

Woodland west of Site Stables within Site Houses on Tollgate Road



Photograph 21 View from private access track to Park Cottages

Stables within Site



Photograph 22 View from Tollgate Road, south of Tollgate Farm

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		Project Land south of Tollgate Road, Colney Heath	Drawing No. CSA/3925/103	
Drawing Title Photosheets	Date September 2020			
Client Vistry Group	Drawn SG	Checked CA	Rev -	

Approximate extent of Site

Tollgate Farm

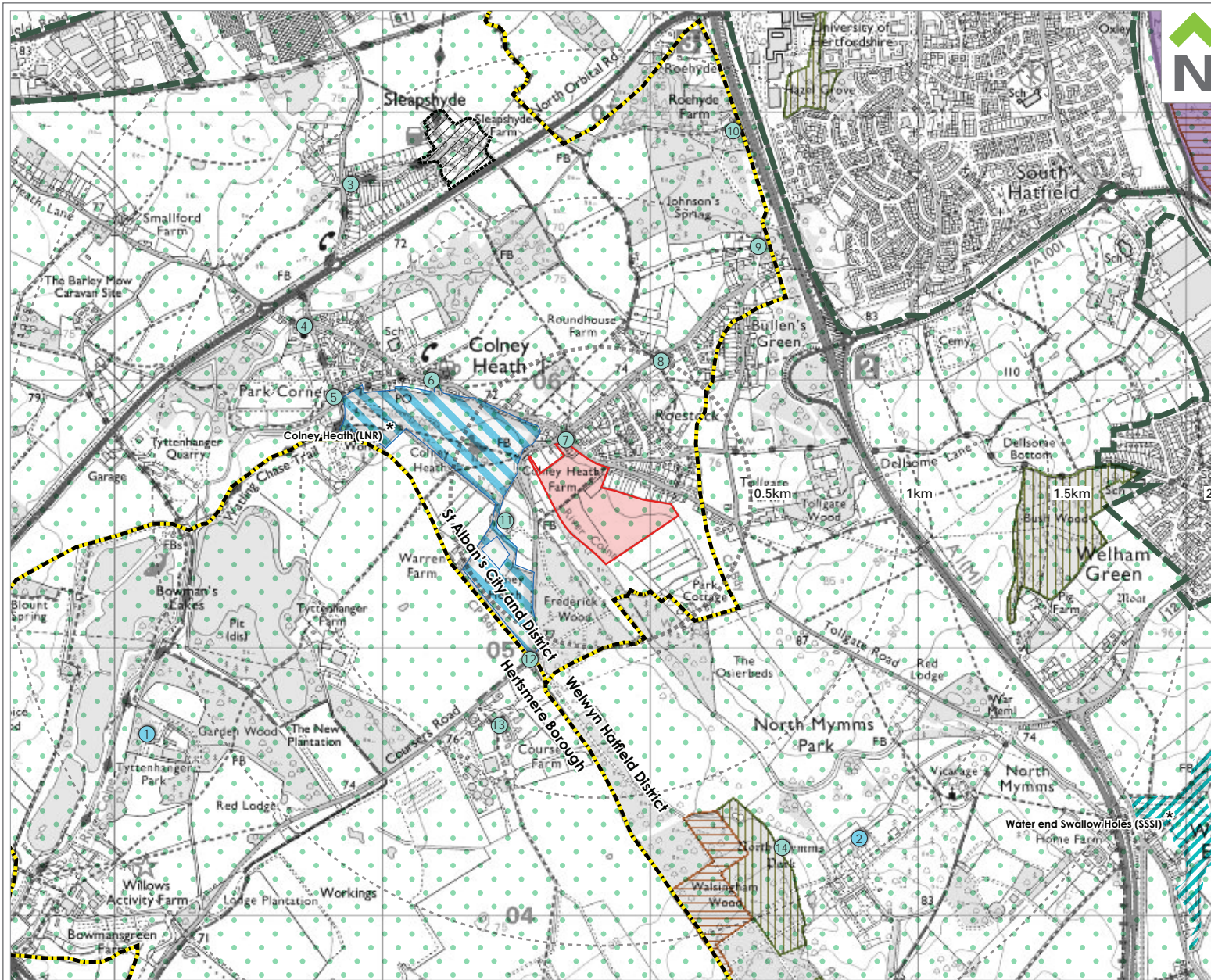


Photograph 23 View from footbridge over the A1(M), on public footpath 55

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Project	Land south of Tollgate Road, Colney Heath	Drawing No. CSA/3925/103		
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Appendix D

MAGIC map and Local Plan Extract



- Site Boundary
 - District Boundary
 - Green Belt
 - Local Nature Reserve (LNR)
 - Site of Special Scientific Interest (SSSI)
 - Registered Parks and Gardens (REG)
 - Sleepshyde Conservation Area
 - Ancient Woodland
 - Ancient Replanted Woodland
 - Grade I Listed Buildings & Structures within 2.0km
 - Grade II Listed Buildings & Structures within 1.5km (Outside Conservation Areas)
1. Tyttenhanger House
 2. North Mymms Park with Adjoining Garden Walls and ha-ha
 3. Ye Old House
 4. Church of St Mark
 5. London Coal Duty Marker
 6. Group of 3; The Crooked Billet Public House, Apsley Cottage & 94 High Street
 7. Group of 5; London Coal Duty Marker on Colney Heath, Queens Head Public House, London Coal Duty Marker adjoining south corner of garden to Queens Head Public House, Barn at Colney Heath Farm & Colney Heath Farmhouse
 8. 68 Roestock Lane
 9. The Grove
 10. Group of 2; Roehyde Farmhouse & adjoining Barn and Stable
 11. Mill at Mill House
 12. London Coal Duty Marker at Southern Boundary of Parish
 13. Barn 60 metres north west of Coursers Farm House
 14. Ice House at North Mymms Park



Dixies Barns, High Street,
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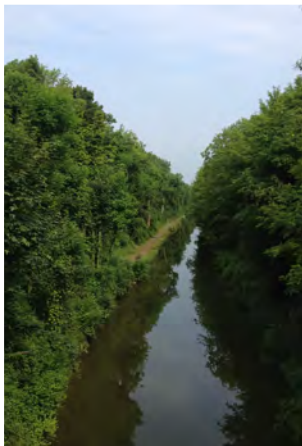
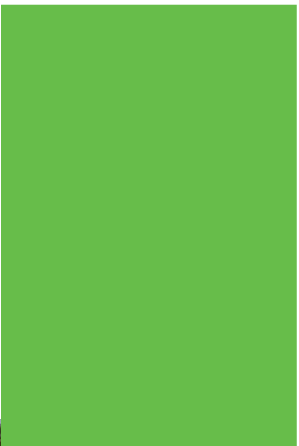
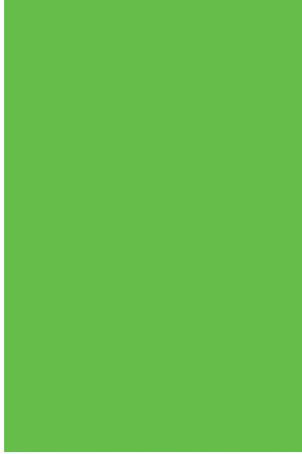
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Project	Land south of Tollgate Road, Colney Heath
Drawing Title	MAGIC Map and Local Plan Extract
Client	Vistry Group

Date	September 2020	Drawing No.	CSA/3925/104
Scale @ A4	NTS	Rev	-
Drawn	SG	Checked	CA

Appendix E

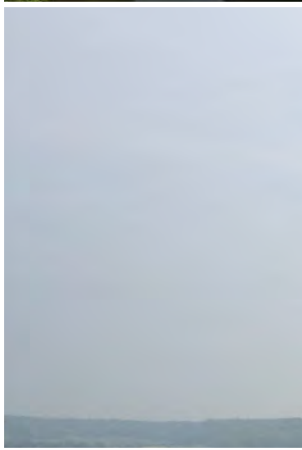
Extract from Green Belt Review Purposes Assessment 2013



GREEN BELT REVIEW PURPOSES ASSESSMENT
 (Prepared for Dacorum Borough Council, St Albans City and District Council and Welwyn Hatfield Borough Council)

Annex 1 – Parcel Assessment Sheets for St Albans City and District Council

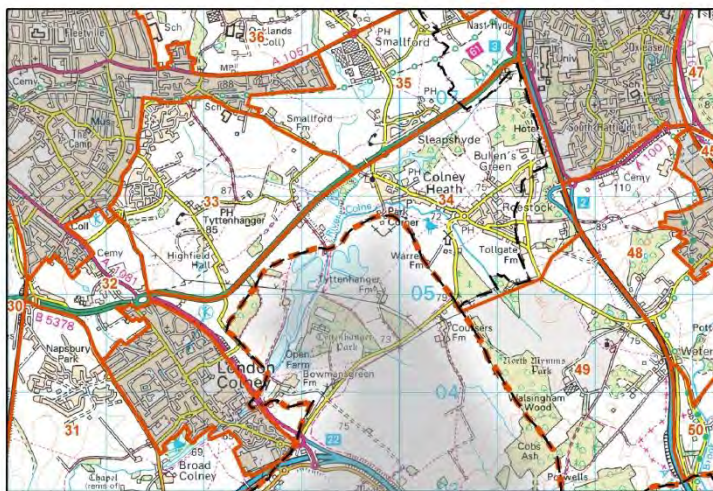
November 2013



SINCLAIR KNIGHT MERZ
SKM

GB34 –Green Belt Land between Hatfield and London Colney

Description The parcel is located to the southwest of Hatfield and the northeast of London Colney. The boundary to the north follows the North Orbital A414 to the south follows Coursers Road. It is 419 ha in size and comprises the broad and shallow basin of the meandering upper River Colne.



Land use Predominantly arable farmland and heathland. It includes significant areas of water in lakes created by sand and gravel working and some blocks of woodland.

Colney Heath and Bullens End narrow local gap



View to north shows strong rural and open characteristics



Principal Function / Summary

Significant contribution towards safeguarding the countryside and maintaining the existing settlement pattern (providing gap between Hatfield and London Colney). Partial contribution towards preventing merging (of St Albans and Hatfield) and preserving the setting of London Colney, Sleepshyde and Tyttenhanger Park. Overall the parcel contributes significantly towards 2 of the 5 Green Belt purposes.

GB34 – Green Belt Purposes Assessment		Contribution
To check the unrestricted sprawl of large built-up areas		LIMITED / NO
The parcel is located away from large built-up areas of London, Luton and Dunstable and Stevenage. It does not form a connection with a wider network of parcels to restrict sprawl.		
To prevent neighbouring towns from merging		PARTIAL
The parcel does not fully separate neighbouring 1 st tier settlements. However it contributes with GB33, 35 and 36 towards the strategic gap between St Albans and Hatfield. As a whole, the gap contains some built development and ribbon development associated to 3 rd tier settlements in the Green Belt. Overall, any minor reduction in the gap would be unlikely compromise the separation of 1 st tier settlements in physical or visual terms, or overall visual openness.		
To assist in safeguarding the countryside from encroachment		SIGNIFICANT
The parcel displays typical rural and countryside characteristics, especially to the south, in medium sized arable fields with hedgerow boundaries, sheep pasture and substantial riverine wetland habitats along the Colne, and areas of heath and semi natural grassland which are locally important at Colney Heath. Tyttenhanger Park and Hall is located to the south. There is evidence of linear built development in the north part of the parcel which contains Colney Heath and Bullens Green. The A1(M) is also a major urban influence which is audibly intrusive. Levels of openness are generally high especially to the south due to an absence of built development.		
To preserve the setting and special character of historic towns		PARTIAL
The parcel adjoins London Colney and Sleafshyde conservation areas however visual connection or views are limited by local routes and wooded areas. Tyttenhanger Park the setting of the Hall is encircled by sand and gravel working and mounds of overburden and spoil, with associated conveyor belts and plant at present but future restoration should remedy this impact in countryside character..		
To maintain existing settlement pattern		SIGNIFICANT
<p>The parcel provides a range of gaps. It provides the primary local gap between Hatfield (1st) and London Colney (2nd) and contributes with parcels GB33 to GB36 and GB43B to the overall gap with St Albans. The gap is large at 4.3km but contains ribbon development at Colney Heath (3rd) and Bullens End (3rd). The gap to the south to Colney Heath is 2.6km and well maintained (relatively free of development) however the gap to the north is more built up and narrower at 1.7km.</p> <p>Therefore any reduction in the gaps would compromise the separation of settlements in physical and visual terms to the north, and local levels of visual openness. A minor reduction to the south would lead to a less significant impact.</p>		

Level of openness and countryside character

Existence of built development The level of built development is low at 1.0%. Some ribbon development has taken place especially around villages to the north and east of the parcel.

Visual Openness The parcel is generally open to the north and more enclosed to the south where it is more wooded although there are some extensive panoramas over arable fields towards the Shenley ridge to the south.

Countryside Character Riverine character with many sites subject to past gravel working now restored to pasture, lakes or water meadow along the Colne. Well wooded to the south.

Appendix F

Extract from Hertfordshire Landscape Character Assessment

County map showing location of LANDSCAPE CHARACTER AREA

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Hertfordshire
County Council
LA076678



LOCATION

This area is located between London Colney and St Albans in the west and Hatfield in the east. The A414 and Colney Heath mark the southern boundary and Hatfield aerodrome the northern limit.

LANDSCAPE CHARACTER

A medium-scale landscape contained by adjacent urban areas and transport routes. There is a good network of hedges, field trees and tree belts to the urban areas that visually contain the largely arable character. Mineral extraction has created a number of disturbed and new landscapes that are still young. Areas of heath and semi-natural grassland are locally important at Colney Heath and Smallford gravel pits.

KEY CHARACTERISTICS

- medium-scale arable farmland
- subtle gently undulating landforms
- severance by transport corridors, past and present
- areas of semi-natural restored mineral workings
- heath habitat at Colney Heath
- urban development contains area physically but visually largely concealed

DISTINCTIVE FEATURES

- Smallford gravel pits
- Alban Way



Colney Heath •
(J. Billingsley)

PHYSICAL INFLUENCES

Geology and soils. To the east the geology comprises Aeolian silty drift and till. The soils are deep stoneless well-drained silty soils over gravel (Hamble 2 series). The gravels were laid down in glacial lakes during the Ice Age by the 'proto-Thames'. To the west around Tyttenhanger the soils overlie a chalky till geology with calcareous subsoils in places. Soils are deep, fine, loamy and clayey, with slow permeable subsoils and slight seasonal waterlogging (Hornbeam 3 series).

Topography. This is a subtle landform. To the west there are gentle undulations. To the east the landform is a continuation of the De Havilland Plain and the land is virtually flat. The past mineral workings have produced some minor local variations in landform.

Degree of slope. Typically less than 1 in 50 to the west, but locally up to 1 in 25. Virtually flat to the east, c.1 in 500.

Altitude range. 75-86m to the west and 70 to 74 in the east.

Hydrology. The young and seasonal River Colne flows into the south of the area at Colney Heath, where it has been artificially channelled across the common since the early 20th century. There are also a number of seepage lines and spring lines in the heathy woodland. The agricultural land to the north is drained by a series of field ditches and then into Butterwick Brook and Ellenbrook, both of which flow into the Colne within Tyttenhanger Park. There are a number of waterbodies associated with the former mineral workings, e.g. at Smallford gravel pits, and elsewhere there are scattered small ponds.

Land cover and land use. The primary land use is arable farming with a pattern of treed farmland. There is a significant area of disturbed land, within which restoration has been variable in its extent and quality. Pasture is limited in extent and confined to the edge of settlements.

Vegetation and wildlife. Woodlands are discrete and comprise oak, ash and hornbeam. There are two ancient woods at Coppice Wood and Knight Wood that are a natural oak/hazel mix. Either side of the A414 is a dramatic avenue of hybrid poplars. On the north-west edge adjacent to St Albans there are a number of tree belts that conceal the extent of development behind, e.g. at the former Cell Barnes Hospital. Some mineral restoration sites have lakes and new plantation areas, often willows and poplars. Hedge species include hawthorn, elm and some holly. Field trees are mainly oaks.

- Colney Heath is an open area of common with both acidic woodland and acidic/neutral grassland communities. Species include hawthorn, gorse, bracken, foxgloves and oak, with alders lining the Colne.

- At Smallford gravel pits an interesting and valuable mosaic of semi-improved grassland, scrub, ephemeral ponds and pockets of undisturbed species-rich acidic/neutral grassland has developed on old mineral working sites that were 'poorly' restored with rubble. These areas have been grazed by gypsy horses to create an interesting 'common'. The ponds contain great crested newts, (BAP species).
- At Sleapshyde, where the pits have not been filled there is good marsh vegetation. There are also areas of naturally occurring bog communities.

