • 270m NW • 370m SSE • 490m South • 500m ENE • 700m WSW • 760m NW • 770m ENE • 780m East • 780m ENE • 790m SSE • 870m SSE • 890m WSW • 970m North • 990m NE

Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

Plecotus auritus Brown long-eared bat

Sussex Rare Species

Misopates orontium Weasel's-snout
Metroptera roeselii Roesel's Bush-cricket
Conocephalus fuscus Long-winged Cone-head
Tyria jacobaeae Cinnabar

Notable Bird Inventory

Hirundo rustica Swallow
Delichon urbicum House Martin

Invasive Alien Species Inventory

Cameraria ohridella Horse Chestnut Leaf-miner
Myriophyllum aquaticum Parrot's-feather
Crassula helmsii New Zealand Pigmyweed
Cotoneaster horizontalis Wall cotoneaster
Impatiens glandulifera Indian balsam
Petasites fragrans Winter Heliotrope
Prunus laurocerasus Cherry Laurel
Rhododendron sp. Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/589)

Ephemeral/short perennial and Tall ruderal – Outside the bare central area cover the base of the yard and the former grades into the latter towards the edges. Species include annual meadow grass *Poa annua*, Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris*, soft rush *Juncus effusus*, pendulous sedge *Carex pendula*, greater plantain *Plantago major*, broad-leaved willowherb *Epilobium montanum*, hedge garlic *Alliaria petiolata*, wood avens *Geum urbanum*, field and creeping buttercup *Ranunculus acris* and *repens*, cleavers *Galium aparine* and nettle, as well as tree and shrub seedlings.

Semi-natural broadleaved woodland – On the western, southern and eastern banks. Canopy includes mature oak, ash, field maple, hornbeam and beech. Shrub layer is of hazel, holly and ash and the field layer is dominated by ivy and bramble but also includes nettle, cleavers, hedge garlic, foxglove *Digitalis purpurea*, wood avens and male fern *Dryopteris felix-mas*. Outside the compound, beside the PRoW on the eastern boundary the Ancient Woodland Indicator Species tutsan *Hypericum androseanum* and wood melick *Melica uniflora* are recorded.

Species poor hedge – Of non-native cypress on the northern boundary.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of ponds approximately 120-160m to the west and south west of the Site and approximately 250m to the east. The woodland on the banks of the yard represent suitable terrestrial habitat for great crested newts within the Site.

Reptiles – (May – June, September – October) limited potential around edges of the base of the yard

Breeding birds – in the woodland.

Bats – Trees and mature trees in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially in and around woodland and trees, scrub and hedges.

Dormice – some potential in woodland.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds to the west and east of the Site

Reptiles – in suitable habitat.

Bats – (inspections: year round) in the first instance inspection of trees to determine the scope for further survey.

Dormice – (April – November) in woodland.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – includes a very small area of woodland with mature trees and some potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the woodland, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer and positively manage the woodland, including the mature trees and their features
- If great crested newts are found in the ponds appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development Site

and possibly trapping and translocation to a suitable receptor site.

- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site.
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention of the woodland (as noted above).

Potential Enhancement Opportunities

Due to the very small size of the Site opportunities for Site Ecological Enhancement and Green Infrastructure are likely to be very limited.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Land South-West of Yew Tree Cottage, Moons Hill, Ninfield
Site Reference Number:	601/3170
Site Summary Description	
A currently unmanaged rather species-poor 0.72ha grassland field with hedges on two of the boundaries and stands of bramble, bracken and tall ruderal.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site lies to the north of Ninfield, separated from the nearest residential development by a field lined with mature trees. Scattered residential development lies to the north and west, beyond which the landscape comprises hedge-lined fields and woodlands. The Site is bordered on the west by Moons Hill, a small lane beyond which lies more hedge-lined fields, broad-leaved woodland and Court Wood Ancient Woodland.	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. 	<ul style="list-style-type: none"> • 270m West • 350m West • 850m SSW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland (un-named) • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Hurst Wood • Ancient & semi-natural woodland (un-named) • Ancient & semi-natural woodland – Little Hurst/ Bakers Wood • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland (un-named) 	<ul style="list-style-type: none"> • 300m East • 340m North • 350m South • 360m West • 460m East • 640m North • 680m ESE • 740m WSW • 670m ESE • 750m ESE • 760m ENE • 830m NNW • 850m SSW • 880m SW

Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

<i>Chiroptera</i>	unidentified bat species
<i>Pipistrellus</i> sp.	Pipistelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat

Sussex Rare Species

<i>Misopates orontium</i>	Weasel's-snout
<i>Metriopectera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Tyria jacobaeae</i>	Cinnabar

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey Heron
<i>Hirundo rustica</i>	Swallow
<i>Delichon urbicum</i>	House Martin

Invasive Alien Species Inventory

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Crassula helmsii</i>	New Zealand Pigmyweed
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Fallopia japonica</i>	Japanese knotweed
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron</i> sp.	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/601)

Poor semi-improved grassland and Tall ruderal/bracken - Unmanaged at the time of survey and appears to have been so for some time. Comprises a variable but generally quite tall sward. Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and sweet vernal-grass *Anthoxanthum odoratum* are the most abundant and frequent grasses, though crested dog's-tail *Cynosorus cristatus*, meadow foxtail *Alopecurus pratensis*, perennial rye-grass *Lolium perrene* and small cat's-tail *Phleum bertolonii* are also present. Forb cover is moderate but variable, from approximately 20-50%. Frequent species include field buttercup *Ranunculus acris*, red clover *Trifolium pratense*, greater bird's foot trefoil *Lotus pedunculatus* and cat's ear *Hypochaeris radicata*, and other species include common sorrel *Rumex acetosa*, lesser stitchwort *Stellaria graminea*, self-heal *Prunella vulgaris*, and common knapweed *Centaurea nigra*. Nettle and dock are present throughout but there are also some larger stands of tall ruderal in the centre and edges of the field. There is a stand of bracken on the eastern edge of the field, adjacent to the hedge.