HISTORICAL AND CULTURAL INFLUENCES

The open unenclosed heath of Colney Heath is the last remnant of the old manorial lands of Tyttenhanger, owned by the abbey until the dissolution of the monasteries. The heath lay just outside the jurisdiction of the Metropolitan Police and was the haunt of highwaymen and the location of cockfights and prize fights. The inns around the heath were all connected by a series of footpaths.

Field pattern. The field pattern is mainly pre-18th century organic enclosure which has largely been retained in areas that have not been extracted. To the north of Colney Heath there is more evidence of parliamentary enclosure. In contrast to the adjacent character areas of the Vale of St Albans and the De Havilland Plain, fields are medium in size and irregular in shape. In areas that have not been subject to mineral extraction, hedgerows are medium to tall, particularly north of the A414, which creates a sense of enclosure from the adjacent urban areas and road corridors. The extracted area north east of Colney Heath is more open in character.

Transport pattern. The historic road pattern is of narrow winding lanes within the farmed landscape. This has been largely retained, although the area is divided by the linear A414 dual carriageway. The Smallford Trail follows the line of a disused railway and is also a valuable wildlife corridor.

Settlements and built form. The traditional pattern is of dispersed settlement. There are a number of clusters, including the older settlements of Tyttenhanger, Wilkins Green, Sleapshyde and Colney Heath. These have been added to and, together with ribbon development and expansion from the adjacent urban areas, there is a sense of urban pressure. There are a number of traditional buildings, using weatherboard, render and brick alongside 20th-century materials.

VISUAL AND SENSORY PERCEPTION

Views both from outside and within the area are generally well screened by roadside vegetation along both the narrow lanes and the dual carriageways. The A414 and A1(M) provide a major source of noise and disruption.

Rarity and distinctiveness. The landscape type is frequent with the heathy habitats being the most distinct features.

VISUAL IMPACT

The extent of built development within and on the perimeter of the area is generally well concealed by vegetation. Exceptions are some of the large industrial units and glasshouses at Smallford and the A414. There is some localised fly-tipping which is visually detrimental.

ACCESSIBILITY

There is open public access to Colney Heath and a good network of footpaths and the Albans Way/Smallford Trail within the area. Public access to Smallford gravel pits is present but not well signed. There is angling at Smallford gravel pits.

COMMUNITY VIEWS

The heathland landscapes are valued for their distinctiveness amidst an otherwise unremarked-upon setting (D).

LANDSCAPE RELATED DESIGNATIONS

Watling Chase Community Forest.
LNR: Colney Heath Common.

CONDITION

Land cover change: **localised**
Age structure of tree cover: **mature or young**
Extent of semi-natural habitat survival: **fragmented**
Management of semi-natural habitat: **good**
Survival of cultural pattern: **interrupted**
Impact of built development: **moderate**
Impact of land-use change: **moderate**

STRENGTH OF CHARACTER

Impact of landform: **apparent**
Impact of land cover: **apparent**
Impact of historic pattern: **interrupted**
Visibility from outside: **locally visible**
Sense of enclosure: **contained**
Visual unity: **incoherent**
Distinctiveness/rarity: **frequent**

CONDITION	GOOD	Strengthen and reinforce	Conserve and strengthen	Safeguard and manage
	MODERATE	Improve and reinforce	Improve and conserve	Conserve and restore
	POOR	Reconstruct	Improve and restore	Restore condition to maintain character
		WEAK	MODERATE	STRONG
STRENGTH OF CHARACTER				

STRATEGY AND GUIDELINES FOR MANAGING CHANGE: IMPROVE AND CONSERVE

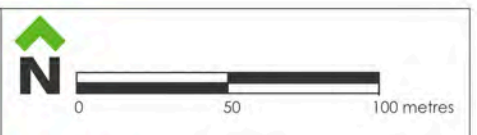
- support the Watling Chase Community Forest in the realisation of its objectives for the area
- promote the appropriate management of ancient woodland, including Knights Wood, in order to maintain a rich ground flora and the distinction between different management systems, such as high forest, coppice and coppice-with-standards
- use ancient hedge and field boundaries to identify the most appropriate location for woodland restoration and expansion
- promote new woodland planting to maintain and improve visual separation from the adjacent urban uses and transport corridors, including A414 and A1(M). Scale of planting to typically comprise small woods, copses and shelterbelts
- encourage effective landscape management along transport corridors to ensure thinning, selective felling and replanting is undertaken to achieve a varied age structure and locally indigenous species
- reduce the visual impact of adjacent built areas, e.g. Smallford
- improve public access and signing to areas of interest including the Alban Way (Smallford Trail) and Smallford gravel pits. Provide stopping places along the Alban Way for sitting and picnicking
- encourage maintenance of the existing pattern and scale of hedgerows and field trees that provide enclosure
- promote hedgerow restoration and creation throughout the area to provide visual and ecological links between existing and proposed woodland areas. Pattern to follow historic field boundaries where possible
- encourage planting of new hedges adjacent to rights of way
- support the retention and management of heath habitats including Colney Heath. Encourage opportunities of extending this habitat
- develop appropriate management strategies to maintain and improve the mosaic of wildlife habitats areas including wetland and semi-improved grassland, in association with former mineral extraction sites. Include the continued use of grazing and management by wildlife organisations
- promote the creation of valuable new nature conservation sites, the restoration of degraded sites associated with mineral extraction and addressing areas of fly-tipping
- promote the creation of buffer zones between intensive arable production and important semi-natural habitats and the creation of links between semi-natural habitats
- promote crop diversification and the restoration of mixed livestock/arable farming where possible
- encourage the restoration of ditches and discourage the enclosure of existing open drainage systems
- provide new uncropped or grass field margins to link areas of wildlife importance and/or existing and proposed rights of way
- promote both the creation of new ponds and the retention/enhancement of existing ponds for wildlife
- where ancient lanes and their associated hedgerows fall within or abut a proposed development ensure that developers retain, protect, enhance and integrate such features into the new development with due regard to their historic, ecological and landscape value
- where hedgerow removal is deemed to be unavoidable, replacement planting should use locally native species of local provenance to maintain local distinctiveness



• From Tyttenhanger towards St Albans (J. Billingsley)

Appendix G

Concept Plan



- Site Boundary: 10.80ha
- Potential area for residential development: 5.28ha (up to 194 dwellings @ 35/40 dph)
- Potential location for Locally Equipped Area for Play (LEAP) (20m buffer required)
- Potential open space to serve the new development
- Potential location for SuDS (Sustainable Drainage Systems) features
- Dwelling frontages
- Potential vehicular access points
- Potential spine road throughout the development
- Potential secondary streets
- Potential key spaces with pedestrian priority
- Potential recreational routes through the development
- Existing public footpaths
- Existing vegetation
- Green Belt
- Existing waterbodies and water courses
- Listed Buildings
- Colney Heath Local Nature Reserve
- Existing bus route and bus stops
- Fluvial flood zone 2 (Source: Environment Agency)
- Fluvial flood zone 3 (Source: Environment Agency)

Provision of higher density housing to add variety and create differing character areas across the site

Existing public footpath through the Site should be retained and enhanced, and new recreational routes should connect with it.

Large area of public open space located along the River Colne where the site is located within flood zone 2 & 3. This POS also sets the new dwellings back suitably from the river.

New dwellings should be orientated to overlook areas of public open space.

Pocket greens will break up the streetscene and aid legibility through the development.

New hedgerow defines the site's south eastern boundary.

Opportunity for new dwellings to stitch into the existing urban fabric.

Potential vehicular and pedestrian access point from Tollgate Way.

Rev	Date	By	Description
B	02.08.18	RC	Fluvial flooding shown on plan
A	20.07.18	RC	Amended to reflect client's comments

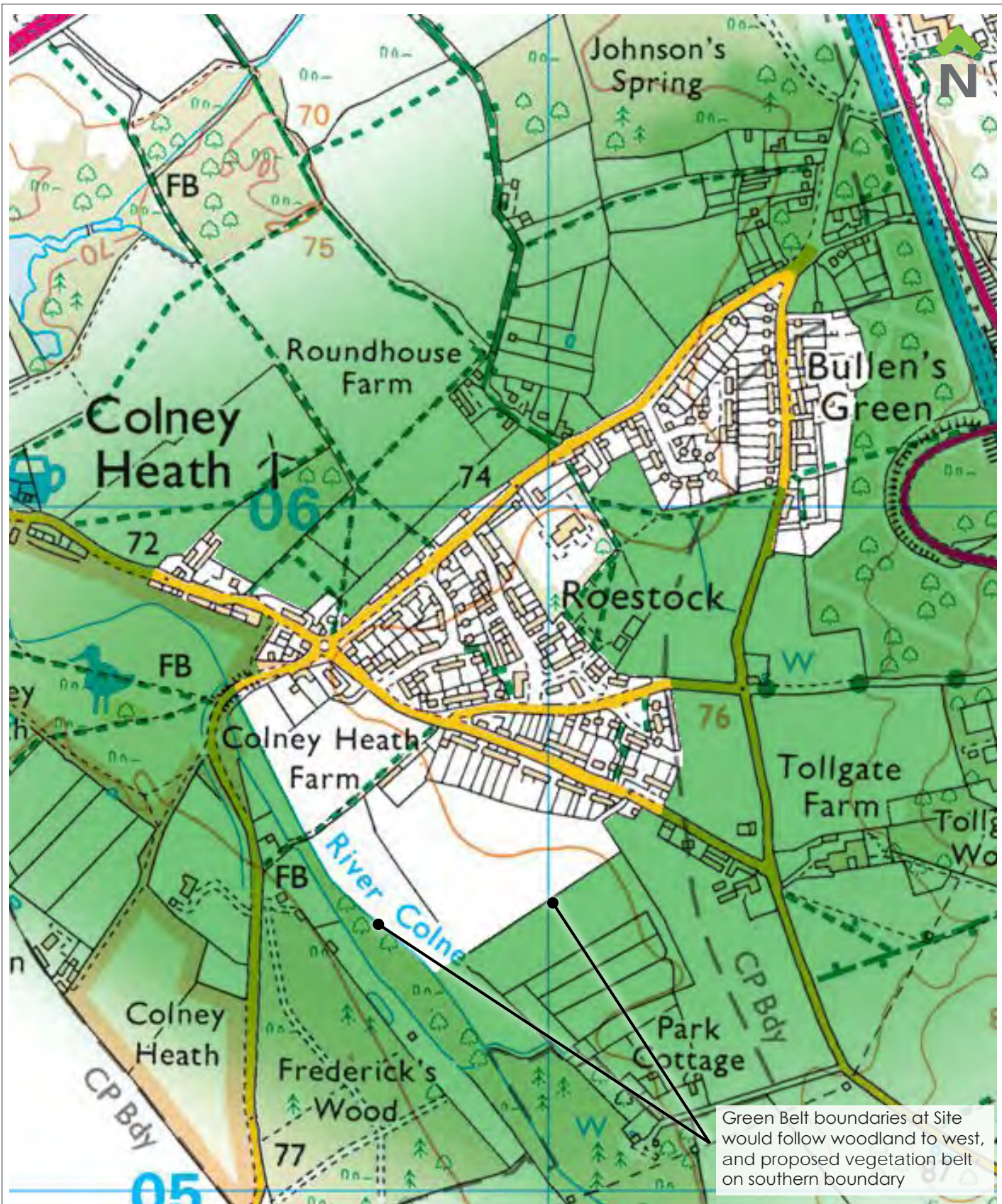
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Project	Land at Colney Heath		
Title	Concept Masterplan		
Client	Linden Homes		
Scale	1:2500 @ A3	Drawn	RC
Date	July 2018	Checked	RR
Drawing No.	CSA/3925/100	Rev	B

Appendix H

Potential Green Belt Boundary



Green Belt boundaries at Site would follow woodland to west, and proposed vegetation belt on southern boundary



Potential Green Belt around Colney Heath

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	<p>Drawing Title Potential Green Belt boundary</p>	<p>Scale @ A4 Not to scale</p>	<p>Drawn SG</p>
	<p>Client Vistry Group</p>	<p>Date Sept 2020</p>	<p>Checked CA</p>

Appendix I

Methodology for Landscape and Visual Assessment

METHODOLOGY FOR LANDSCAPE AND VISUAL IMPACT ASSESSMENTS

- M1 In landscape and visual impact assessment, a distinction is normally drawn between **landscape/townscape effects** (i.e. effects on the character or quality of the landscape (or townscape), irrespective of whether there are any views of the landscape, or viewers to see them) and **visual effects** (i.e. effects on people's views of the landscape, principally from public rights of way and areas with public access, but also private views from residential properties). Thus, a development may have extensive landscape effects but few visual effects if, for example, there are no properties or public viewpoints nearby. Or alternatively, few landscape effects but substantial visual effects if, for example, the landscape is already degraded or the development is not out of character with it, but can clearly be seen from many residential properties and/or public areas.
- M2 The assessment of landscape & visual effects is less amenable to scientific or statistical analysis than some environmental topics and inherently contains an element of subjectivity. However, the assessment should still be undertaken in a logical, consistent and rigorous manner, based on experience and judgement, and any conclusions should be able to demonstrate a clear rationale. To this end, various guidelines have been published, the most relevant of which, for assessments of the effects of a development, rather than of the character or quality of the landscape itself, form the basis of the assessment and are as follows:
- 'Guidelines for Landscape & Visual Impact Assessment', produced jointly by the Institute of Environmental Assessment and the Landscape Institute (GLVIA 3rd edition 2013); and
 - 'An Approach to Landscape Character Assessment', October 2014 (Christine Tudor, Natural England) to which reference is also made. This stresses the need for a holistic assessment of landscape character, including physical, biological and social factors.

LANDSCAPE/TOWNSCAPE EFFECTS

- M3 Landscape/townscape quality is a subjective judgement based on the condition and characteristics of a landscape/townscape. It will often be informed by national, regional or local designations made upon it in respect of its quality e.g. AONB. Sensitivity relates to the inherent value placed on a landscape / townscape and the ability of that landscape/townscape to accommodate change.

Landscape sensitivity can vary with:

- (i) *existing land uses;*
- (ii) *the pattern and scale of the landscape;*
- (iii) *visual enclosure/openness of views, and distribution of visual receptors;*
- (iv) *susceptibility to change;*
- (v) *the scope for mitigation, which would be in character with the existing landscape; and*
- (vi) *the condition and value placed on the landscape.*

- M4 The concept of landscape/townscape value is considered in order to avoid consideration only of how scenically attractive an area may be, and thus to avoid undervaluing areas of strong character but little scenic beauty. In the process of

making this assessment, the following factors, among others, are considered with relevance to the site in question: landscape quality (condition), scenic quality, rarity, representativeness, conservation interest, recreation value, perceptual aspects and associations.

- M5 Nationally valued landscapes are recognised by designation, such as National Parks and Areas of Outstanding Natural Beauty ('AONB') which have particular planning policies applied to them. Nationally valued townscapes are typically those covered by a Conservation Area or similar designation. Paragraph 170 of the current NPPF outlines that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes '*...in a manner commensurate with their statutory status or identified quality in the development plan*'.
- M6 There is a strong inter-relationship between landscape/townscape quality, value and sensitivity as high quality/value landscapes/townscapes usually have a low ability to accommodate change.
- M7 For the purpose of our assessment, landscape/townscape quality, value and sensitivity is assessed using the criteria in Tables LE1 and LE2. Typically, landscapes/townscapes which carry a quality designation and which are otherwise attractive or unspoilt will in general be more sensitive, while those which are less attractive or already affected by significant visual detractors and disturbance will be generally less sensitive.
- M8 The magnitude of change is the scale, extent and duration of change to a landscape arising from the proposed development and was assessed using the criteria in Table LE3.
- M9 Landscape/townscape effects were assessed in terms of the interaction between the magnitude of the change brought about by the development and the quality, value & sensitivity of the landscape resource affected. The landscape/townscape effects can be either beneficial, adverse or neutral. Landscape effects can be direct (i.e. impact on physical features, e.g. landform, vegetation, watercourses etc.), or indirect (i.e. impact on landscape character as a result of the introduction of new elements within the landscape). Direct visual effects result from changes to existing views.
- M10 In this way, landscapes/townscapes of the highest sensitivity, when subjected to a high magnitude of change from the proposed development, are likely to give rise to 'substantial' landscape/townscape effects which can be either adverse or beneficial. Conversely, landscapes of low sensitivity, when subjected to a low magnitude of change from the proposed development, are likely to give rise to only 'slight' or neutral landscape effects. Beneficial landscape effects may arise from such things as the creation of new landscape features, changes to management practices and improved public access. For the purpose of this assessment the landscape/townscape effects have been judged at completion of the development and in year 15. This approach acknowledges that landscape/townscape effects can reduce as new planting/mitigation measures become established and achieve their intended objectives.

VISUAL EFFECTS

- M11 Visual effects are concerned with people's views of the landscape/townscape and the change that will occur. Like landscape effects, viewers or receptors are categorised by their sensitivity. For example, views from private dwellings are generally of a higher sensitivity than those from places of work.

- M12 In describing the content of a view the following terms are used:
- No view - no views of the development;
 - Glimpse - a fleeting or distant view of the development, often in the context of wider views of the landscape;
 - Partial - a clear view of part of the development only;
 - Filtered - views to the development which are partially screened, usually by intervening vegetation - the degree of filtering may change with the seasons;
 - Open - a clear view to the development.
- M13 The sensitivity of the receptor varies according to its susceptibility to a particular type of change, or the value placed on it (e.g. views from a recognised beauty spot will have a greater sensitivity). Visual sensitivity was assessed using the criteria in Table VE1.
- M14 The magnitude of change is the degree in which the view(s) may be altered as a result of the proposed development and will generally decrease with distance from its source, until a point is reached where there is no discernible change. The magnitude of change in regard to the views was assessed using the criteria in Table VE2.
- M15 Visual effects were then assessed in terms of the interaction between the magnitude of the change brought about by the development and also the sensitivity of the visual receptor affected.
- M16 As with landscape effects, a high sensitivity receptor, when subjected to a high magnitude of change from the proposed development, is likely to experience 'substantial' visual effects which can be either adverse or beneficial. Conversely, receptors of low sensitivity, when subjected to a slight magnitude of change from the proposed development, are likely to experience only 'slight' or neutral visual effects, which can be either beneficial or adverse.
- M17 Unless specific slab levels of buildings have been specified, the assessment has assumed that slab levels will be within 750mm of existing ground level.

MITIGATION AND RESIDUAL EFFECTS

- M18 Mitigation measures are described as those measures, including any process or activity, designed to avoid, reduce and compensate for adverse landscape and/or visual effects resulting from the proposed development.
- M19 In situations where proposed mitigation measures are likely to change over time, as with planting to screen a development, it is important to make a distinction between any likely effects that will arise in the short-term and those that will occur in the long-term or 'residual effects' once mitigation measures have established. In this assessment, the visual effects of the development have been considered at completion of the entire project and at 15 years thereafter.
- M20 Mitigation measures can have a residual, positive impact on the effects arising from a development, whereas the short-term impact may be adverse.

ASSESSMENT OF EFFECTS

- M21 The assessment concisely considers and describes the main landscape/townscape and visual effects resulting from the proposed development. The narrative text demonstrates the reasoning behind judgements concerning the landscape and visual effects of the proposals. Where appropriate, the text is supported by tables

which summarise the sensitivity of the views/landscape/townscape, the magnitude of change and describe any resulting effects.

CUMULATIVE EFFECTS

- M22 Cumulative effects are *'the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together.'*
- M23 In carrying out landscape assessment it is for the author to form a judgement on whether or not it is necessary to consider any planned developments and to form a judgement on how these could potentially affect a project.

ZONE OF THEORETICAL VISIBILITY (ZTV)

- M24 A ZTV map can help to determine the potential visibility of the site and identify those locations where development at the site is likely to be most visible from the surrounding area. Where a ZTV is considered appropriate for a proposed development the following methodology is used.
- M25 The process is in two stages, and for each, a digital terrain model ('DTM') using Key TERRA-FIRMA computer software is produced and mapped onto an OS map. The DTM is based on Ordnance Survey Landform Profile tiles, providing a digital record of existing landform across the UK, based on a 10 metre grid. There is the potential for minor discrepancies between the DTM and the actual landform where there are topographic features that are too small to be picked up by the 10 metre grid. A judgement will be made to determine the extent of the study area based on the specific site and the nature of the proposed change, and the reasons for the choice will be set out in the report. The study area will be determined by local topography but is typically set at 7.5km.
- M26 Different heights are then assigned to significant features, primarily buildings and woodland, thus producing the first stage of an 'existing' ZTV illustrating the current situation of the site and surrounding area. This data is derived from OS Open Map Data, and verified during the fieldwork, with any significant discrepancies in the data being noted and the map adjusted accordingly. Fieldwork is confined to accessible parts of the site, public rights of way, the highway network and other publicly accessible areas.
- M27 The second stage is to produce a 'proposed' ZTV with the same base as the 'existing' ZTV. The proposed development is introduced into the model as either a representative spot height, or a series of heights, and a viewer height of 1.7m is used. Illustrating the visual envelope of the proposed development within the specific site.
- M28 The model is based on available data and fieldwork and therefore may not take into account all development or woodland throughout the study area, nor the effect of smaller scale planting or hedgerows. It also does not take into account areas of recent or continuous topographic change from, for instance, mining operations.

VISUALISATION TYPE METHODOLOGY

- M29 The photographs and visualisations within this report have been prepared in general conformance with the Landscape Institute's Technical Guidance Note 06/19. The 'types', as set out within the Guidance, comprise the following:
- Type 1 - annotated viewpoint photographs;
 - Type 2 - 3D wireline / model;
 - Type 3 - photomontage / photowire;
 - Type 4 - photomontage / photowire (survey / scale verifiable).

- M30 Photographs were taken with a digital camera with a lens that approximates to 50mm, to give a similar depth of view to the human eye. In some cases images have been joined together to form a panorama. The prevailing weather and atmospheric conditions, and any effects on visibility are noted. Images are displayed at the most appropriate size, taking into account the published guidance, legibility at A3 paper size, and context (which is often shown for illustrative purposes only), and allows for enlarged scale printing if required.
- M31 The Guidance Note advocates a proportionate and reasonable approach, which includes professional judgement, in order to aid informed decision making.
- M32 The determination of the suitable Visualisation Type to aid in illustrating the effects of the scheme, has been determined by a range of factors as set out below, including the timing of the project, the technical expertise, and costs involved.
- M33 Where it is deemed suitable or necessary to utilise the Visualisation Types set out within the Guidance Note, the table below has been used to determine which Visualisation Type is most appropriate to the project, unless otherwise specified within the report.
- M34 The table below (based on Table 1 within the Guidance Note) sets out the intended purpose and user of the report, and the Likely Level of Effect. The Likely Level of Effect is based on Tables LE4 and VE3 in this methodology, and takes into consideration the type and nature of the proposed development, as well as the sensitivity of the host environment and key visual receptors. The Likely Level of Effect is based on an initial consideration of the landscape and visual effects of the project as a whole, and the subsequent assessment may conclude a lesser or higher level of overall effect, once completed. Table VMT also provides an indication as to the appropriate Visualisation Type, noting that it is not a fixed interpretation and that professional judgement should always be applied.
- M35 Additional photographs (which do not conform to any Type) may be included to illustrate the character of the landscape/townscape, or to illustrate relevant characteristics, for example the degree and nature of intervening vegetation, or reciprocal views from residential properties.

Table VTM		VISUALISATION TYPE METHODOLOGY				
		Type 1	Type 2	Type 3	Type 4	
User, Purpose, and Likely Level of Effect	A	Evidence submitted to most Public Inquiries, most planning applications for EIA development accompanied by Landscape and Visual ES Chapters.				
		Neutral	Negligible	Slight	Moderate	Substantial
	B	Planning applications for most non-EIA development accompanied by LVIA/LVA, where there are concerns about landscape and visual effects and effective mitigation may be required. Some Landscape and Visual ES Chapters.				
		Neutral	Negligible	Slight	Moderate	Substantial
C	Planning applications where the character and appearance of the development is a material consideration, but where a LVIA/LVA may not be required.					
	Neutral/Negligible/Slight		Moderate	Substantial		
D	To inform the iterative process of assessment and design with client, and/or pre-application consultations with the competent authority.					
	Neutral/Negligible/Slight/Moderate			Substantial		

Table LE 1

LANDSCAPE / TOWNSCAPE QUALITY AND VALUE

	Very High	High	Medium	Low
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Description of Landscape/Townscape Quality and Value</p>	<p>Landscape Quality: Intact and very attractive landscape which may be nationally recognised/designated for its scenic beauty. e.g. National Park, Area of Outstanding Natural Beauty or World Heritage Site.</p> <p>Townscape Quality: A townscape of very high quality which is unique in its character, and recognised nationally/internationally, e.g. World Heritage Site</p> <p>Value: Very high quality landscape or townscape with Statutory Designation for landscape/townscape quality/ value, e.g. National Park, World Heritage Site, Registered Park or Garden. Contains rare elements or significant cultural/historical associations.</p>	<p>Landscape Quality: A landscape, usually combining varied topography, historic features and few visual detractors. A landscape known and cherished by many people from across the region. e.g. County Landscape Site such as a Special Landscape Area.</p> <p>Townscape Quality: A well designed townscape of high quality with a locally recognised and distinctive character e.g. Conservation Area</p> <p>Value: High quality landscape/townscape or lower quality landscape with un-fettered public access, (e.g. commons, public park) or with strong cultural associations. May have important views out to landmarks/designated landscapes and few detracting features. May possess perceptual qualities of tranquility or wildness.</p>	<p>Landscape Quality: Non-designated landscape area, generally pleasant but with no distinctive features, often displaying relatively ordinary characteristics. May have detracting features.</p> <p>Townscape Quality: A typical, pleasant townscape with a coherent urban form but with no distinguishing features or designation for quality.</p> <p>Value: An ordinary landscape/townscape of local value which may have some detracting features. No recognised statutory designations for landscape/townscape quality. A landscape which may have limited public access and/ or have pleasant views out, or be visible in public views.</p>	<p>Landscape / Townscape Quality: Unattractive or degraded landscape/townscape, affected by numerous detracting elements e.g. industrial areas, infrastructure routes and un-restored mineral extractions.</p> <p>Value: Landscape/townscape generally of lower quality. A landscape with limited public access, no designations or recognised cultural significance. Limited public views.</p>

Table LE 2

LANDSCAPE / TOWNSCAPE SENSITIVITY

	Very High	High	Medium	Low
Description of Sensitivity	<p>A landscape/townscape with a very low ability to accommodate change such as a nationally designated landscape.</p> <p>A landscape/townscape with limited ability to accommodate change because such change may lead to some loss of valuable features or elements. Development of the type proposed could potentially be discordant with the character of the landscape/townscape.</p> <p>A landscape/townscape with reasonable ability to accommodate change. Change may lead to a limited loss of some features or characteristics. Development of the type proposed would not be discordant with the character of the landscape/townscape.</p> <p>A landscape/townscape with good ability to accommodate change. Change would not lead to a significant loss of features or characteristics, and there would be no significant loss of character or quality. Development of the type proposed would not be discordant with the landscape/townscape in which it is set and may result in a beneficial change.</p>			

Table LE 3 LANDSCAPE / TOWNSCAPE MAGNITUDE OF CHANGE

	Substantial	Moderate	Slight	Negligible	Neutral
Description of the Change predicted	Total loss of or significant impact on key characteristics, features or elements				
	Partial loss of or impact on key characteristics, features or elements				
	Minor loss of or alteration to one or more key landscape/ townscape characteristics, features or elements				
	Very minor loss or alteration to one or more key landscape/ townscape characteristics, features or elements				
	No loss or alteration of key landscape/ townscape characteristics, features or elements				

Table LE 4 LANDSCAPE / TOWNSCAPE EFFECTS

	Substantial	Moderate	Slight	Negligible	Neutral
Description of the Effect	<p>The proposals will alter the landscape/ townscape in that they:</p> <ul style="list-style-type: none"> • will result in substantial change in the character, landform, scale and pattern of the landscape/townscape; • are visually intrusive and would disrupt important views; • are likely to impact on the integrity of a range of characteristic features and elements and their setting; • will impact a high quality or highly vulnerable landscape; • cannot be adequately mitigated. 				
	<p>The proposals:</p> <ul style="list-style-type: none"> • noticeably change the character, scale and pattern of the landscape/townscape; • may have some impacts on a landscape/townscape of recognised quality or on vulnerable and important characteristic features or elements. • are a noticeable element in key views; • not possible to fully mitigate. 				
	<p>The proposals:</p> <ul style="list-style-type: none"> • do not quite fit the landform and scale of the landscape/townscape and will result in relatively minor changes to existing landscape character; • will impact on certain views into and across the area; • mitigation will reduce the impact of the proposals but some minor residual effects will remain. 				
	<p>The proposals:</p> <ul style="list-style-type: none"> • complement the scale, landform and pattern of the landscape/townscape; • development may occupy only a relatively small part of the Site; • maintain the majority of landscape features; • incorporates measures for mitigation to ensure the scheme will blend in well with the landscape/townscape and mitigates any loss of vegetation. 				
	<p>The proposals:</p> <ul style="list-style-type: none"> • maintain existing landscape/townscape character; • has no impact on landscape features, such as trees, hedgerows, watercourses, etc.; • utilises a highly degraded landscape or brownfield site. 				

Footnote:

1. Each level (other than neutral) of change identified can be either regarded as 'beneficial' or 'adverse'. The above table relates to adverse landscape effects, however where proposals complement or enhance landscape character, these will have a comparable range of beneficial landscape effects.

Table VE 1

VISUAL SENSITIVITY

	High	Medium	Low
<p>Description of the Receptor</p>	<p>Residential properties with predominantly open views from windows, garden or curtilage. Views will normally be from ground and first floors and from two or more windows of rooms mainly in use during the day.</p> <p>Users of Public Rights of Way in sensitive or generally unspoilt areas.</p> <p>Predominantly non-motorised users of minor or unclassified roads in the countryside.</p> <p>Views from within an Area of Outstanding Natural Beauty, National Park, World Heritage Site or Conservation Area and views for visitors to recognised viewpoints or beauty spots.</p> <p>Users of outdoor recreational facilities with predominantly open views where the purpose of that recreation is enjoyment of the countryside - e.g. Country Parks, National Trust or other access land etc.</p>	<p>Residential properties with partial views from windows, garden or curtilage. Views will normally be from first floor windows only, or an oblique view from one ground floor window, or may be partially obscured by garden or other intervening vegetation.</p> <p>Users of Public Rights of Way in less sensitive areas or where there are significant existing intrusive features.</p> <p>Users of outdoor recreational facilities with restricted views or where the purpose of that recreation is incidental to the view e.g. sports fields.</p> <p>Schools and other institutional buildings, and their outdoor areas.</p> <p>Users of minor or unclassified roads in the countryside, whether motorised or not.</p>	<p>People in their place of work.</p> <p>Users of main roads or passengers in public transport on main routes.</p> <p>Users of outdoor recreational facilities with restricted views and where the purpose of that recreation is unrelated to the view e.g. go-karting track.</p>

Table VE 2		VISUAL MAGNITUDE OF CHANGE				
		Substantial	Moderate	Slight	Negligible	Neutral
Description of the Change predicted	Large and dominating changes which affect a substantial part of the view.					
	Clearly perceptible and noticeable changes within a significant proportion of the view.					
	Small changes to existing views, either as a minor component of a wider view, or smaller changes over a larger proportion of the view(s).					
	Very minor changes over a small proportion of the view(s).					
	No discernible change to the view(s).					

Table VE 3		VISUAL EFFECTS				
		Substantial	Moderate	Slight	Negligible	Neutral
Description of the Effects	The proposals would have a significant impact on a view from a receptor of medium sensitivity, or less damage (or improvement) to a view from a highly sensitive receptor, and would be an obvious or dominant element in the view.					
	The proposals would impact on a view from a medium sensitive receptor, or less harm (or improvement) to a view from a more sensitive receptor, and would be a readily discernible element in the view.					
	The proposals would have a limited effect on a view from a medium sensitive receptor, but would still be a visible element within the view, or a greater effect on a view from a receptor of lower sensitivity.					
	The proposals would result in a negligible change to the view but would still be discernible.					
	No change in the view.					

Footnote:

1. Each level (other than neutral) of change identified can be either regarded as 'beneficial' or 'adverse'.

Appendix J

Methodology for Green Belt Assessment

GREEN BELT REVIEW METHODOLOGY

APPROACH

GB1 The purpose of this review is to consider the performance of Green Belt land at the Site against the Green Belt purposes identified in the NPPF. The assessment is focused on Green Belt purposes and does not consider other factors which may affect the potential suitability of the site for development, e.g. transport and sustainability.

STAGE 1: DESK BASED ASSESSMENT

GB2 An initial desk-based assessment was undertaken to identify any absolute/primary constraints which would prevent development at the site. Whilst these factors are unrelated to the function or performance of the Green Belt, land in these locations is not considered suitable for housing.

GB3 As part of the desk based assessment the following sources of information were consulted:

- Multi-Agency Geographic Information for the Countryside ('MAGIC') mapping;
- Adopted Local Plan Policies Maps;
- Aerial Photography; and
- Ordnance Survey Mapping.