Hedges – On the western and eastern boundaries these are species rich with hazel, holly, oak, ash, willow and hawthorn. Part of the hedge on the western boundary also includes ash trees.

Field Survey: Notable and Protected Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Notable and Protected Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of a pond less than 100m to the north east of the Site, on the other side of Moons Hill. There are further ponds approximately 200m to the north. Habitats within the Site, including hedges, tall ruderal, bracken and unmanaged grassland represent suitable terrestrial habitat for great crested newts.

Reptiles – potential throughout the Site.

Breeding birds – especially hedges.

Bats – Trees and mature trees on the western boundary in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially in and around the trees, scrub and hedges.

Dormice – some potential in hedges.

Badgers – Potential for setts within the woodland, scrub and hedgerows, but with or without setts badgers may also use any or the entire Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of ponds to the north/north east of the Site

Reptiles – (May – June, September – October) throughout Site.

Bats – (inspections: year round) in the first instance inspection of trees to determine the scope for further survey.

Dormice – (April – November) in hedges.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Moderate value – small area of rather species poor grassland, though still retaining some diversity, and the hedges are of moderate value. The habitats and features present have potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedges, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific

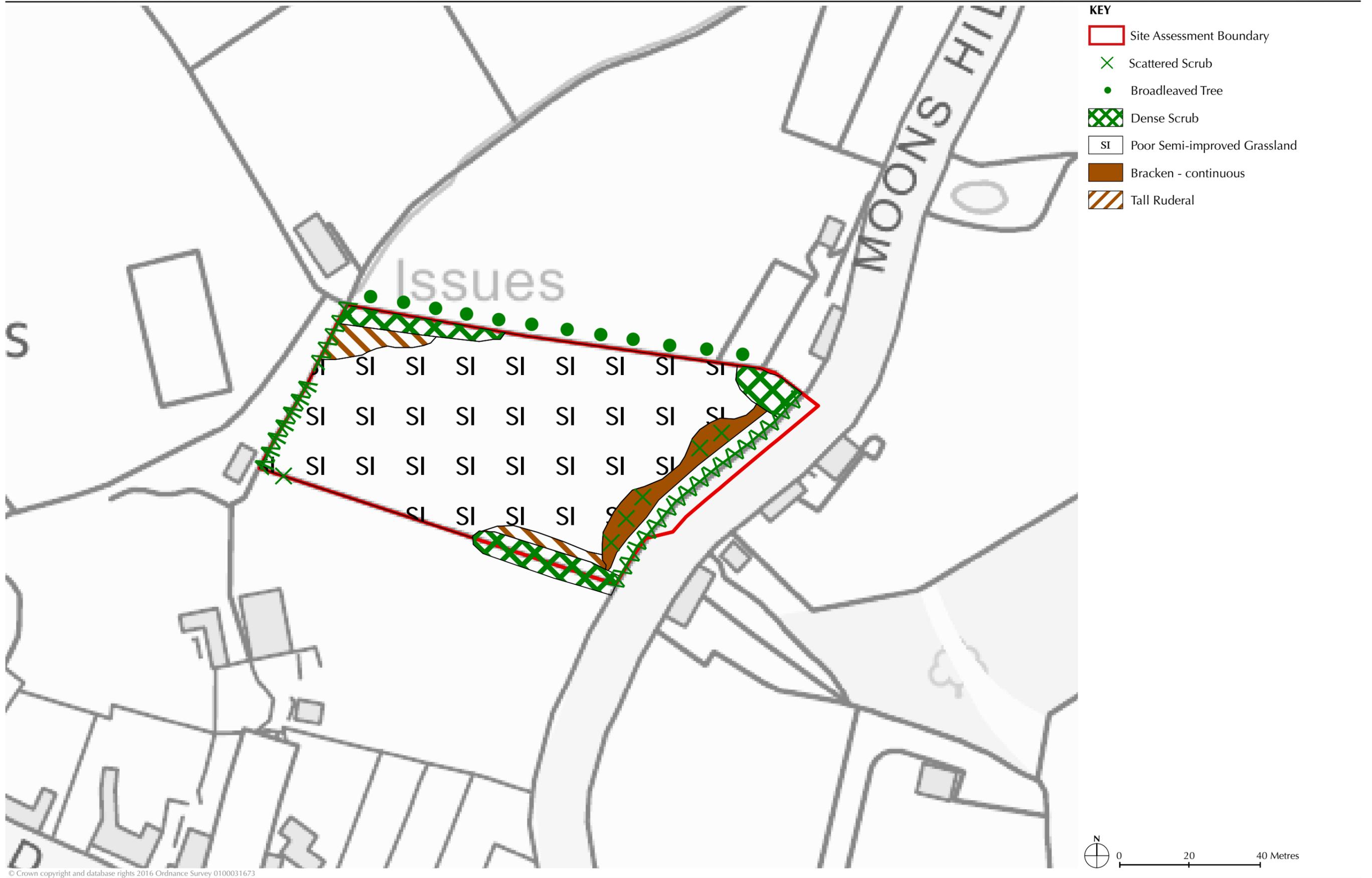
measures will be required if any works are close to watercourses and/or waterbodies.