GB4 Absolute constraints are constraints which would preclude development, and are as follows:

- Flood Zone 3;
- National and International Ecological Designations
- Site of Special Scientific Interest;
- Special Protection Area;
- Special Area of Conservation;
- Ancient Woodland;
- Statutory Landscape designations e.g. AONB and National Park;
- Registered Park and Garden; and
- Scheduled Monument.

GB5 Primary constraints pose a substantial obstacle to development and these include:

- Non-statutory Ecology Designations;
- Local wildlife Site and Local Nature Reserve;
- Area of publicly accessible open land e.g. country park;
- Presence of strong, permanent existing Green Belt Boundaries – e.g. Major highway infrastructure can present a strong boundary to prevent sprawl and encroachment on the countryside; and
- Local landscape designations.

STAGE 2: EVALUATION

GB6 The Site and the effect of the proposed development on it were assessed against the national Green Belt purposes using the methodology set out below.

ASSESSMENT METHODOLOGY

GB7 The NPPF sets out the five purposes for including land within the Green Belt:

- to check the unrestricted sprawl of large built-up areas;
- to prevent neighbouring towns merging into one another;
- to assist in safeguarding the countryside from encroachment;
- to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

GB8 The NPPF does not attach a hierarchy to the Green Belt purposes and it is assumed that each purpose is of equal importance. In addition, neither the NPPF nor the National Planning Policy Guidance provides direction on how to assess the performance of Green Belt parcels. The most relevant non-policy guidance in relation to Green belt Assessment is published by the Planning Advisory Service ('PAS', Planning on the Doorstep: the Big Issues – Green Belt [2015]). This methodology has therefore been informed by this guidance, and by past experience and relevant examples.

GB9 The following assessment methodology considers the first four Green Belt purposes. The fifth purpose has not been included, as it is considered that if the Green Belt achieves this purpose, then all Green Belt land performs this function to the same extent. This is supported by the PAS guidance, which states that the application of this purpose is unlikely to distinguish differences in contribution to Green Belt.

GB10 In order to assess the performance of the Site against each of the four Green Belt Purposes, a five point scale has been used.

GB11 In order to assess the performance of each land parcel against each of the four Green Belt Purposes a five point scale has been used.

Strong Contribution	Land makes a significant contribution to this purpose and should remain in the Green Belt
Relatively Strong Contribution	Land performs well against this purpose.
Moderate Contribution	Land performs moderately well against this purpose.
Relatively Weak Contribution	Land makes some contribution to this purpose.
Weak / No Contribution	Land makes little or no contribution to this purpose.

GREEN BELT BOUNDARIES

- GB12 An important part of the assessment of the performance of any site in relation to the Green Belt purposes, is consideration of the effectiveness of the existing Green Belt boundaries. The NPPF states that boundaries should be defined 'clearly, using physical features that are readily recognisable and likely to be permanent'.
- GB13 The following features are considered most likely to fulfil this requirement:
- Major transport infrastructure, motorways, main trunk roads and railways;
 - Landscape features including woodland blocks and bands and watercourses; and
 - Topography such as ridgelines.
- GB13 Where these features are absent secondary boundaries could include field hedgerows or minor roads/private roads.
- GB14 Where Green Belt boundaries follow the rear of existing housing at the periphery of the settlement, these can lack visual containment and result in a poor relationship between the edge of settlement and the adjoining land parcel. Where such situations exist, consideration should be given to whether an improved boundary could be provided through planned expansion.
- GB15 When considering the performance of a site against the Green Belt purposes, the presence of alternative, durable boundaries can help reduce the perception of sprawl, countryside encroachment and loss of separation. In addition, release of land will typically form part of a planned extension, and consideration should be given to whether new appropriate Green Belt boundaries can be created.

PURPOSE 1: TO CHECK THE UNRESTRICTED SPRAWL OF LARGE BUILT UP AREAS

- GB16 National Planning Policy does not define what constitutes a large built up area. For the purpose of this methodology large built up areas have been defined with reference to the Local Planning Authorities settlement hierarchy, typically this will include main urban areas and local service centres. Villages or settlements washed over by the Green Belt are not normally included within this definition.
- GB17 In relation to sprawl, the PAS guidance notes:
- '...is development that is planned positively through a local plan, and well designed with good masterplanning, sprawl?'*
- GM18 All Green Belt land which adjoins a large built up area plays some role in preventing further expansion of the urban area. The degree to which Green Belt land prevents sprawl however is dependent on the relationship between the Green Belt parcel and the existing urban edge and its containment from the wider countryside. In this sense this purpose is closely related to the third Green Belt purpose. If a land parcel is well contained by logical physical and visual boundaries it will be more effective at preventing sprawl. Locations where land, and existing boundaries play an important role in containing the edge of the settlement, and there are no alternative boundaries which would provide a similar function, make an important contribution to containing sprawl.
- GB19 In addition, the perception of sprawl can be reduced/mitigated by providing a suitable landscape framework/masterplan. Accordingly, whilst areas may perform this

function strongly, there may be scope to accommodate development sensitively which mitigates the perception of sprawl. In addition, in locations where the perception of sprawl is already evident, there may be scope to provide alternative boundaries which provide a more robust edge to the Green Belt.

GB20 The following factors are of relevance:

- The degree to which the land parcel is associated with the existing urban area/wider countryside. Parcels which are adjoined on more than one side by urban development, or are indented into the urban edge (infill) are likely to perform weakly against this function. Similarly, landform and landscape features can provide a strong degree of separation between the urban area and/the wider countryside;
- The degree to which the existing Green Belt boundary is well defined and provides containment to the urban area; and
- The presence, or absence of other physical/landscape boundaries which could provide containment to potential urban expansion.

GB21 The following table sets out the criteria against which this purpose has been assessed:

Purpose 1: To check the unrestricted sprawl of large built up areas	
Strong	<ul style="list-style-type: none"> • Existing boundary with urban area well defined by established and robust landscape / physical feature which strongly contains the existing urban area; • Little / no relationship with the established pattern of development and strong relationship to the wider countryside; • Landform may provide separation between the urban edge and the wider landscape; • No logical alternative boundaries which would contain built development; and • Expansion would result in a substantial intrusion into the wider landscape and would be poorly contained and / or would result in ribbon development.
Relatively Strong	<ul style="list-style-type: none"> • Existing boundary with urban area well defined by established landscape / physical feature which contains the existing urban area; • poor relationship with the established pattern of development and strong relationship to the wider countryside; • Landform may provide some separation between the urban edge and the wider countryside; • Alternative boundaries which would contain built development are less well defined; • Development could result in ribbon development and would be poorly related to the main built-up area; and • Expansion would result in a significant intrusion into the wider landscape and would be poorly contained.
Moderate	<ul style="list-style-type: none"> • Existing boundary with urban area follows a logical landscape / physical feature and provides some containment to the urban area; • Some relationship with the established pattern of development which may have a visible presence along one or more sides;

	<ul style="list-style-type: none"> • Landform plays little role in separating the urban edge and the wider countryside; • Alternative boundaries may be present which could provide a redefined edge to the Green Belt, although may require additional strategic landscaping which could be provided as part of a planned extension; • Expansion would result in some intrusion on the wider countryside but would be better related to the existing urban area.
Relatively Weak	<ul style="list-style-type: none"> • Land may be physically and visually related to the existing urban area and be perceived as part of / closely related to it; • Existing boundary may be poorly defined and alternative boundaries may exist, or there is an opportunity to create a more robust edge to the urban area; • Landform may assist in separating the land parcel from the wider countryside; • Expansion in this area would relate to the existing settlement pattern and would have little impact on the perception of sprawl.
Weak / None	<ul style="list-style-type: none"> • The land parcel is effectively indented ('infil') into the existing urban area and plays little / no role in the countryside setting of the adjoining urban area. • It is largely contained by built development and may be perceived as part of the existing settlement envelope; • Land parcel is unrelated to an existing urban area and plays no role in preventing sprawl.

PURPOSE 2: TO PREVENT NEIGHBOURING TOWNS FROM MERGING INTO ONE ANOTHER

GB22 The NPPF specifically refers to preventing the merging of towns, not the merging of towns with smaller settlements, or the merging of small settlements with each other. Despite this, the methodology recognises the role that Green Belt plays in maintaining the setting and settlement pattern hierarchy within the District / Borough. In addition, the cumulative erosion of the separation of smaller settlements can impact on the perceived separation of larger settlements. This assessment therefore considers the separation between the main urban areas but also their relationship to other smaller settlements of significance.

GB23 The nature and size of an existing gap are important considerations in determining the role that a land parcel plays in maintaining separation between settlements. The PAS guidance however states that when assessing this purpose, 'A 'scale rule' approach should be avoided. The identity of a settlement is not really determined just by the distance to another settlement; the character of the place and of the land between must be taken into account.'

GB24 In determining the function that a land parcel plays in maintaining separation between neighbouring settlements the following factors are of relevance:

- Intervisibility between settlements;
- The role of landform and land cover in maintaining separation;
- The effect of development on the transition between settlements; and
- The individual character and setting of the settlements.

GB25 The following table sets out the criteria against which this purpose has been assessed:

Purpose 2: To prevent neighbouring towns from merging into one another	
Strong	<ul style="list-style-type: none"> • The land parcel occupies the physical gap / or the majority of the gap between the main settlements and any reduction in the existing gap would result in coalescence or the perceived coalescence of these towns.
Relatively Strong	<ul style="list-style-type: none"> • Development would result in a significant reduction in the physical and visual separation between the towns; • Development may be readily apparent in views from the adjoining settlement edges and from the approaches along the principle routes between settlements, resulting in a significant reduction in the perceived separation between the settlements; and

	<ul style="list-style-type: none"> • Development could significantly impact on the separation between a main settlement and a smaller settlement which possess distinct characters.
Moderate	<ul style="list-style-type: none"> • Land parcel forms part of a wider gap between neighbouring settlements; • Limited inter-visibility between settlements, and landform and land cover play some role in maintaining a sense of separation; • Development may encroach on views from sections of the intervening highway network; • Development would result in some reduction in the gap between a main settlements and smaller settlements and there may be a cumulative erosion in the separation between main settlements.
Relatively Weak	<ul style="list-style-type: none"> • The land parcel forms part of a wider gap; • Landform and / or land cover prevent inter-visibility and would preserve a sense of separation; • May be limited impact on separation with a smaller settlement, but separate identity would remain; • Development in this location would not result in actual or perceived coalescence but there may be some reduction in the physical extent of the gap.
Weak / None	<ul style="list-style-type: none"> • The land parcel forms part of a much wider land parcel between settlements and makes little / no contribution to maintaining separation between settlements; or does not lie between two towns / smaller settlements.

PURPOSE 3: ASSIST IN SAFEGUARDING THE COUNTRYSIDE FROM ENCROACHMENT

GB26 In respect of safeguarding countryside from encroachment the PAS guidance makes the following statement:

“The most useful approach is to look at the difference between urban fringe – land under the influence of the urban area - and open countryside, and to favour the latter in determining which land to try and keep open, taking into account the types of edges and boundaries that can be achieved”.

GB27 All open land at the edge of settlement plays some role in protecting the countryside from encroachment. In order to assess the role that a land parcel plays in safeguarding countryside it is important to understand the degree to which it displays characteristics of the countryside. This should be distinguished from a judgement about landscape quality / condition which is not a Green Belt consideration.

GB28 An assessment of the role of a parcel in meeting this purpose should consider its existing land-use, its relationship to the wider landscape and the degree to which it is influenced by the adjoining urban area.

GB29 A planned urban extension on the periphery of a settlement is likely to encroach on the wider countryside. Any consideration of this purpose should

assess the ability of the land parcel to accommodate change and its impact on the wider countryside.

GB30 The following factors should be taken into consideration:

- Degree to which a land parcel displays rural characteristics;
- Current land use and does it display urban fringe characteristics;
- Its relationship to the wider rural landscape and the degree to which it forms a component of this landscape;
- Its proximity to built development and the extent to which this influences the character of the land parcel.

GB31 A site which has a strong rural character and few visual detractors; forms an integral part of the wider rural landscape; and is visually and physically linked to the wider countryside will perform this purpose strongly. A site which is closely related and influenced by existing development will perform less well. The assessment also takes into account the presence of existing boundary features which would minimise the impact of future growth on the character of the wider countryside.

Purpose 3: To Assist in safeguarding the countryside from encroachment	
Strong	<ul style="list-style-type: none"> • The land parcel has an un-spoilt rural character with few visual detractors and is visually and physically connected to the wider rural hinterland; • Contains no built development within the parcel, apart from that of a rural character; • There is an absence of established boundaries which would reduce encroachment on the wider countryside; and • The existing urban edge follows a logical and robust boundary which limits the perception of encroachment and provides containment to the urban area.
Relatively Strong	<ul style="list-style-type: none"> • The land parcel has a predominately rural character and forms a component of the wider rural landscape; • There is limited development within the parcel and it is predominately of a rural character; • Physical or visual boundaries are largely absent and development would encroach on the character of the wider landscape; • The existing urban edge is well defined but development maybe visible at the edge of the Green Belt.
Moderate	<ul style="list-style-type: none"> • There is a perception of encroachment from the urban edge and the parcel has a semi-rural character; • The parcel may contain a number of urban fringe land-uses / buildings, however remains largely green field; • Existing landscape / topographic features reduce the link between this area and the wider countryside and provide some visual and physical containment.

Relatively Weak	<ul style="list-style-type: none"> • The land parcel is heavily influenced by the adjoining urban edge; • The land is largely urban fringe, and may contain some built development; • The land parcel relates more strongly to the urban area than the wider countryside; and • May contain degraded land and there are opportunities for enhancement.
Weak / None	<ul style="list-style-type: none"> • Land parcel is very closely related to the built edge and is largely divorced from the wider countryside. Land exhibits few rural characteristic and is semi-urban in character.

PURPOSE 4: TO PRESERVE THE SETTING AND SPECIAL CHARACTER OF HISTORIC TOWNS

GB32 The fourth NPPF purpose is specifically aimed at protected the setting and special character of historic ‘towns’, and does not refer to smaller settlements which may have a historic character. The PAS guidance notes that in reality this purpose will relate to very few settlements, as in most cases there is more recent development between the historic core and the edge of town.

GB33 Whilst Green Belt plays a role in protecting the setting of historic towns it also maintains the setting of smaller settlements which have an acknowledged historic character. In most cases these settlements will have a designated historic core which lies within an identified Conservation Area. Although it is not the function of Green Belt to preserve the historic setting of these smaller settlements, where relevant reference to nearby heritage assets is made within the main report.

GB34 The following factors have been taken into consideration:

- Conservation Area Appraisals and guidance;
- Visual relationship between historic core and wider countryside;
- Views to landmark buildings in historic core; and
- Extent to which historic core is contained by built development/extends to edge of the settlement.

Purpose 4: To Preserve the Setting and Special Character of Historic Towns

<p>Strong</p>	<ul style="list-style-type: none"> • There is a strong visual / physical relationship between the land parcel and the designated historic asset; • There are views from the historic asset towards the Site which would be a visible component within the wider landscape; • The Site would be visible in the foreground in key views towards the historic assets from public vantage points; and • The land parcel identifies key characteristics identified in the Conservation Area Appraisal which contribute to the landscape setting of the area.
<p>Relatively Strong</p>	<ul style="list-style-type: none"> • There is a visual relationship between the Site and the historic asset; • There are some views from the historic asset to the Site; • The land parcel contains characteristics identified in the Conservation Area Appraisal which contribute to the landscape setting of the area.
<p>Moderate</p>	<ul style="list-style-type: none"> • There are some views of parts of the historic asset from the Site and from the neighbouring area, but the relationship is interrupted by intervening development; • The Site plays a limited role in providing a landscape setting for the historic settlement.
<p>Relatively Weak</p>	<ul style="list-style-type: none"> • The Site is separated from the historic asset by more recent built development and / or there is no visual connection between them; • The historic asset is inward looking and the surrounding landscape makes little contribution to its landscape setting;
<p>Weak / None</p>	<ul style="list-style-type: none"> • The Site is separated from the asset by significant built development, and / or there is no visual relationship and the Site makes no contribution to the landscape setting of the historic settlement.



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Land south of Tollgate Road,
Colney Heath

Preliminary Ecological Appraisal

Prepared by
CSA Environmental

on behalf of
Vistry Group

Report Ref: CSA/3925/02

October 2020

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Date	Revision	Prepared by	Approved by	Comments
CSA/3925/02	08/10/2020	-	AC	JW	



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Appendix A: Habitats Plan & Photosheet

Appendix B: Legislation, Planning Policy and Standing Advice

Appendix C: Desk Study Information

Appendix D: Habitats and Flora Species List

Appendix E: Preliminary Roost Assessment

EXECUTIVE SUMMARY

Residential development is proposed at Land south of Tollgate Road, Colney Heath, for which representations will be made to St Albans City and District Council.

CSA Environmental was instructed by Vistry Group to undertake a Preliminary Ecological Appraisal (PEA) of the Site to identify ecological constraints to development, inform recommendations for design, highlight opportunities for ecological enhancement and determine any additional investigation/survey work necessary.

As part of this PEA, a desk study and extended Phase 1 Habitat survey of the Site were undertaken in September 2020. The Site comprises a riding stables with associated paddocks, areas of semi-improved and improved grassland and a single storey building with pitched roof. Colney Heath Farm Meadows LWS lies within the boundary of the Site and is proposed to be retained within public open space. However, restoration of the habitats within the LWS will be required, alongside mitigation for anticipated recreational impacts.

Detailed botanical work is recommended to determine the nature and condition of the grasslands present across the Site and within the LWS, and to support a robust assessment of potential impacts. Subject to findings of this survey work and where a significant proportion of this grassland is to be lost to development, substantial habitat creation or restoration may be required to mitigate for its loss and ensure a net gain in biodiversity is achieved.

The Site also lies c. 0.1km from Colney Heath LNR, therefore mitigation for the anticipated increase in visitor pressure to this protected site will be required.

Hedgerows across the Site should be retained and, if practicable, should be buffered from development edge effects. Protected species which may be present include bats, water vole, otter and reptiles. Further surveys to confirm the presence or likely absence of these species, and the nature of their use of the Site, are recommended to inform an evidence based Ecological Impact Assessment to be prepared in support of planning.

Recommendations have been provided for ecological enhancement measures that could be delivered as part of the proposed development.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Vistry Group. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of Land to the south of Tollgate Road, Colney Heath (hereafter referred to as 'the Site'). Residential development is proposed at the Site, for which for which representations will be made to St Albans City and District Council.
- 1.2 The scope of this appraisal has been determined with due consideration for best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and to the *Biodiversity: Code of practice for planning and development* (BS 42020:2013) published by the British Standards Institution (2013).
- 1.3 The Site occupies an area of c. 10.8ha and is located around central grid reference TL 20772 05612, to the south-west of Hatfield. It consists of a riding stables with associated paddocks, semi-improved grassland and a single storey building with pitched roof (see Habitats Plan in Appendix A).
- 1.4 A desk study and extended Phase 1 Habitat survey were undertaken of the Site, the findings of which are presented herein.
- 1.5 This PEA aims to:
 - Identify any ecological constraints to development of the Site
 - Inform design decisions
 - Identify further ecological surveys and investigation necessary to inform a full Ecological Impact Assessment (EclA) of the Site
 - Highlight opportunities for ecological enhancement and Biodiversity Net Gain (BNG)
- 1.6 As set out in best practice guidelines (CIEEM, 2017) a PEA is typically only suitable for planning submission where there are no ecological constraints relating to the project. Where ecological constraints are identified, such as the presence of important ecological features, the effects of development on these features should be assessed within a separate EclA report, which would supersede the PEA.

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this PEA includes:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Wildlife and Countryside Act 1981 (as amended)
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Protection of Badgers Act 1992

2.2 This above legislation has been addressed, as appropriate, in the production of this report. Further information on the above legislation is provided in Appendix B.

National Planning Policy

2.3 The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2019) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity. Further details are provided in Appendix B.

2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their effects within the planning system.

Local Planning Policy

2.5 A number of local planning policies relate to ecology, biodiversity and/or nature conservation. These are summarised in Table B.1 of Appendix B. These policies have been addressed, as appropriate, in the production of this report.

Standing Advice

2.6 Natural England and Defra's Standing Advice (Natural England & Defra, 2014) regarding habitats and protected species aims to support local authorities and forms a material consideration in determining applications in the same way as any individual response received from Natural England following consultation. Standing advice has therefore been given due consideration, alongside other detailed guidance documents, in the production of this report.

3.0 METHODS

Desk Study

- 3.1 The Multi-Agency Geographic Information for the Countryside (MAGIC) online database was reviewed in September 2020 to identify nature conservation designations within the following search radii:
 - Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites within 10km of the Site (including possible/proposed sites)
 - Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR) within 3km of the Site
 - Other relevant data e.g. Ancient Woodland Inventory within 1km of the Site
- 3.2 A review was undertaken of the location of any such designations, their distance from and connectivity with the Site, and the reasons for their designation. This information was used to determine whether they may be within the Site's zone of influence.
- 3.3 Hertfordshire Environmental Records Centre (HERC) was contacted for details of any non-statutory nature conservation designations and records of protected/notable habitats and species. This information was requested for an area encompassing the Site and adjacent land within c. 2km of its central grid reference. This search area was selected to include the likely zone of influence upon non-statutory designations and protected or notable habitats and species.
- 3.4 Further online resources were reviewed for information which may aid the identification of important ecological features. The Woodland Trust's online Ancient Tree Inventory was reviewed for known ancient or veteran trees within the Site and adjacent land. Interactive online mapping provided by the charity 'Buglife' was used to determine whether the Site falls within an Important Invertebrate Area.
- 3.5 In accordance with Natural England's Great Crested Newt Mitigation Guidelines (2001), a desktop search was undertaken to identify ponds within 500m of the Site which may have potential to support breeding great crested newts *Triturus cristatus*, using Ordnance Survey (OS) mapping, the MAGIC database and aerial photography.
- 3.6 All relevant desk study data are presented in Appendix C.

Field Survey

Extended Phase 1 Habitat Survey

- 3.7 An extended Phase 1 Habitat survey was carried out in fine and dry weather conditions on 16 September 2020 by Alexandra Cole MCIEEM,

encompassing the Site and immediately adjacent habitats that could be viewed.

3.8 Phase 1 Habitat survey is a method of classification and mapping wildlife habitats in Great Britain. It was originally intended to provide "...*relatively rapidly, a record of the semi-natural vegetation and wildlife habitat over large areas of countryside.*" The Phase 1 Habitat survey method has been widely 'extended' beyond its original purpose to allow the capture of information at an intermediate level between Phase 1 and Phase 2 Habitat surveys, and here includes the following:

- More detailed floral species lists for each identified habitat
- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition
- Mapping of additional habitat types (e.g. hardstanding)
- Identification of Priority Habitats under Section 41 of the NERC Act
- Identification of Habitats Directive Annex I habitat types
- Evidence of, or potential for, European Protected Species (EPS) (including bats, great crested newt, dormouse and otter)
- Evidence of, or potential for, other protected species (including birds, reptiles, water vole, badger and certain invertebrates)
- Evidence of, or potential for, other notable species (including S41 Species of Principal Importance as well as notable, rare, protected or controlled plants and invertebrates)

3.9 Results of the extended Phase 1 Habitat survey are presented on the Habitats Plan in Appendix A. Appendix D provides a list of floral species recorded in each habitat.

Preliminary Roost Assessment

3.10 All accessible buildings on-site were inspected and assessed for their potential to support roosting bats, with due consideration for the *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016). Full survey methods and results are provided in Appendix E.

Limitations

3.11 There were no specific limitations to the desktop study. However, the extended Phase 1 Habitat survey was conducted at a sub-optimum time of year for botany which may result in some species being missed. Full access to B1 and its surroundings in the north-east corner of the Site was not possible, therefore descriptions of this habitat are based on aerial photography and observations from adjacent land.

Evaluation and Assessment

3.12 The evaluation and assessment of ecological features is beyond the scope of a PEA and has therefore not been undertaken here. Formal evaluation and assessment of any identified important ecological

features should be undertaken as part of either a full EclA, or receptor-specific survey and assessment in accordance with the published CIEEM method (CIEEM, 2018).

4.0 BASELINE ECOLOGICAL CONDITIONS

Nature Conservation Designations

Statutory

- 4.1 There are no statutory designations covering any part of the Site.
- 4.2 A single international statutory designation was identified within 10km of the Site; two national statutory designations within 3km and; three local statutory designations were identified within 3km of the Site. These statutory designations are described in Table 1 below.

Non-Statutory

- 4.3 Thirteen non-statutory designations were identified within 1km of the Site. These non-statutory designations are described in Table 1 below.

Table 1. Statutory and Non-Statutory Designations within search radii

Site Name & Designation	Distance & Direction from Survey Area	Special Interests or Qualifying Features
International Designations within 10km		
Wormley Hoddesdonpark Woods SAC	c. 9.7km east	Designated for its hornbeam forests with sessile oak standards. Woodlands support bluebell and great wood-rush with carpets of mosses.
National Designations within 3km		
Water End Swallow Holes SSSI	c. 2km south-east	Willow carr/swamp community adjacent to chalk sinkholes are of importance, along with semi-natural woodland, scrub and semi-improved grassland.
Redwell Wood SSSI	c. 2.4km south	Combination of ancient woodland comprising pedunculated oak and hornbeam, with heathland. Alongside well developed scrub and secondary woodland.
Local Designations within 3km		
Colney Heath LNR	c. 0.1km north-west	Acid heathland bordering River Colne. One of the few remaining acid heathlands in Hertfordshire.
Oxleys Wood LNR	c. 2.3km north-east	Woodland with pond.
Howe Dell LNR	c. 2.8km north-west	Hornbeam, oak and beech woodland with stream.
Non-Statutory Designations within 1km		
Colney Heath Farm Meadows LWS	On-site	Mosaic of unimproved neutral to acid grasslands along River Colne. Lower lying areas support a range of wetland species and a pond is present. Other habitats include a scrub-lined ditch, alder plantation and hedgerow.
Colney Heath Common LWS	c. 25m north-west	Includes a stretch of the River Colne. The common supports a remnant of heathland with a mosaic of neutral, acid and marshy grasslands, heathland, scrub and riverine habitats. Species include

		several scarce or local distributed in the county.
Frederick's Wood LWS	c. 0.1km west	Mature mixed plantation on old heathland/acid grassland.
Tollgate Wood LWS	c. 0.4km east	Old, secondary broadleaved woodland with a semi-natural canopy and varied structure.
North Mymms Park	c. 0.4km south-east	Parkland of semi-improved neutral grassland with frequent planted trees and small ponds along north-eastern edge.
Scrubby Grassland by Frederick's Wood LWS	c. 0.4km south-west	Unimproved acid grassland with some scattered to dense patches of hawthorn.
Walsingham Wood LWS	c. 0.5km south-west	Part ancient semi-natural pedunculated oak/hornbeam woodland with areas cleared and replanted with conifer and broadleaf species.
Sleapshyde Gravel Pit LWS	c. 0.6km north-west	Former gravel pit restored to an amenity/wildlife park. Mosaic of habitats with open water, wet neutral grassland, tall herbs, scattered scrub and plantation.
Coursers Farm Area LWS	c. 0.6km south-west	Building and environs important for protected species.
Tyttenhanger Gravel Pits North LWS	c. 0.8km west	Former agricultural and park land adjacent to the River Colne supporting and area of sand and gravel pits, many of which are flooded. Sand pits form the largest and most important site for sandy ground bees and wasps in Hertfordshire with several nationally notable/rare species recorded. Flooded pits are prime regional site for breeding waders.
St. Mark's Churchyard and Graveyard LWS	c. 0.9km north-west	Churchyard and graveyard supporting old unimproved neutral to acid grassland with hedgerows and trees.
The Old Vicarage, St. Marks Close, Colney Heath LWS	c. 0.9km north-west	Building and environs important for protected species.
The New Plantation LWS	c. 0.1km south-west	Old secondary woodland with a semi-natural canopy and varied structure.

Ancient Woodland

- 4.4 There is no ancient woodland covering any part of the Site or immediately adjacent land. No trees on or adjacent to Site are listed on the Ancient Tree Inventory. The closest ancient woodland is Walsingham Wood LWS, with the ancient component of this woodland c. 1km south-west of the Site.

Habitats and Flora

- 4.5 Habitats recorded on-site were classified in line with current Phase 1 Habitat survey guidance (JNCC, 1990), as illustrated in Appendix A. Detailed species lists for each habitat are provided in Appendix D.

Notable Flora Records

- 4.6 The HERC provided 215 records of 60 notable plant species from within the search area. The majority of records provided are historic, including a single record for the Hertfordshire vulnerable species lady's-mantle *Alchemilla filicaulis subsp. vestita*, recorded within pasture habitats located in the west of the Site in 1990.
- 4.7 Also of note is Japanese knotweed *Fallopia japonica*, recorded between 2013 and 2016. Japanese knotweed is included within the Wildlife and Countryside Act's Schedule 9 list of invasive non-native species. All records provided were more than c. 1km from the Site to the north-west and this species was not recorded at the Site.
- 4.8 Other species identified within the search area include those associated with grassland and arable habitats, as reflected in the habitats both on-site and in the surrounding area, in addition to species associated with acidic/heathland habitats. The Hertfordshire Ecological Network Map provided for the Site and surrounding area suggests that grassland habitats along the western boundary of the Site could be suitable for restoration, with suggested target habitats including acidic open/neutral grassland or wetland.

Grassland

- 4.9 Fields F1-F4 are all used for horse grazing, on rotation. At the time of survey F2 and F3 were grazed, with F1 and F4 un-grazed. Dates provided anecdotally by the landowner suggest that F1 has been un-grazed since March 2020, with F2, F3 and F4 all grazed at various times during 2020. The on-site section of F5 comprises a narrow section of a wider field in the north-west of the Site which does not appear to have been recently grazed.

Field F1

- 4.10 In its un-grazed state F1 comprises an un-managed semi-improved grassland with a relatively diverse range of herb species found. Perennial ryegrass *Lolium perenne* and cock's-foot *Dactylis glomerata* are abundant, with crested dog's-tail *Cynosurus cristatus*, red fescue *Festuca rubra*, common bent *Agrostis capillaris* and timothy *Phleum pratense* also present occasionally throughout the sward.
- 4.11 Herb species include yarrow *Achillea millefolium*, white clover *Trifolium repens*, field speedwell *Veronica persica*, broad-leaved dock *Rumex obtusifolius*, creeping buttercup *Ranunculus repens*, common bird's-foot trefoil *Lotus corniculatus*, meadow vetchling *Lathyrus pratensis*, goat's-beard *Tragopogon pratensis*, red clover *Trifolium pratense*, hogweed *Heracleum sphondylium*, ragwort *Senecio jacobaea*, lady's bedstraw *Galium verum*, smooth sow-thistle *Sonchus oleraceus*, creeping thistle *Cirsium arvense* and creeping cinquefoil *Potentilla reptans*.

4.12 Along the eastern hedgerow, the grassland becomes dominated by ruderal and some scrub species, with dock *Rumex* sp., white dead-nettle *Lamium album*, fat-hen *Chenopodium album* agg., white campion *Silene latifolia*, knotgrass *Polygonum* sp., bramble *Rubus fruticosus* agg., wood avens *Geum urbanum*, St John's-wort *Hypericum* sp., creeping thistle, cat's-ear, spurge *Euphorbia* sp. and self-seeded blackthorn *Prunus spinosa* present among the grass and herb species.

4.13 A few stands of teasel *Dipsacus fullonum* are present along the western boundary of F1 where it meets F2.

Field F2

4.14 The entirety of F2 falls within Colney Heath Farm Meadows LWS. At the time of survey, this grassland was horse grazed with a short sward and patches of common nettle indicative of localised nutrient enrichment from the presence of manure. F2 runs alongside the off-site River Colne and sits within the flood zone for this river. Perennial ryegrass was frequent in the sward with cock's-foot also present and patches of bare ground next to the access gate. Herb species include yarrow, dove's-foot crane's-bill *Geranium molle*, mouse-ear *Cerastium* sp., ribwort plantain *Plantago lanceolata*, daisy *Bellis perennis*, meadow vetchling and creeping buttercup *Ranunculus repens*. Ruderal type species are also present including ragwort, common nettle, broad-leaved dock and bristly ox-tongue *Helminthotheca echioides*.

Field F3

4.15 Field F3 is a small field adjacent to the horse yard and was horse-grazed at the time of survey. The sward within F3 is short with bare patches. Species present include perennial ryegrass, yarrow, dandelion *Taraxacum officinale* agg., dove's-foot crane's-bill, ribwort plantain, spurge, red dead-nettle *Lamium purpureum*, dock and white clover *Trifolium repens*.

Field F4

4.16 Field F4 is located in the north-west of the Site and has a public footpath running through it. The western edge of F4, which sits lower than the remainder of the field is included within Colney Heath Farm Meadows LWS, the field then rises away towards the road. Whilst it was not horse-grazed at the time of survey, this field had been grazed earlier in 2020. At the time of survey the sward within F4 was short, although not grazed, and dominated by perennial ryegrass with tussocks of cock's-foot and false oat-grass *Arrhenatherum elatius*. Longer patches of grassland within this field indicate areas of potential nutrient enrichment. Along the western edge of F4 were patches of tall ruderal comprising common nettle. Additional herb species include fat-hen, garlic mustard *Alliaria petiolata*, mallow *Malva* sp. and white dead-nettle.