- Buffer the hedges, including the mature trees and their features.
- If great crested newts are found in any of the ponds to the north/north east of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development Site and possibly trapping and translocation to a suitable receptor site.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features such as the hedges and mature trees.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen Site boundary vegetation, for example where it adjoins the lane and residential properties, to link to adjoining habitat, and incorporating retained trees where relevant.
- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit;
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings;
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Land at Manchester Road, Ninfield
Site Reference Number:	604/3170
Site Summary Description	
<p>Most of the Site comprises two rather species-poor grassland fields with hedges, including a section with mature trees totalling 2.99ha. The southern part of the Site is a mosaic comprising further rather species poor grassland, mature trees, scrub and tall ruderal, as well as small areas within the curtilage of residential properties including for example, amenity grassland</p>	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
<p>The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site's southern and western boundaries immediately adjoin existing residential development, whilst the north and east face out across relatively large hedge-lined fields and woodlands beyond.</p>	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. • Long Wood and Wet Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of hornbeam coppice and wet wood and hornbeam coppice, alder and willow with sedge ground flora”</i>. 	<ul style="list-style-type: none"> • 140m West • 100m West • 720m SSW • 960m WSW
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland – Little Hurst/ Bakers Wood • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Rough Wood 	<ul style="list-style-type: none"> • 90m West • 180m North • 230m South • 450m East • 500m North • 590m NNW • 600m WSW • 630m East • 800m ESE • 840m SSW

<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Hurst Wood • Ancient & semi-natural woodland 	<ul style="list-style-type: none"> • 880m ESE • 910m ENE
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Desk Study: Protected and Notable Species within 1km

Protected Species Inventory

<i>Chiroptera</i>	unidentified bat species
<i>Pipistrellus sp.</i>	Pipistelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat

Sussex Rare Species

<i>Misopates orontium</i>	Weasel's-snout
<i>Metriopectera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Tyria jacobaeae</i>	Cinnabar

Notable Bird Inventory

<i>Ardea cinerea</i>	Grey Heron
<i>Hirundo rustica</i>	Swallow
<i>Delichon urbicum</i>	House Martin

Invasive Alien Species Inventory

<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Crassula helmsii</i>	New Zealand Pigmyweed
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron sp.</i>	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/604)

Poor semi-improved grassland – The fields appears to be used largely as horse pasture with sward structure variable and reflecting the level of recent grazing. In both fields Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and sweet vernal-grass *Anthoxanthum odoratum* are the most abundant and frequent grasses, but a range of other grasses are also present, including crested dog's-tail *Cynosorus cristatus*, meadow foxtail *Alopecurus pratensis*, perennial rye-grass *Lolium perrene*, small cat's-tail *Phleum bertolonii* and cocksfoot *Dactylis glomerata*. Forb content is variable and low to moderate, approximately 10-40%, with most around 20-30%. The most frequent species are field buttercup *Ranunculus acris*, red clover *Trifolium pratense*, bird's foot trefoil *Lotus corniculatus* and greater bird's foot trefoil *Lotus pedunculatus*, common sorrel *Rumex acetosa*, common knapweed *Centaurea nigra* and cat's ear *Hypochaeris radicata*. Tall ruderals such as nettle, thistles, docks and ragwort are occasional but locally abundant. The western filed is a little richer than the eastern.

The very short grassland among trees and scrub in the south of the Site is similar on overall species composition but includes more creeping buttercup *Ranunculus repens*, cinquefoil *Potentilla reptans* and daisy *Bellis perennis*.

There are also some areas of taller species poor grassland along the track providing access from Manchester Road.

Tall ruderal – There are stands of this on the edges of the two fields but especially around and among trees and scrub etc. in the south of the Site.

Bracken – two stands of bracken are developing on the western boundary of the Site.

Scrub – Small quantities of scrub are present in the south of the Site.

Scattered trees – i.e. those outside hedges included mature oak and ash within, or on the edge of the

southern part of the Site.

Hedges –species rich with hazel, holly, willow, hawthorn, blackthorn, rose, ash, and including honeysuckle. The hedges on the southern boundary of the field include mature oak and ash trees as well as crack willow.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, OS maps indicate the presence of ponds to the north and north east of the approximately 200-250m distant. Habitats within the Site, including hedges, tall ruderal and any tall unmanaged grassland represent suitable terrestrial habitat for great crested newts.

Reptiles – potential especially on field edges and in the south of the Site.

Breeding birds – especially hedges, trees and scrub.

Bats – mature trees in particular have potential to be used as roosts, activity throughout but especially along hedges.

Badgers – (Year round but Spring / Autumn optimal) potential within the scrub and hedges, though not recorded, but may also use the Site for foraging.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of ponds to the north/north east of the Site

Reptiles – (May – June, September – October) in suitable habitat.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in hedges.

Badgers – (Year round but Spring / Autumn optimal) of whole site.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – mostly rather species poor grassland, though still retaining some diversity, but the hedges and mature trees are of moderate value. The habitats and features present have potential to support notable/protected species.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedges, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest;
- Offset buffers to protect retained habitats (minimum 10m);
- Use of protective fencing to define construction areas and protect retained habitats;
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats;
- Inclusion of mammal ladders or similar in any trenches left open overnight;
- Sealing of pipework overnight, to prevent animals becoming trapped;
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents;
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer the hedges and mature trees and their features
- If great crested newts are found in any of the ponds to the north/north east of the Site appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development Site and possibly trapping and translocation to a suitable receptor site.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges, as noted above).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