Field F5

- 4.17 Field F5 is a continuation of F4 to the north-west. A narrow section of this field falls within the Site boundary and also sits within Colney Heath Farm Meadows LWS. As with F4, F5 is dominated by perennial ryegrass with patches of cock's-foot. Scattered common nettle and dock are present around the edge of the field. The section of F5 within the LWS sits within a depression, with a bank to the east.

Amenity Grassland

- 4.18 A small section of short-mown grassland to the east of the Site is utilised as an amenity area with children's play equipment and small vegetable beds present. A chicken coup is also present at the western end of this area.

Hedgerows & Trees

- 4.19 Six hedgerows are present, mainly within the east of the Site. Hedge H1 runs along the south-eastern edge of F5 and comprises hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* with elder *Sambucus nigra*. It is managed to a height of c. 1.5m and width of c. 1m. Ground flora include bramble *Rubus fruticosus* agg., cow parsley *Anthriscus sylvestris*, cleavers *Galium aparine*, ivy *Hedera helix*, common nettle, garlic mustard, white dead-nettle, common toadflax *Linaria vulgaris* and red dead-nettle.
- 4.20 Hedge H2 is a garden privet *Ligustrum ovalifolium* boundary hedgerow which runs alongside the hardstanding at the entrance to the centre of the Site. Ground flora species include cow parsley and false oat-grass.
- 4.21 Hedge H3 runs alongside the amenity grassland and into F1. It ranges in height from between c. 2-2.5m and is c. 1-2m wide. H3 is dominated by hawthorn with a single elder and low growing blackthorn. Ground flora includes purple toadflax *Linaria purpurea*, dandelion, false oat-grass, ribwort plantain, bramble, mugwort *Artemisia vulgaris*, common nettle, cow parsley, spurge and herb Robert *Geranium robertianum*.
- 4.22 Hedge H4 is a short, but well established section of blackthorn hedgerow with ash *Fraxinus excelsior* and hawthorn. It is c. 3-4m wide and c. 2.5m tall. A mature oak tree is present just off-site, at the northern end of H4.
- 4.23 The south-eastern edge of the Site is demarked by H5, a defunct, gappy hedgerow managed to c. 1.5m tall by c. 1m wide. This hedgerow comprises blackthorn, hawthorn, holly *Ilex aquifolium* and rose *Rosa* sp. and runs c. halfway along the south-eastern boundary.
- 4.24 Patchy sections of boundary hedgerows and shrubs are also present along the north-eastern boundary of the Site, where residential gardens meet F1. Species present include hawthorn, elder, firethorn *Pyracantha* sp., lilac *Syringa vulgaris*, rose, apple *Malus* sp., *Prunus* sp., beech *Fagus*

sylvatica, holly and Leyland cypress *Leylandii* x *Cupressocyparis leylandii*.

- 4.25 Hedge H6 is a row of hawthorn within F2 which run along the fence line between F1 and F2, ground flora under the hawthorn include common nettle, white dead-nettle, red dead-nettle, ragwort, nipplewort *Lapsana communis*, smooth sow-thistle, field speedwell, mouse-ear, smooth meadowgrass *Poa pratensis*, dandelion, meadow buttercup *Ranunculus acris*, ground ivy *Glechoma hederacea* and Yorkshire fog *Holcus lanatus*. Further north of this tree line lies a single semi-mature oak *Quercus* sp. tree and a dead tree (species unidentified).

Waterbodies

- 4.26 The River Colne runs off-site to the west, alongside F2, F4 and F5. Vegetation along the eastern bank of the river comprises a range of mature trees including ash, alder *Alnus glutinosa*, aspen *Populus tremula*, willow *Salix* sp., hawthorn and goat willow *Salix caprea*. Dense ivy cover is present on some trees with a sparse understorey comprising blackthorn, elder and smaller hawthorn trees. Ground flora includes a mix of ruderal, grass and herb species including common nettle, creeping thistle, bramble, false oat-grass, perennial ryegrass, meadow foxtail *Alopecurus pratensis*, meadowsweet *Filipendula ulmaria*, hogweed and herb Robert.

Hardstanding & Bare Ground

- 4.27 Small areas of hardstanding are present around the on-site buildings, with a manège adjacent to the stable block. Ephemeral vegetation has grown within areas of hardstanding and around the edge of the manège including shepherd's-purse *Capsella bursa-pastoris*, pineappleweed *Matricaria discoidea*, spurge, common poppy *Papaver rhoeas*, greater plantain *Plantago major*, common nettle, perennial ryegrass, annual meadowgrass, mugwort, red dead-nettle, knotgrass and mallow.

Buildings

- 4.28 Two buildings are present on-site, B1 is a stable block in the centre of the Site and B2 is a single-storey brick built farm building. These buildings are discussed in more detail below.

Fauna

Bats

- 4.29 A total of 321 bat records were identified within the search area, dating from 1985 to 2018. These include the following species: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, brown long-eared *Plecotus auritus*, Natterer's bat *Myotis nattereri*, Daubenton's bat, *Myotis daubentonii* and three records for whiskered bat *Myotis mystacinus*. A number of records were

also recorded for pipistrelle *Pipistrellus* sp. and 'bat' *Chiroptera* spp. which could not be identified to species level. The closest recent record is for soprano pipistrelle (c. 0.6km from the Site). The closest record provided for a roost c. 1.5km south-east of the Site, common pipistrelle roost, 2016.

- 4.30 Habitats on and around the Site provide suitable foraging habitat for bats, with the adjacent River Colne providing a key navigational feature in the wider landscape. Several small woodlands are located within the area surrounding the Site, providing potential roosting opportunities for bats with larger woodland blocks c. 2km north-east around Hatfield House, including Milward's Park ancient replanted woodland.

Preliminary Roost Assessment - Structures

- 4.31 Two structures were present on-site, B1 and B2 (see Habitats Plan in Appendix A). B1 was not fully accessible at the time of survey and as such was not subject to a full preliminary roost assessment. B2 was determined to have 'Negligible' roosting potential. The full results of the building inspection are provided in Table E.1 of Appendix E.

Badger

- 4.32 [REDACTED]

- 4.33 [REDACTED]

Dormouse

- 4.34 A total of two historic records of dormouse *Muscardinus avellanarius* were identified within the search area, dating from 1975 and 1994.

- 4.35 The Site provides very limited suitable habitat for dormice with only small sections of hedgerow present which lack the species diversity required to provide suitable foraging for dormice. Dormice are therefore considered absent from the Site.

Water Vole

- 4.36 A total of four historic records of water vole *Arvicola amphibius* were identified within the search area, dating from 1967 to 1998. No records were provided for otter. The closest water vole record is c. 3km from the Site, to the north-west along the River Colne.

- 4.37 The River Colne runs adjacent to the Site to the west and is known to historically support water voles. The river and its banks provide suitable habitat to support water voles and otters should they still be present within the surrounding area.

Hedgehog

- 4.38 Seventeen records of hedgehog *Erinaceus europaeus* were identified within the search area, dating from 1960 to 2015. A single record was provided on-site, in F4, from 1966. The closest recent record was from 2016, c. 0.7km north-west of the Site near Bullen's Green.
- 4.39 Garden habitats in the surrounding area, in addition to long grassland and hedgerow habitats on-site provide suitable foraging and hibernation opportunities for this species.

Birds

- 4.40 A total of 43,872 records of 165 bird species were identified within the search area, dating from 1986 to 2016. During the survey a green woodpecker *Picus viridis* was seen flying across F4.
- 4.41 Grassland and hedgerow habitats on-site provide foraging and nesting opportunities for a range of common bird species and are not likely to support a bird assemblage of significant importance.

Reptiles

- 4.42 A total of 25 records of three reptile species were identified within the search area including grass snake *Natrix natrix* (syn. *N. helvetica*), slow worm *Anguis fragilis*, and common lizard *Zootoca vivipara*. Records were mostly historic, with three records for grass snake from 2000-2004. The closest of these records was c. 0.2km north-west of the Site.
- 4.43 Longer grassland habitats at the Site provide suitable habitat for reptile species with connectivity to suitable habitats in the surrounding area. However, frequent grazing of the grasslands at the Site reduce their suitability to support reptiles substantially.

Amphibians

- 4.44 A total of 117 records of two amphibian species were identified within the search area, including great crested newt *Triturus cristatus* and common toad *Bufo bufo*.
- 4.45 A more detailed appraisal of the Site in respect of great crested newt is provided below.

Great Crested Newt

- 4.46 Despite spending much of their annual lifecycle within the terrestrial environment, great crested newts are dependent upon the presence of suitable aquatic breeding habitat in order for a population to persist. No

potential breeding ponds were identified on-site during the site survey, although five appear to be present within a dispersible range of the Site, based on OS mapping. However, these ponds are all beyond significant dispersal barriers. The MAGIC online database provided two records of a European Protected Species Mitigation Licence (EPSML) for GCN (EPSM2013-5578, 2015-11388-EPS-MIT) from around Coursers Farm c. 0.8km from the Site boundary, beyond the dispersal distance for this species.

- 4.47 Tall grassland and hedgerow habitats on-site provide some limited terrestrial opportunities for amphibians to refuge and forage, and for dispersal. However, given the lack of suitable waterbodies on-site and within dispersal distance breeding opportunities are limited. Great crested newts are therefore considered absent from the Site.

Invertebrates

- 4.48 A total of 1750 records of 141 invertebrate species were identified within the search area, including 76 species which are classified as species which are in decline or found in low numbers within Hertfordshire.
- 4.49 The Site is not located within an Important Invertebrate Area (IIA). However, it does fall within a 'B-line', a network of flower-rich pathways created by Buglife to benefit pollinators and other wildlife.
- 4.50 The Site is formed of common and widespread habitat types and is therefore unlikely to support a locally important assemblage of invertebrates.

5.0 DISCUSSION AND RECOMMENDATIONS

Nature Conservation Designations

Statutory

Wormley Hoddesdonpark Woods SAC

- 5.1 Woodland habitats present at the SAC are sensitive to a combination of recreational pressures (i.e. trampling of woodland flora) and nitrogen deposition (i.e. from vehicle emissions). Public access has been identified as a threat, with proposals to monitor site features sensitive to disturbance and take remedial action. Actions are also proposed with regard to air pollution and nitrogen deposition.
- 5.2 Whilst the proposed development will result in a modest increase in population (up to 194 dwellings), the closest part of the SAC is located c. 9.7km from the Site. Therefore it is considered unlikely that new residents will make regular visits to the SAC and a small increase in recreational pressure and/or vehicle emissions from the Site is considered unlikely to result in likely significant adverse effects on the integrity of the SAC and its qualifying features.

Water End Swallow Holes SSSI

- 5.3 Water End Swallow Holes SSSI comprises willow carr and swamp communities in association with chalk sinkholes, along with semi-natural woodland, scrub and semi-improved grassland. Public footpaths run around and through the site of which 100% is currently listed as in favourable condition with no identified condition threats. Given the presence of existing footpaths and lack of identified threats to the SSSI it is not considered that the slight potential increase in footfall at the Site as a result of the proposals will result in significant adverse effects.

Redwell Wood SSSI

- 5.4 Redwell Wood SSSI is an ancient woodland site with pedunculated oak and hornbeam in addition to heathland, well developed scrub and secondary woodland. The site is dividing into two units, the first of which is currently listed as being in favourable condition with no identified condition threat. The second is in unfavourable- recovering condition, again with no identified condition threat. Deer browse damage appears to be the main cause of the unfavourable condition, with no comments regarding recreational pressures. Public footpaths run along the exterior of this site, with permissible paths through the centre of the site. It is acknowledged that the proposals will likely result in a small increase in footfall at the site. However, given the small increase and current condition of the site it is not considered that this will result in significant adverse effects.

Colney Heath LNR

- 5.5 Colney Heath LNR is one of the few remaining acid heathlands in Hertfordshire and is listed as a key heathland site within the Biodiversity Action Plan (BAP) for Hertfordshire. The BAP lists recreational pressures, including trampling which can inhibit the growth of scarce plants, in addition to accidental fires as a threat to heathlands. Nutrient enrichment is another threat to heathlands and can be increased by dog fouling.
- 5.6 Colney Heath LNR is located within walking distance of the Site and is publically accessible via footpaths. Areas of public open space, including recreational routes are proposed at the Site which will reduce the impact of recreational pressure on the LNR. In addition to this appropriate signage encouraging the use of open space at the Site and information leaflets should be provided to educate new residents on the sensitive habitats within the LNR and how to minimise their impacts. Dog waste bins could be provided both within areas of open space/walking routes at the Site and at entrances to the LNR to prevent dog fouling and build-up of nutrients.

Local Nature Reserve (2No.)

- 5.7 Oxleys Wood LNR Howe Dell LNR are located c. 2.3km and c. 2.8km from the Site, respectively. Whilst it is acknowledged that woodland habitats at these sites are vulnerable to an increase in recreational pressure, it is considered that the distance and lack of accessibility of these LNRs from the Site will prevent a significant increase in recreational pressure to these LNRs as a result of the proposals at the Site.

Non-Statutory

Colney Heath Farm Meadows LWS

- 5.8 Approximately 35% (2.66ha of 4.95ha) of Colney Heath Farm Meadows LWS falls within the boundary of the Site, with the remaining extending over the River Colne to the west, and addition fields to the north and southeast.
- 5.9 The LWS is stated to be "*a mosaic of old unimproved neutral to acid grasslands along the River Colne*" along with wetland habitats and a pond. However, based on the survey carried out grasslands within the LWS do not closely resemble this description, and may have declined due to management/land use since the designation was established. No pond was found within the on-site section of the LWS.
- 5.10 It is recommended that further botanical survey work is undertaken to determine the character and condition of the grassland across the Site, including the area of LWS to inform a robust assessment of potential impacts and inform mitigation.

- 5.11 The current proposals include retention of the LWS within public open space. Subject to the findings of further surveys, it is recommended that habitats be restored through appropriate management interventions to their former condition, along with reinstatement of any features previously lost (i.e. pond and wetland habitats).

Colney Heath Common LWS

- 5.12 Colney Heath Common LWS falls within Colney Heath LNR and therefore should be taken into consideration as per Colney Heath LNR above.

Local Wildlife Sites (11No.)

- 5.13 The remaining local wildlife sites within the surrounding area are all acknowledged to be sensitive to a range of factors, including potential recreational pressure (i.e. trampling of grassland flora and woodland understorey) and increase in cat predation (on birds and other wildlife). However, the measures listed above are anticipated to also relieve any potential pressures in respect of these designations.

Habitats and Flora

- 5.14 Emerging legislative frameworks and policy seeks to leave biodiversity in a better state than prior to development, i.e. development should deliver a Biodiversity Net Gain (BNG).

- 5.15 The Site is dominated by grassland habitats, likely to be of at least some intrinsic ecological interest such that development of the Site, without significant habitat creation/restoration on-site and/or off-site, would likely result in a net loss of biodiversity. As such the following step-wise approach should be taken to informing design and mitigation:

- Minimise as far as possible the loss of important habitat (see below with respect to determining the importance of grassland habitat).
- Where loss is unavoidable, retained grassland habitat should be restored and managed in the long-term for biodiversity, with a robust mechanism to secure appropriate management.
- Where sufficient habitat on-site cannot be provided to ensure biodiversity interests are maintained a biodiversity net gain secured, off-site habitat creation/restoration would need to be undertaken, ideally in the local area and for equivalent grassland habitats.

- 5.16 In line with the above approach it is recommended that the scheme design be informed by the application of a 'Biodiversity Net Gain Calculation', making use of the latest Biodiversity Metric (2.0 Beta at the time of writing) published by Natural England, to provide a quantitative assessment of losses or gains in biodiversity. This will enable future planning applications to be made in-line with emerging legislative frameworks and policy.

- 5.17 Application of the above approach should complement any works required in respect of protected or notable species, such as for bats, water vole and reptiles, as set out below.

Grassland

- 5.18 The Site is dominated by grassland habitats of which a proportion are covered under LWS designation. Some these grasslands are also identified by the Hertfordshire Ecological Network Map as potentially suitable for restoration, with suggested target habitats including acidic open/neutral grassland or wetland.
- 5.19 The grassland on-site could not be fully characterised given the very short sward present and timing of survey work during a suboptimal season for botanical identification. However, grasslands appear to be at least moderately improved and have been classified as semi-improved grasslands on a precautionary basis. It is acknowledged that grazing and nutrient enrichment of the soil from horse manure may be limiting the potential of former ecological interest of grassland at the Site.
- 5.20 It is recommended that further botanical survey work is undertaken to determine the character and condition of the grassland across the Site to inform a robust assessment of potential impacts, including the application of BNG policy as set out above.

Hedgerows & Trees

- 5.21 Six hedgerows are present across the Site in addition to a semi-mature oak tree, where possible hedgerows and mature trees should be retained and protected.
- 5.22 In the absence of mitigation, retained trees will be vulnerable to damage during the construction phase from passing construction traffic and ground compaction. Retained trees, including those off-site but adjacent to the construction zone will be protected during the construction phase through compliance with standard arboricultural practice (BS5837:2012).

Fauna

Bats

- 5.23 The Site offers foraging opportunities for bats with hedgerows and the adjacent River Colne providing commuting opportunities and connectivity to surrounding habitats. Monitoring of bat activity is therefore recommended to determine the species present and pattern of use of the Site by bats. To enhance opportunities for foraging/commuting bats at the Site, strengthening of existing hedgerows and new hedgerow planting is recommended.

5.24 Additionally, B1 may have potential features to support roosting bats and therefore should be subject to a Preliminary Roost Assessment to assess its potential to support roosting bats.

5.25 The proposals are likely to result in an increase in artificial lighting at the Site. New artificial lighting of retained habitat during construction and operational phases has the potential to disturb bats and other nocturnal wildlife. In order to ensure ecological functionality of new and retained hedgerows along Site boundaries for bats as well as the River Colne, a sensitive external lighting scheme will be prepared. The future lighting scheme will be developed in consultation with a bat ecologist to avoid/minimise light spill onto retained and created habitat. This is to maintain a dark corridor available for bats and other nocturnal wildlife.

Badger

5.26 Badgers are protected under the Protection of Badgers Act (1992). Killing or injury of a badger, or interference with a sett is prohibited. No evidence of badgers or sett digging was identified during the survey. However, habitats at the Site provide potential for foraging and dispersing badgers which may pass through the Site.

5.27 Therefore, during the construction phase, badgers are at risk of falling into open excavations or entering open ended pipework (above 150mm diameter), risking an offence under the above legislation. Given the protection badgers received under the Protection of Badgers Act 1992, the following precautionary measures will be implemented which could be secured via a Planning Condition:

- Pre-construction badger survey and monitoring for signs of new sett digging
- Covering any open excavations with wooden boards, or fitting them with appropriate escape ramps, in order to prevent badgers falling into them and injuring themselves or becoming trapped.
- Monitoring of site for any new sett excavation during prolonged remediation, construction or landscaping works.

Water Vole & Otter

5.28 The River Colne lies adjacent to the Site and is known to historically support water voles and also has potential to support otters. It is therefore recommended that further survey work is undertaken to identify whether water vole and otters are present along the stretch of river adjacent to the Site.

Hedgehog

5.29 Given that hedgehog may make use of the Site, appropriate design/enhancement measures should be considered for this species as detailed below.

Nesting Birds

- 5.30 All wild birds are protected from killing and injury, and their nests and eggs are protected from damage and destruction, under the Wildlife and Countryside Act 1981 (as amended). Therefore any vegetation clearance required to facilitate the development will avoid the period between March and August (inclusive) when nesting birds are most likely to be present. If this is not possible vegetation will need to be checked for nesting birds by a suitably qualified ecologist prior to clearance.

Reptiles

- 5.31 Where not grazed, grassland habitats on-site provide suitable habitat for reptiles. These habitats are likely to be lost to development and therefore further survey work is recommended to determine the presence or likely absence of reptile species within the Site.

Summary of Recommendations

- 5.32 Based on the ecological constraints identified above, Table 2 summarises recommendations for further work necessary to determine the need for, and scope of, any avoidance, mitigation and/or compensation measures to address potential adverse effects of development. The outcome of this further work will inform an EclA of the final scheme.

Table 2. Recommendations for further investigation/survey

Ecological Feature	Further Work	Applicable Timescales
Colney Heath Farm Meadows LWS	Consultation with LPA to agree mitigation measures with regard to LWS	Anytime, ideally started early in design process
	Supplementary peak season botanical surveys	May - July
Colney Heath LNR	Consultation with LPA to agree measures to limit recreational pressure on LNR	Anytime
Biodiversity Metric Assessment	Biodiversity Net Gain calculation	Anytime, ideally started early in design process
Grassland	Supplementary peak season botanical surveys	May - July
Bats	Preliminary ground-based roost assessment of B1	Anytime
	Dusk/pre-dawn emergence/return surveys of Buildings B1 (if required)	May - August
	Seasonal walked transects and periods of automated static monitoring	May - August
Water vole & otter	Water vole & otter survey, two visits	Mid-April to June; and July-Sept, min 2 months apart
Reptiles	Reptile survey, standard seven visits	March - October

Opportunities for Ecological Enhancement

5.33 To promote adherence to the NPPF, saved policies of the City and District of St Albans District Local Plan Review and the forthcoming St Albans City & District Local Plan 2020-2036 the following opportunities for ecological enhancement have been identified:

- Habitat restoration in line with Hertfordshire Ecological Network Map, including acidic open/neutral grassland or wetland.
- Incorporation of native plant species and those of wildlife importance within the landscaping scheme to provide foraging opportunities for birds, invertebrates and bats.
- Provision of new bat roosting and bird nesting opportunities within new buildings and retained mature trees (numbers and specification to be determined at detailed design stage).
- Provision of wildlife ponds to increase availability of aquatic habitats for great crested newts and other amphibians within the area.
- 13cm 'Hedgehog Cut-outs' will be cut/built into all new timber fencing erected between private gardens to enable small mammals and other wildlife to disperse through the Site and forage.

6.0 CONCLUSIONS

6.1 Confirmed ecological constraints to development at the Site have been identified as the presence of:

- Colney Heath LNR
- Colney Heath Common LWS

6.2 The following additional investigation/survey work is recommended to inform an evidence-based EclA of the proposed development, such that suitable ecological impact avoidance, mitigation and/or compensation measures may be adopted:

- Consultation with LPA with regard to potential effects on Colney Heath Farm Meadows LWS
- Consultation with LPA with regard to potential effects on Colney Heath LNR
- Biodiversity Metric Assessment
- Botanical surveys
- Bat surveys
- Water vole and otter surveys
- Reptile surveys

6.3 Recommendations for ecological enhancement measures that could be delivered as part of development at the Site have been provided here-in, which will aid accordance with saved policies of the City and District of St Albans District Local Plan Review and the forthcoming St Albans City & District Local Plan 2020-2036.

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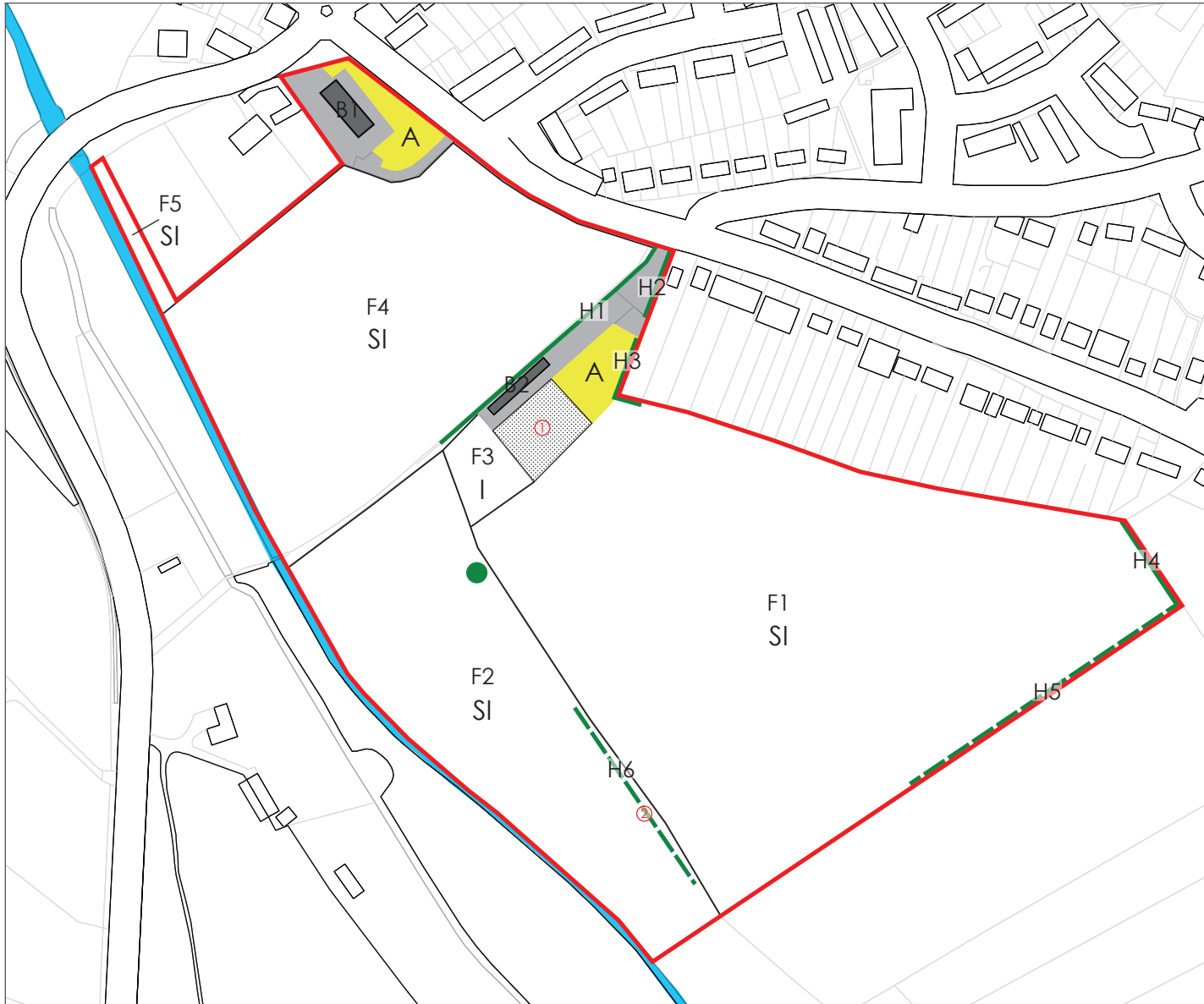
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


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Appendix A

Habitats Plan & Photosheet



-  Redline boundary
-  Semi-improved grassland
-  Amenity
-  Bare ground
-  Hardstanding
-  Buildings with number
-  Hedgerow with number
-  Defunct hedgerow with number
-  Fence
-  Target Note:
1 - Menege
2 - Rabbit warren



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Project Land south of Tollgate Road, Colney Heath

Drawing Title Habitats Plan

Client Vistry Group

Date Oct 2020

Drawing No. CSA/3925/107

Scale Refer to scale

Rev -

Drawn AC

Checked JW



Photo 1. F1 and H5 looking towards F2 and the River Colne.



Photo 2. F1 with H6/F2 on the left, looking towards stable block in centre of Site.



Photo 3. F2 with River Colne on right.



Photo 4. F4 looking towards Tollgate Road.



Photo 5. B1.



Photo 6. B2.

Appendix B

Legislation and Planning Policy

- 1.1. The **Conservation of Habitats and Species Regulations 2017** (as amended) transposes Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, and aspects of Council Directive 79/409/EEC on the Conservation of Wild Birds, into UK domestic law. The Regulations make prescriptions for the designation and protection of Sites of Community Importance ('European sites', e.g. Special Areas of Conservation and Special Protection Areas) and European Protected Species (EPS). Through the provisions of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, the Regulations retain all protections afforded to sites, habitats and species following the UK's departure from the European Union on 31st January 2020.
- 1.2. The **Wildlife and Countryside Act 1981** (as amended, principally by the Countryside and Rights of Way Act 2000) forms the basis for protection of statutory designated sites of national importance (e.g. Sites of Special Scientific Interest; SSSIs) and native species that are rare and vulnerable in a national context. Additionally, badgers are protected under the **Protection of Badgers Act 1992**.
- 1.3. Section 40(1) of the **Natural Environment and Rural Communities (NERC) Act 2006** states that each public authority, "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 41 (S41) lists of 56 habitats and 943 species of principal importance. The UK Biodiversity Action Plan (BAP) has been superseded by the Biodiversity 2020 Strategy, which continues to prioritise the S41 lists, however Local BAPs continue to influence biodiversity management and conservation effort, including through the spatial planning system, at the local scale.
- 1.4. The **National Planning Policy Framework (2019)** (NPPF) sets out government planning policies for England and how they should be applied. With regards to ecology and biodiversity, Chapter 15: Conserving and Enhancing the Natural Environment, paragraph 170, states that the planning system and planning policies should minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- 1.5. Paragraph 175 sets out the principles that local planning authorities should apply when determining planning applications:
 - If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts).

- Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.
 - Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.
 - Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.
- 1.6. The **Government Circular 06/2005**, which is referred to within the NPPF, defines statutory nature conservation sites and protected species as a material consideration in the planning process.
- 1.7. Local planning policies of relevance to ecology, biodiversity and/or nature conservation have been set out in Table B.1 below.

Table B.1. Summary of regional and local planning policy relating to ecology

Policy	Summary
City and District of St Albans District Local Plan Review 1994 (Adopted 30 November 1994) Saved and Deleted Policies Version (July 2020)	
Policy 106: Nature Conservation	<p>"The Council will take account of ecological factors when considering planning applications and will refuse proposals which could adversely affect:..</p> <p>... (iii) other sites of wildlife, geological or geomorphological importance;</p> <p>(iv) any site supporting species protected by the Wildlife and Countryside Act 1981;</p> <p>(v) the natural regime of either surface or ground waters in river valleys and their wetlands.</p> <p>If planning permission is granted to development which could affect a s site of conservation interest, it will normally be subject to conditions aimed at protecting the special features of the site. The Council will also seek a Section 106 Agreement to ensure the appropriate management of the site.</p>
St Albans City and District Local Plan 2020-2036 (Publication Draft, 2018)	
Policy L29 – Green and Blue Infrastructure, Countryside, Landscape and Trees	<p>"...<u>Biodiversity</u></p> <p>Identified and designated areas, sites and networks of importance for biodiversity including sites of local importance will be conserved, enhanced and managed. Opportunities to link or reconnect wildlife habitats will be taken, along with provision of green infrastructure in new developments. The objectives of current Hertfordshire-wide and local habitat and</p>

Policy	Summary
	<p>biodiversity studies and strategies will be implemented. Areas of importance for geodiversity in the District will be conserved and managed. The needs of protected and other important species will be fully considered.</p> <p>Development will be refused if harmful to:</p> <ol style="list-style-type: none"> 1) Sites of Special Scientific Interest 2) Nature Reserves (international, national, regional and local) 3) Any other sites of wildlife, geological or geomorphological importance 4) Any site supporting species protected by UK or European law 5) The natural regime of either surface or ground waters in river valleys and their wetlands. <p>Opportunities to improve the ecological value and quality of the District through development, particularly by maintaining, improving and extending defined habitat areas, will be managed in accordance with current advice from the Local Nature Partnership (LNP) supported by the Environmental Records Centre or any successor bodies.</p> <p>Where development that affects biodiversity is unavoidable, a net gain in biodiversity should be achieved on site. Exceptionally, off site proposals for a net gain through habitat creation and / or improvement may be considered, (as an 'offset' to loss and damage caused by the development). Offset values and the acceptability of such proposals will be determined according to national policy and guidance. Information on landscapes, habitats and sites of particular importance will be maintained and regularly updated as a current GIS data set...."</p>

Appendix C

Desk Study Information

9/30/2020

Site Check Report Report generated on Wed Sep 30 2020
You selected the location: Centroid Grid Ref: TL20840554
The following features have been found in your search area:

Special Areas of Conservation (England)

Name	WORMLEY-HODDESDONPARK WOODS
Reference	UK0013696
Hectares	335.99
Hyperlink	http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0013696

Ramsar Sites (England)

No Features found

Proposed Ramsar Sites (England)

No Features found

Possible Special Areas of Conservation (England)