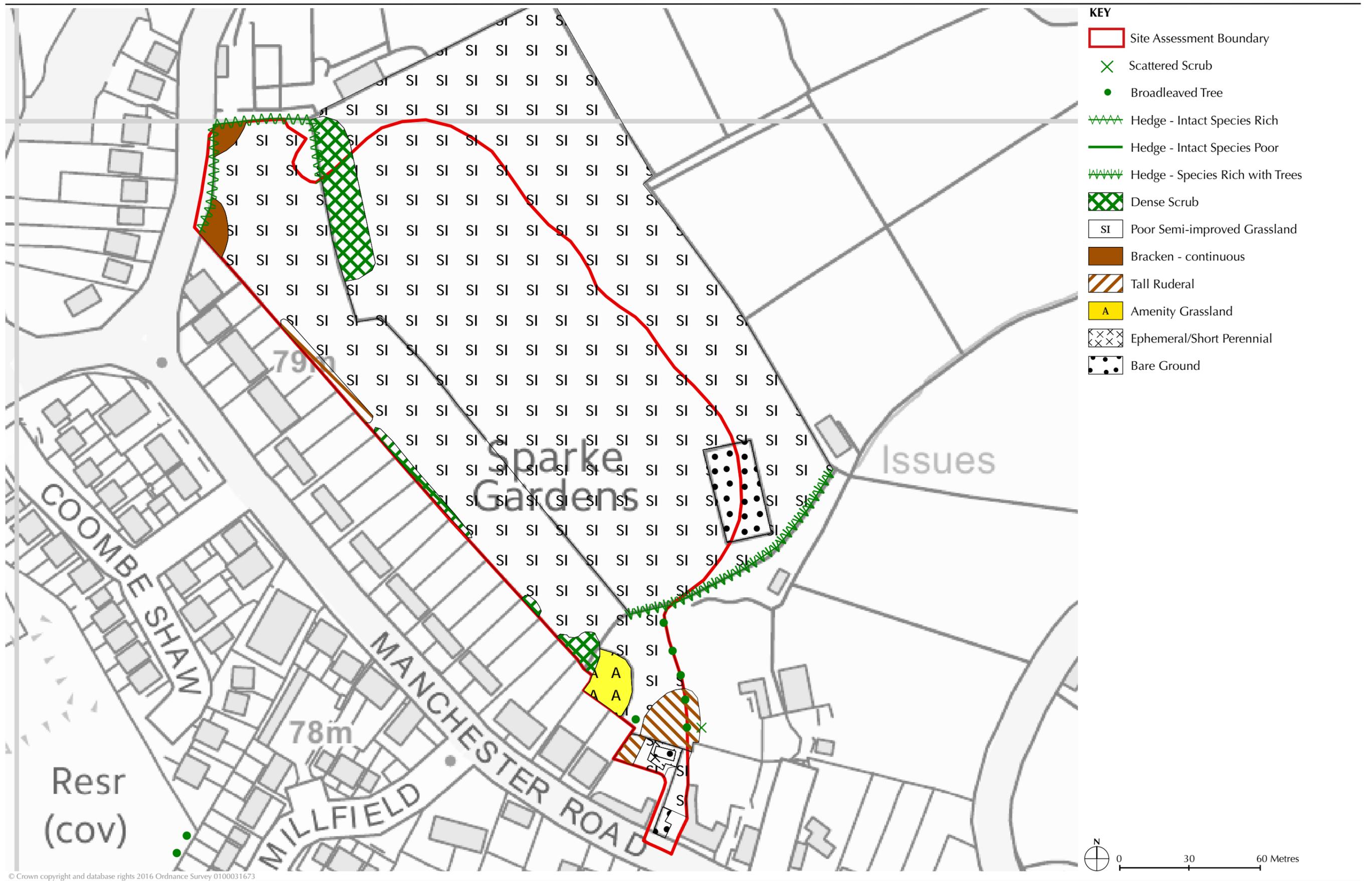
Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedges and mature trees.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen Site boundary vegetation, for example where it adjoins residential properties and to link to adjoining

habitat, and incorporating retained trees where relevant.

- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit;
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings;
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



ECOLOGICAL ASSESSMENT	
Settlement/ Area:	Ninfield
Site Address:	Land East of Moor Hill Drive, Ninfield
Site Reference Number:	739/3170
Site Summary Description	
Several areas of mostly species-poor grassland with boundary hedges, including section with mature trees totalling 4.47ha. The eastern part of the Site adjoins Church Wood Ancient Woodland.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site is located on the southern fringes of Ninfield, bordered to the north and west by residential development. Hedge-lined fields lie to the east and south of the Site, with Church Wood Ancient Woodland adjoining its south eastern boundary.	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> • Ninfield Reservoir LWS – The Citation summary describes the Site as follows: <i>“Two covered reservoirs of herb rich grassland over different soil compositions including peat. Notable botanical interest”</i>. • Coombe Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of sweet chestnut coppice with marshy grassland and reed bed area with willow carr and standing water on northern boundary”</i>. • Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: <i>“Woodland complex on steep sided stream valley with ancient woodland ground flora”</i>. • Long Wood and Wet Wood LWS – The Citation summary describes the Site as follows: <i>“Ancient woodland of hornbeam coppice and wet wood and hornbeam coppice, alder and willow with sedge ground flora”</i>. 	<ul style="list-style-type: none"> • 90m North • 260m North • 350m SSW • 650m West
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Church Wood • Ancient & semi-natural woodland – Coombe Wood • Ancient & semi-natural woodland – Kiln Wood • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland – Court Wood ext. • Ancient & semi-natural woodland – Rough Wood • Ancient & semi-natural woodland • Ancient & semi-natural woodland • Ancient & semi-natural woodland – Court Wood • Ancient & semi-natural woodland – Hurst Shaw • Ancient & semi-natural woodland – Hurst Wood 	<ul style="list-style-type: none"> • Adjacent South East • 250m NW • 300m West • 350m SSW • 460m NE • 590m West • 620m N • 620m SW • 640m ENE • 680m East • 760m East

<ul style="list-style-type: none"> • Ancient & semi-natural woodland – Lower Freckly/Bretons Woods • Ancient & semi-natural woodland – Staplehurst Wood 	<ul style="list-style-type: none"> • 950m N • 970m SE
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Desk Study: Protected and Notable Species within 1km

Protected Species Inventory	
<i>Triturus cristatus</i>	Great crested newt
<i>Chiroptera</i>	unidentified bat species
<i>Pipistrellus sp.</i>	Pipistelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat
<i>Nyctalus noctula</i>	Noctule Bat
<i>Plecotus auritus</i>	Brown long-eared bat
<i>Plecotus sp.</i>	Long-eared bat species
Sussex Rare Species	
<i>Misopates orontium</i>	Weasel's-snout
<i>Mespilus germanica</i>	Medlar
<i>Metriopectera roeselii</i>	Roesel's Bush-cricket
<i>Conocephalus fuscus</i>	Long-winged Cone-head
<i>Coenonympha pamphilus</i>	Small Heath
<i>Tyria jacobaeae</i>	Cinnabar
Notable Bird Inventory	
<i>Ardea cinerea</i>	Grey Heron
<i>Hirundo rustica</i>	Swallow
<i>Delichon urbicum</i>	House Martin
Invasive Alien Species Inventory	
<i>Cameraria ohridella</i>	Horse Chestnut Leaf-miner
<i>Myriophyllum aquaticum</i>	Parrot's-feather
<i>Crassula helmsii</i>	New Zealand Pigmyweed
<i>Cotoneaster horizontalis</i>	Wall cotoneaster
<i>Fallopia japonica</i>	Japanese knotweed
<i>Impatiens glandulifera</i>	Indian balsam
<i>Petasites fragrans</i>	Winter Heliotrope
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rhododendron sp.</i>	Rhododendron

Field Survey: Habitat Descriptions (see Figure 19/739)

Poor semi-improved grassland – Much of this in the west of the Site is very species poor. The most northerly part of the west of the Site is dominated by Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris*, with low number and cover of forbs, mainly creeping buttercup *Ranunculus repens*, silverweed *Potentilla anserina*, self-heal *Prunella vulgaris*, ribwort plantain *Plantago lanceolata* and white clover *Trifolium repens*. There is also patchy nettle and dock. The rest of the western part of the Site has been recently cut for hay, making assessment of the grassland more difficult, but it appears to be similarly species-poor.

The central area is also very species poor, with frequent/abundant perennial rye-grass *Lolium perenne* and abundant broadleaved dock *Rumex obtusifolius*. There is a poached area in the west of the field with mayweed *Tripleurospermum/Matricaria sp.*, greater plantain *Plantago major*, field speedwell *Veronica persica*, swinecress *Lepidium squamatum*, scarlet pimpernel *Anagallis arvensis*, shepherds purse *Capsella bursa-pastoris* and common cudweed *Filago vulgaris*.

The eastern area, which lies immediately to the north of Church Wood, is somewhat richer, with little or no perennial rye-grass and dock and with frequent and locally abundant bird's foot trefoil *Lotus corniculatus* and greater bird's foot trefoil *Lotus pedunculatus* and red clover *Trifolium pratense*.

Hedges – These are species-rich with hazel, holly, oak birch ash, and hawthorn. Part of the hedge between the western and central grasslands includes much gorse. Sections of hedge include mature trees, including oak and ash. The western hedge comprises a tree and shrub belt which has been modified through planting, and although still retaining native species also includes pines and cypress as well as cherry laurel and Rhododendron.

Scrub – There are stands of dense and scattered scrub, including bramble ash and willow on the southern boundary/fence line of the central grassland and on the Sites north eastern boundaries.

Field Survey: Protected and Notable Species

No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.

Field Survey: Invasive Non-native Species

No non-native invasive species recorded during the survey.

Assessment of Potential for Protected and Notable Species

Great crested newts – There are no ponds within the Site. However, there are ponds in Church Wood approximately 50-100m to the south of the Site. Habitats within the Site, including the hedges and scrub, as well as tall ruderal and taller/unmanaged grassland, represent suitable habitat for great crested newts.

Reptiles – especially along field edges.

Breeding birds – especially hedges and scrub.

Bats – Trees, mature trees and hedges in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially along hedges and woodland edge.

Dormice – High potential in hedge, especially given connection to woodland.

Badgers – Potential for setts within the woodland, scrub and hedgerows, but with or without setts badgers may also use any or the entire Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of the ponds in Church Wood.

Reptiles – (May – June, September – October) in suitable habitat, currently largely around field margins.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in suitable habitat – hedges and woodland.

Badgers – (Year round but Spring / Autumn optimal) of whole Site and adjoining woodland.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the grassland is species poor and of low value but the hedges and mature trees are of moderate value. The habitats and features present have potential to support notable/protected species. The Site adjoins Ancient Woodland.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- Retaining the hedges, including the mature trees and their features.
- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents.
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer the hedges and mature trees and their features.
- Buffer the Adjoining Church Wood Ancient Woodland, including retention and positive management of the grassland to the north of Church Wood, in the south east of the Site.
- If great crested newts are found in the ponds in Church Wood appropriate measures will need to be put in place to prevent harm to them during their terrestrial phase, for example herp fencing the development Site and possibly trapping and translocation to a suitable receptor site.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained hedges and woodland, as noted above).
- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges and woodland (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

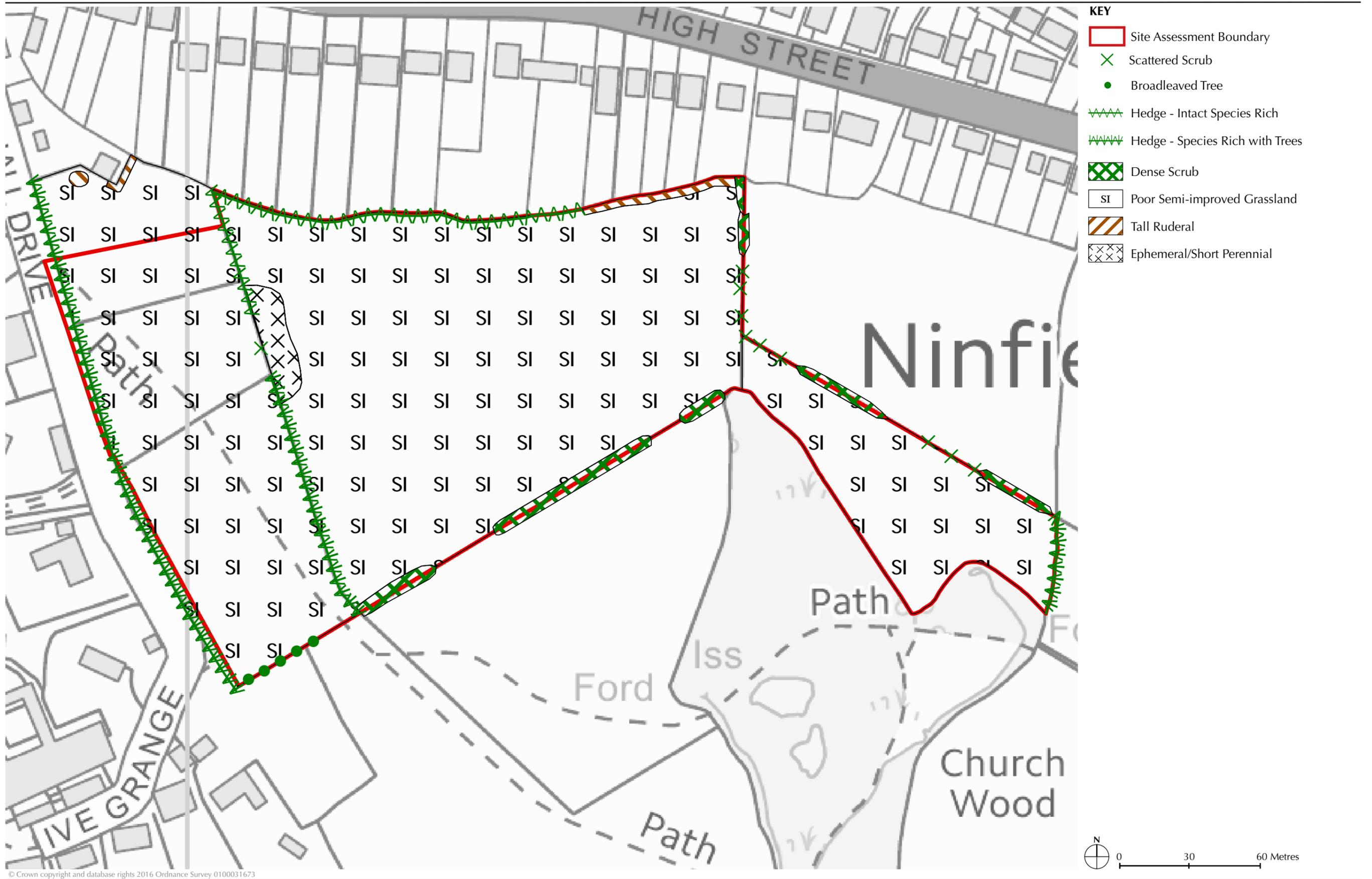
Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including hedges and mature trees.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen Site

boundary vegetation, for example where it adjoins residential properties and Church Wood, to link to adjoining habitat, and incorporating retained trees where relevant.

- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



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ECOLOGICAL ASSESSMENT	
Settlement/Area:	Ninfield
Site Address:	Land at Staplehurst Wood and Land Adjacent to A269, Ninfield
Site Reference Number:	831/3170
Site Summary Description	
A 0.38ha area dominated by tall ruderal with scrub and trees and adjacent to the Staplehurst Wood Ancient Woodland. The Site also includes part of a pond.	
ECOLOGICAL BASELINE	
Green Infrastructure Context (see Figure 19.1)	
The Site is located within a characteristic High Weald landscape of small to medium sized fields, including both grassland and arable, set within a relatively extensive and intact hedgerow network which includes frequent trees. Woodland, including Ancient Woodland, is relatively plentiful and includes both large and small parcels. Gill woodland is also present along some of the stream corridors. Further to the south a broader, low lying landscape of larger open pasture and grazing marsh develops towards the Pevensy Levels. The Site is located on the southern fringes of Ninfield, bordered to the north and south by residential development. The A269 forms the Site's western border whilst to the east lies Staplehurst Wood Ancient Woodland, with hedge-lined agricultural fields lying further beyond.	
Desk Study : Designated Sites within 1km (see Figure 19.2)	Distance from Site
<ul style="list-style-type: none"> Rough Wood and Whites Wood LWS – The Citation summary describes the Site as follows: "<i>Woodland complex on steep sided stream valley with ancient woodland ground flora</i>". 	<ul style="list-style-type: none"> 860m West
Desk Study: BAP Priority Habitats within 1km	Distance from Site
<ul style="list-style-type: none"> Ancient & semi-natural woodland – Staplehurst Wood Ancient & semi-natural woodland – Rough Wood Ancient & semi-natural woodland – Park Wood Ancient & semi-natural woodland – Church Wood Ancient & semi-natural woodland Ancient & semi-natural woodland – Hurst Shaw Ancient & semi-natural woodland – Hurst Wood Ancient & semi-natural woodland – Sprays Wood Ancient & semi-natural woodland – Court Wood 	<ul style="list-style-type: none"> Adjacent E 860m West 750m SSW 880m NW 460m SE 800m North 620m NNE 520m ENE 960m North
Desk Study: Protected and Notable Species within 1km	
Protected Species Inventory	
<i>Triturus cristatus</i>	Great crested newt
<i>Zootoca vivipara</i>	Common Lizard
<i>Anguis fragilis</i>	Slow-worm
<i>Natrix natrix</i>	Grass snake
<i>Muscardinus avellanarius</i>	Hazel Dormouse
Chiroptera	unidentified bat species
<i>Pipistrellus</i> sp.	Pipistrelle species bat
<i>Pipistrellus pipistrellus</i>	Common pipistrelle bat
<i>Myotis daubentonii</i>	Daubentons bat

<p><i>Nyctalus noctula</i> <i>Plecotus auritus</i> <i>Plecotus sp.</i></p> <p>Sussex Rare Species <i>Misopates orontium</i> <i>Mespilus germanica</i> <i>Euphorbia platyphyllos</i> <i>Pyrgus malvae</i> <i>Coenonympha pamphilus</i> <i>Tyria jacobaeae</i></p> <p>Notable Bird Inventory <i>Tyto alba</i></p> <p>Invasive Alien Species Inventory <i>Cameraria ohridella</i> <i>Fallopia japonica</i></p>	<p>Noctule Bat Brown long-eared bat Long-eared bat species</p> <p>Weasel's-snout Medlar Broad-leaved Spurge Grizzled Skipper Small Heath Cinnabar</p> <p>Barn Owl</p> <p>Horse Chestnut Leaf-miner Japanese knotweed</p>
Field Survey: Habitat Descriptions (see Figure 19/831)	
<p>Tall ruderal – Much of the Site comprises large stands of nettle, with a number of other associated species, including cleavers <i>Galium aparine</i>, hedge bindweed <i>Calystegia sepium</i> and sowthistles <i>Sonchus</i> spp. Pendulous sedge <i>Carex pendula</i> is also abundant in parts. A trackway through the Site supports dense pendulous sedge, although parts support grassy vegetation</p> <p>Bracken – A dense stand in the centre-west of the Site</p> <p>Scrub – Is the second most abundant habitat, including stands of bramble and dense and scattered bushes, including blackthorn, holly, hazel and willows. Where this is dense the field layer is dominated by ivy.</p> <p>Scattered trees – There are a number of mature oaks, and in the lower and wetter east of the Site, and some alders.</p> <p>Pond – There is a pond in the east of the Site which straddles the boundary, with only the northern part within the Site. The part within the Site is heavily shaded and shallow with much leaf and woody debris. Vegetation includes common duckweed <i>Lemna minor</i>, a small amount of white water lily <i>Nymphaea alba</i> (most of which lies outside the Site), woody nightshade <i>Solanum dulcamara</i>, hemlock water-dropwort <i>Oenanthe crocata</i> and remote sedge <i>Carex remota</i>. The southern end of the pond, outside the Site, is open and un-shaded with abundant white water lily.</p> <p>Rubble and log piles – Are present.</p>	
Field Survey: Protected and Notable Species	
No species considered notable for their nature conservation value recorded during the Phase I habitat field survey.	
Field Survey: Invasive Non-native Species	
No non-native invasive species recorded during the survey.	
Assessment of Potential for Protected and Notable Species	
<p>Great crested newts – potential breeding in pond and rest of Site represents suitable terrestrial habitat. There are also records of great crested newts from among residential properties on the eastern side of the A269 Bexhill Road as well as from near Ingrams House, approximately 220m and 360m to the north of the Site respectively.</p> <p>Reptiles – some potential throughout site</p> <p>Breeding birds – especially among scrub, trees and, woodland edge.</p>	

Bats – Trees and mature trees in particular, with features such as cracks and cavities have potential to be used as roosts. Given the habitats and features present activity, including foraging and commuting, is likely throughout, but especially in and around woodland and trees, scrub and hedges.

Dormice – some potential in scrub

Badgers – Potential for setts within the woodland, scrub and hedgerows, but with or without setts badgers may also use any or the entire Site for foraging. However, neither setts nor foraging signs are recorded during the survey.

Recommendations for Further Survey (and optimal survey timings)

Amphibian (including great crested newt) – (March – June) of pond.

Reptiles – (May – June, September – October) in suitable habitat.

Bats – (inspections: year round; activity surveys April – October) in the first instance inspection of trees to determine the scope for further survey and activity surveys.

Dormice – (April – November) in suitable habitat.

Badgers – (Year round but Spring / Autumn optimal) of whole Site and adjoining woodland.

INDICATIVE ECOLOGICAL APPRAISAL

Low to Moderate value – the tall ruderal and scrub are of relatively low value but the mature trees and pond are of moderate value. The habitats and features present have potential to support notable/protected species. The Site adjoins Ancient Woodland.

Impact Avoidance

In order to limit, as far as possible, potentially adverse effects of development including potential harm to the integrity of the wider green infrastructure network, effort should be made to avoid the more ecologically valuable parts of the Site by:

- As far as possible and appropriate retaining and buffering habitats and features supporting notable/protected species, based on the results of more detailed surveys.

Outline Mitigation

Should development at this Site proceed, generic (standard) mitigation for impacts upon habitats and species is set out below. Further detailed or species-specific mitigation may be required dependent upon the outcome of the recommended protected habitat or species surveys.

- Implementation of a Construction and Environmental Management Plan (CEMP) to manage site-specific issues relating to the potential impacts of construction on ecological features of interest.
- Offset buffers to protect retained habitats (minimum 10m).
- Use of protective fencing to define construction areas and protect retained habitats.
- Avoidance of night-time working wherever possible. When not possible, use directional lighting to prevent lightshed into surrounding habitats.
- Inclusion of mammal ladders or similar in any trenches left open overnight.
- Sealing of pipework overnight, to prevent animals becoming trapped.
- Defined and bunded areas for fuel storage and refuelling to prevent spillages and pollution incidents;
- On-Site spill incident equipment, in the event of spillages of fuel or other materials. Specific measures will be required if any works are close to watercourses and/or waterbodies.
- Buffer the adjoining Staplehurst Wood Ancient Woodland, including retention and positive management habitat, including the pond, in the east of the Site.
- If great crested newts are found to be present, retention of pond and sufficient area of terrestrial habitat (as part of buffer strip) and other possible measures to safeguard their conservation status, under a Natural England European Protected Species licence.
- If reptiles are found to be present, measures to prevent harm to them, including potentially translocation from the development Site to a suitable receptor site. Where feasible such receptor areas should be incorporated into the new development (for example in buffer strips beside retained

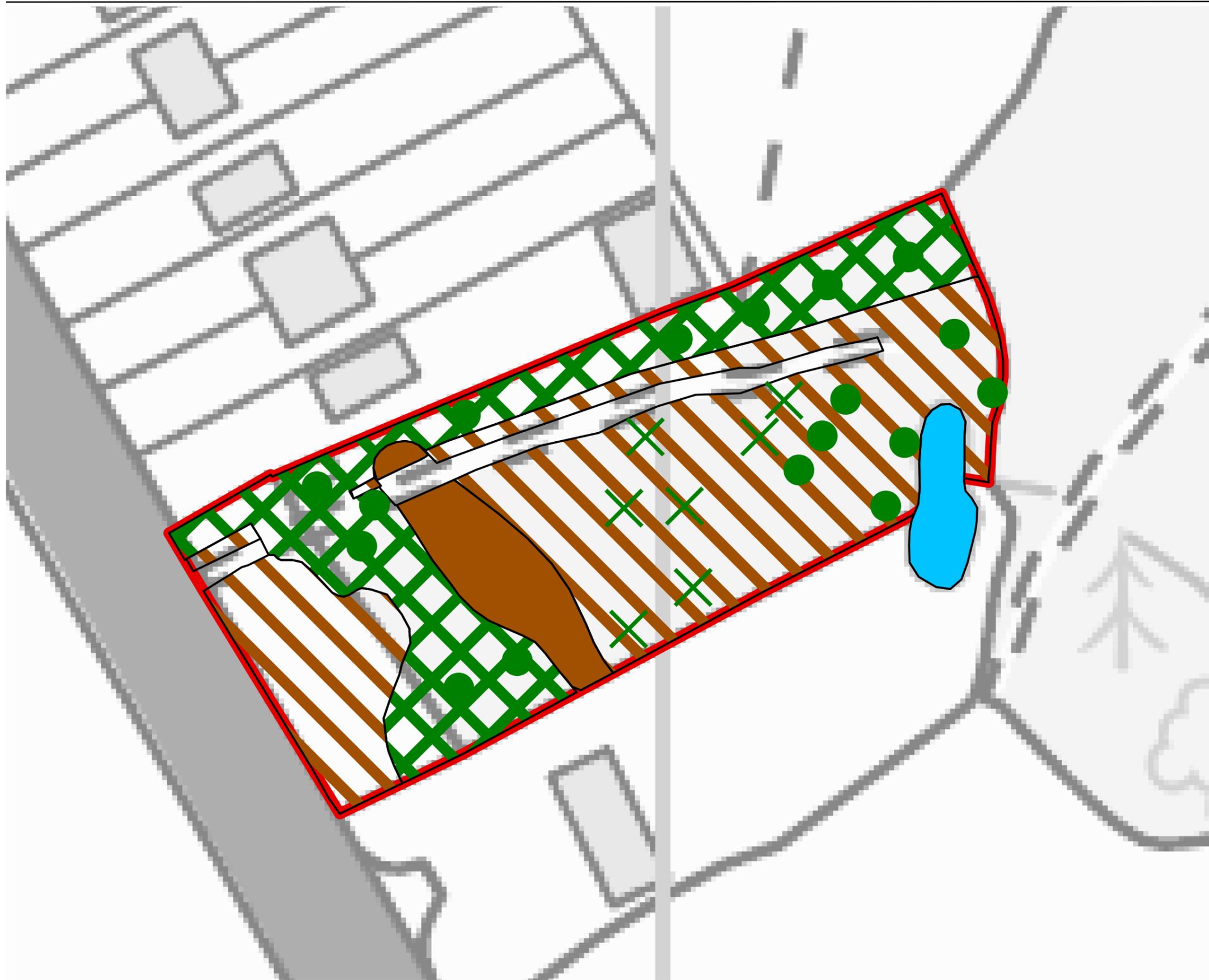
hedges and woodland, as noted above).

- In light of the potential presence of breeding birds, if possible cutting back or removal of woody vegetation, including trees, shrubs/scrub and hedgerows should not be carried out during the bird breeding season, which is March-August inclusive. If this is not possible then the relevant vegetation should be inspected by a suitably qualified ecologist for the presence of breeding birds prior to the commencement of works.
- New development may need to incorporate bat roosts as alternative or replacement habitat if roosts are likely to be lost.
- Insofar as any proposed development of the Site allows, lighting design, particularly for the periphery of the Site should be minimised as far as possible. As a minimum, any lighting along Site boundaries that may potentially form important commuting corridors (e.g. hedgerows) or adjacent woodlands that may support bat roosts should make use of backboards and/or internal louvres to ensure light is directed into the Site and light spill into the adjacent areas of retained habitat is minimised.
- If dormice are found to be present the retention and appropriate buffering of hedges and woodland (as noted above).
- Development should seek to avoid any prime foraging grounds identified through the badger survey, avoid severance to commuting corridors within territories and avoid any construction works within at least 30m of the nearest badger setts.

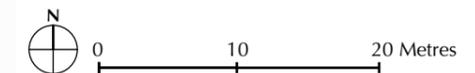
Potential Enhancement Opportunities

Opportunities for enhancing, restoring and/or creating new habitats as an integral part of a Site's development that can also contribute to the District's wider ecological /green infrastructure network are identified below:

- Positively and appropriately manage retained habitats and features, including boundary vegetation, particularly where adjacent with Staplehurst Wood.
- Where appropriate gap-up planting of appropriate native trees and shrubs, to strengthen Site boundary vegetation, for example where it adjoins residential properties, the A269 and adjoining Staplehurst Wood, to link to adjoining habitat, and incorporating retained trees where relevant.
- Habitat creation, ideally located adjacent to retained or adjoining habitat or to form habitat corridors or links, to include for example:
 - Wildlife pond(s), included for example as part of a SuDS scheme;
 - Species-rich grassland and associated features for supporting a variety of terrestrial invertebrates;
 - Scrub and trees; and
 - Creation of dead wood habitats and other habitat piles.
- Erection of bat boxes suitable for a range of bat species, on retained trees or incorporated into buildings where they will remain unlit.
- Erection of bird boxes suitable for a range of bird species on retained trees or incorporated into buildings.
- Implementation of good management practices for retained habitats, notably hedgerow and tree management.



- KEY**
- Site Assessment Boundary
 - × Scattered Scrub
 - Broadleaved Tree
 - Dense Scrub
 - Bracken - continuous
 - Tall Ruderal
 - Standing Water



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