No Features found

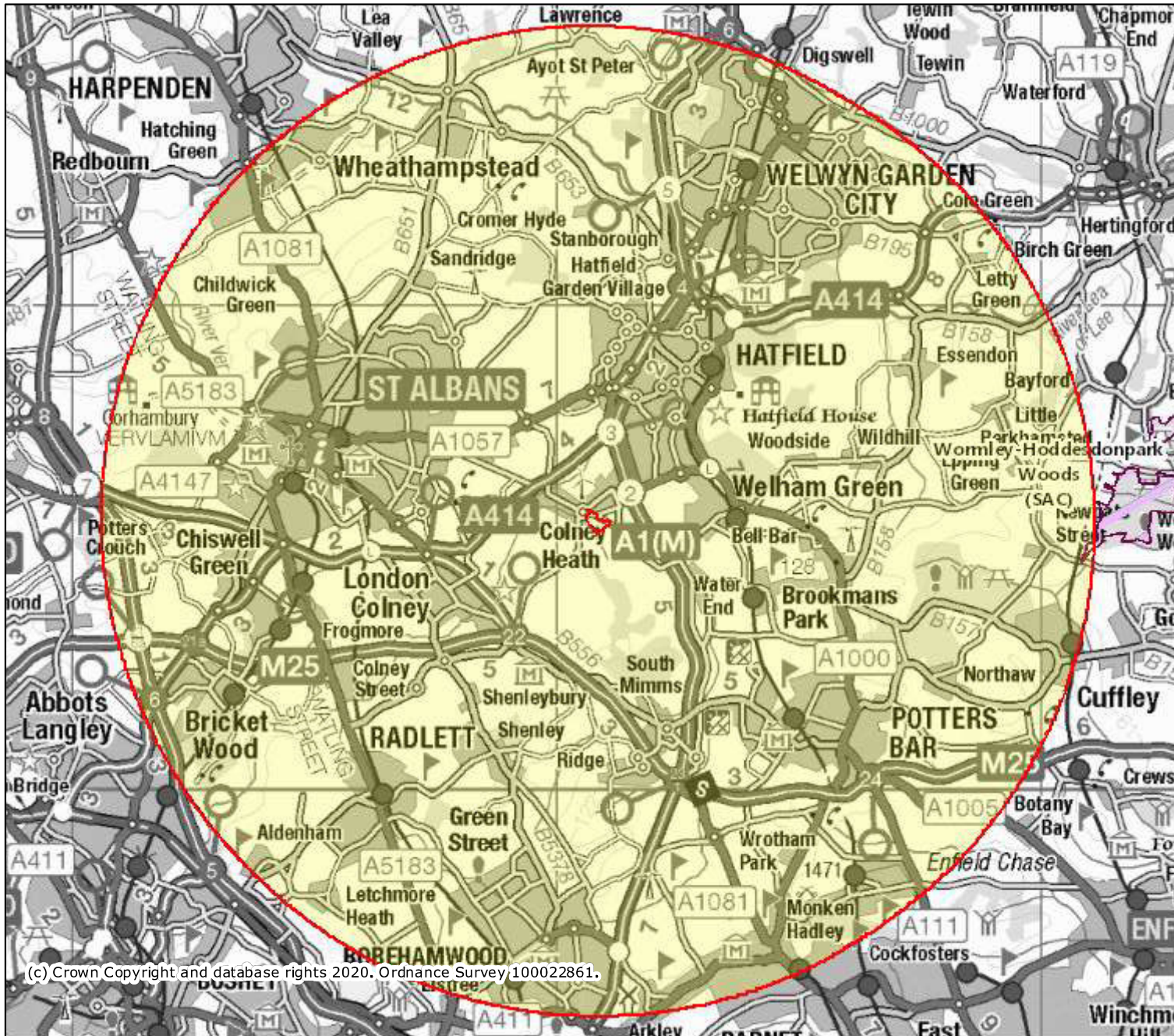
Special Protection Areas (England)

No Features found

Potential Special Protection Areas (England)

No Features found

MAGiC 3925 International Statutory Designations 10km



Legend

- Ramsar Sites (England)
- Proposed Ramsar Sites (England)
- Special Areas of Conservation (England)
- Possible Special Areas of Conservation (England)
- Special Protection Areas (England)
- Potential Special Protection Areas (England)

Projection = OSGB36
 xmin = 490000
 ymin = 190400
 xmax = 551500
 ymax = 220700

Map produced by MAGiC on 30 September, 2020.
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGiC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

Site Check Report Report generated on Wed Sep 30 2020
You selected the location: Centroid Grid Ref: TL20840554
 The following features have been found in your search area:

Local Nature Reserves (England)

Reference 1009336
Name COLNEY HEATH
Hectares 22.54
Hyperlink <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009336>

Reference 1460435
Name HOWE DELL
Hectares 3.98
Hyperlink <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1460435>

Reference 1460436
Name OXLEYS WOOD
Hectares 1.23
Hyperlink <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1460436>

Reference 1009336
Name COLNEY HEATH
Hectares 22.54
Hyperlink <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009336>

Reference 1460435
Name HOWE DELL
Hectares 3.98
Hyperlink <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1460435>

Reference 1460436
Name OXLEYS WOOD
Hectares 1.23
Hyperlink <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1460436>

Sites of Special Scientific Interest (England)

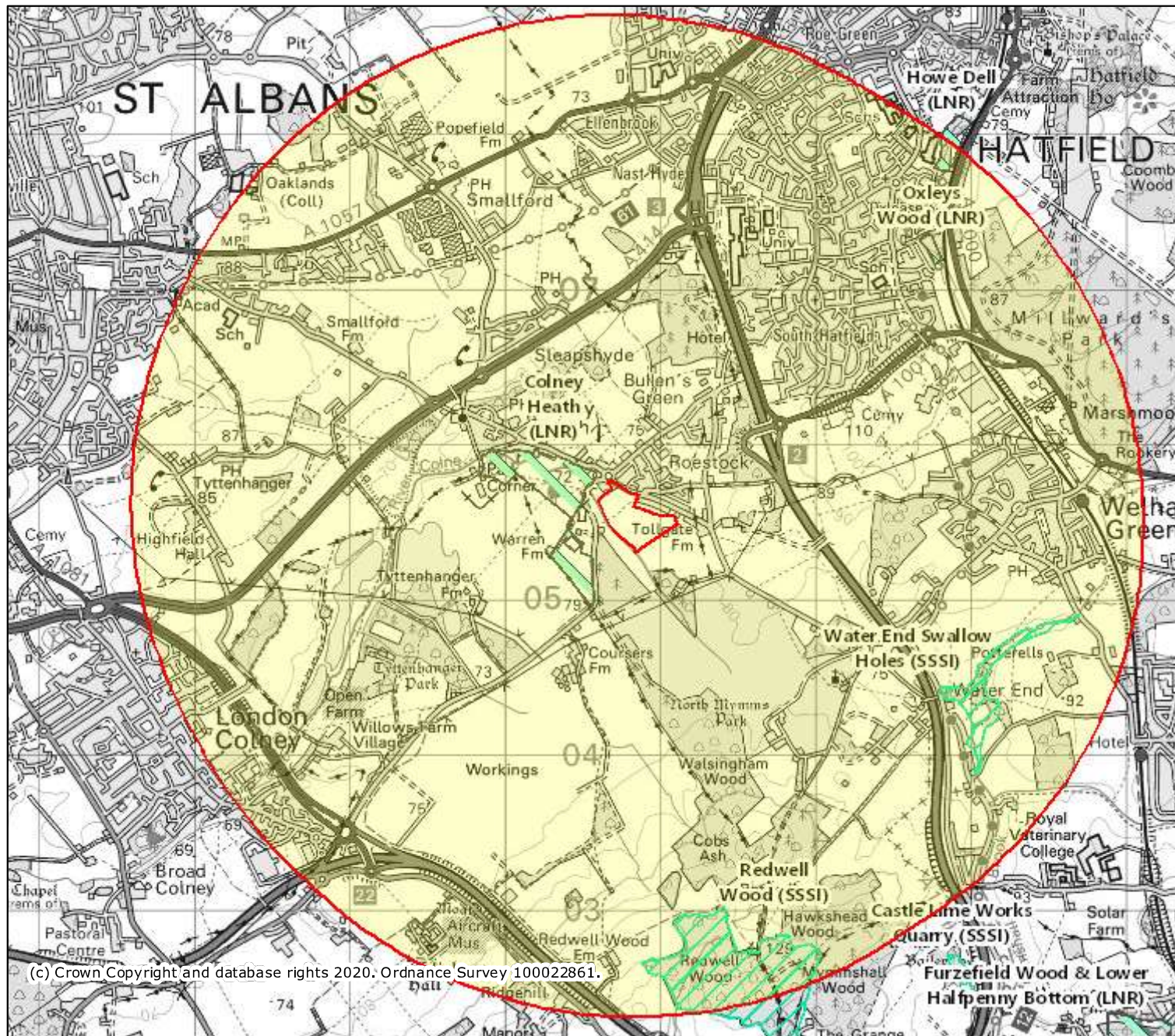
Name Redwell Wood SSSI
Reference 1002727
Natural England Contact ANDREW MILLS
Natural England Phone Number 0845 600 3078
Hectares 52.57
Citation 1001716
Hyperlink <http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1001716>

Name Water End Swallow Holes SSSI
Reference 1002742
Natural England Contact SONJA KAUPE
Natural England Phone Number 0845 600 3078
Hectares 11.12
Citation 1002507
Hyperlink <http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1002507>

Name Redwell Wood SSSI
Reference 1002727
Natural England Contact ANDREW MILLS
Natural England Phone Number 0845 600 3078
Hectares 52.57
Citation 1001716
Hyperlink <http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1001716>

Name Water End Swallow Holes SSSI
Reference 1002742
Natural England Contact SONJA KAUPE
Natural England Phone Number 0845 600 3078
Hectares 11.12
Citation 1002507
Hyperlink <http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1002507>

National Nature Reserves (England)
 No Features found



Legend

-  Local Nature Reserves (England)
-  National Nature Reserves (England)
-  Sites of Special Scientific Interest (England)

Projection = OSGB36

xmin = 511000

ymin = 200800

xmax = 530100

ymax = 210200



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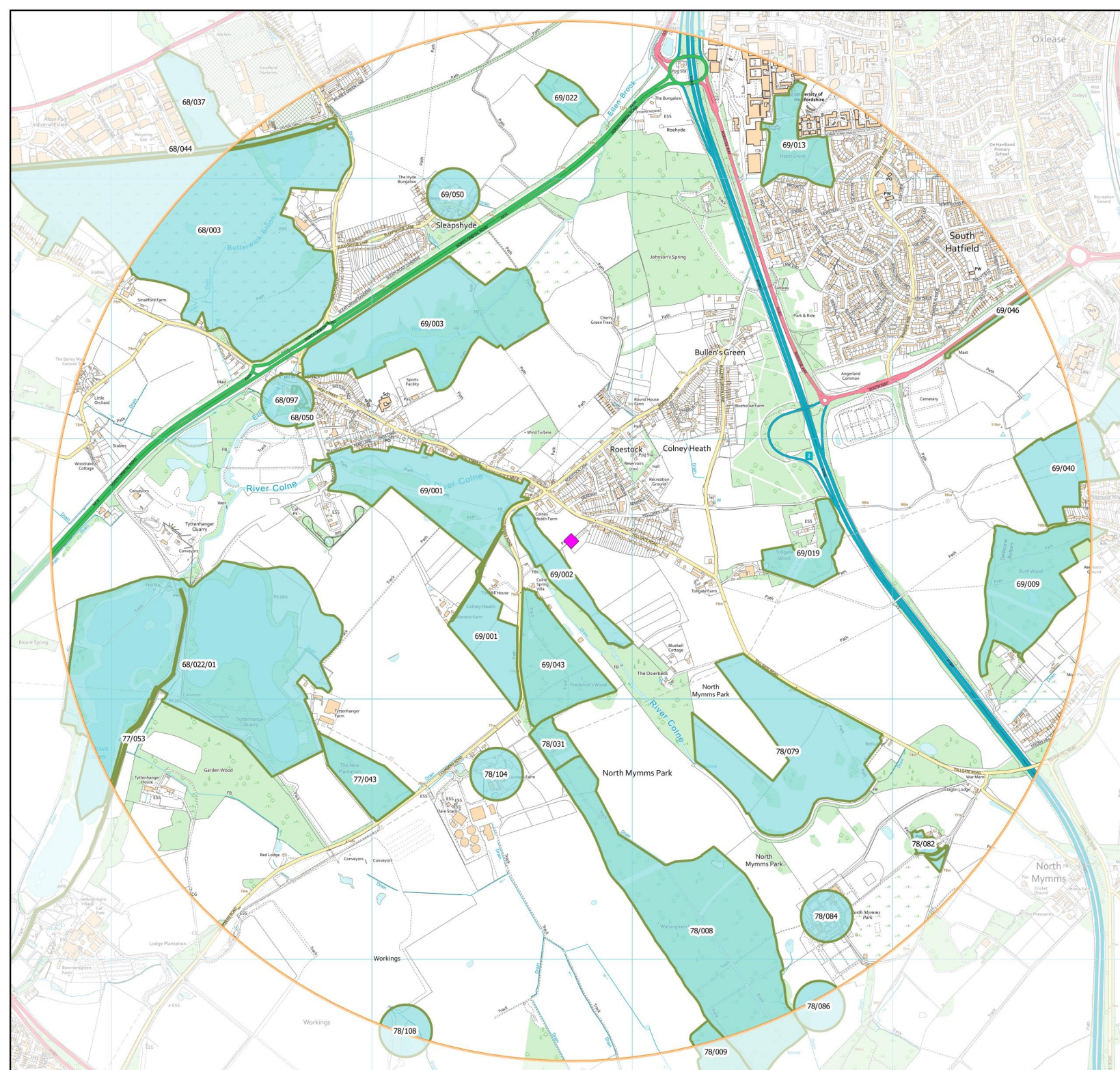
Local Sites Map 1

Search Information

- ◆ Search point
- ▭ Search area

Local Sites

- ▭ Local Wildlife Sites

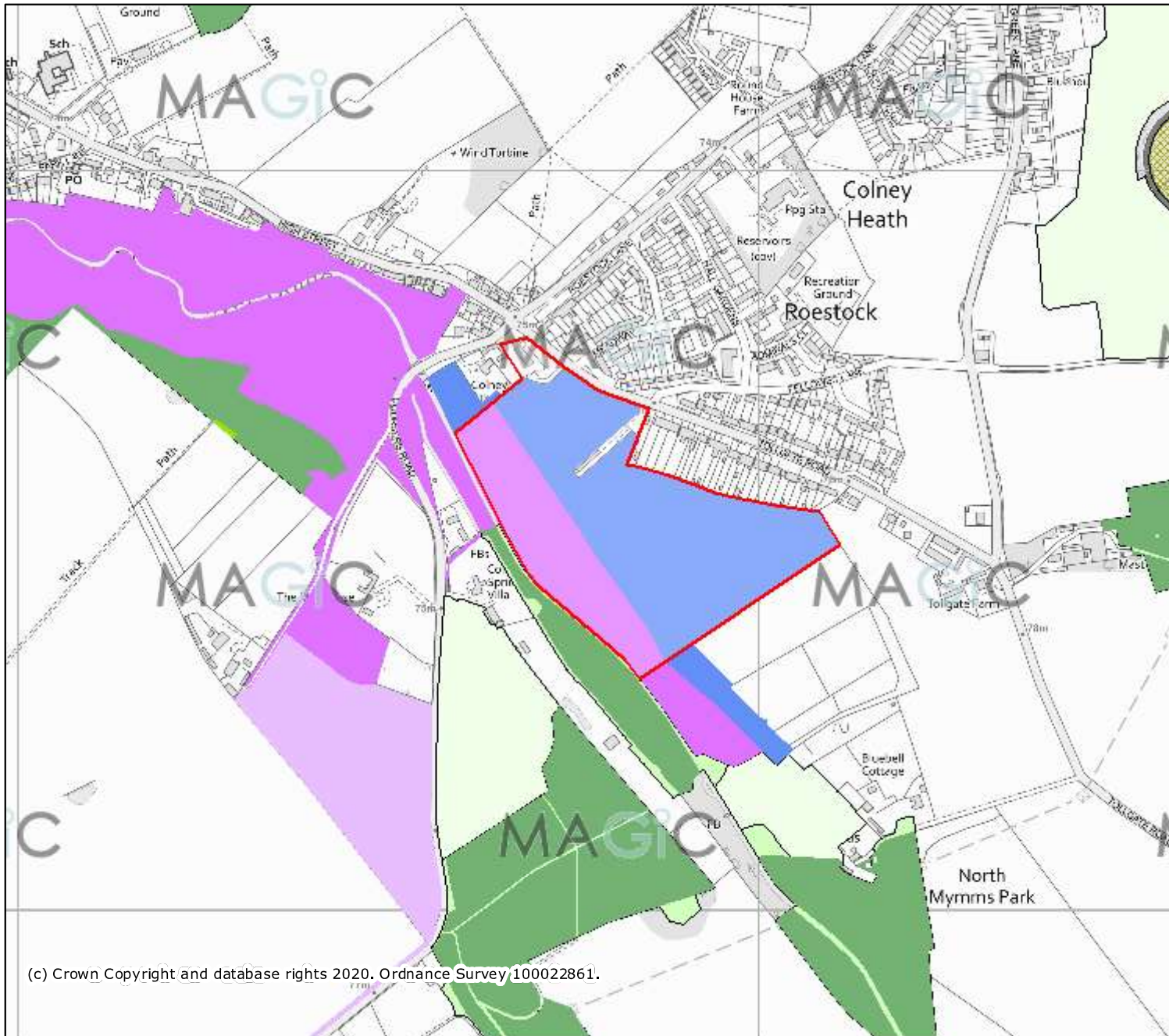


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25/09/2020



Legend

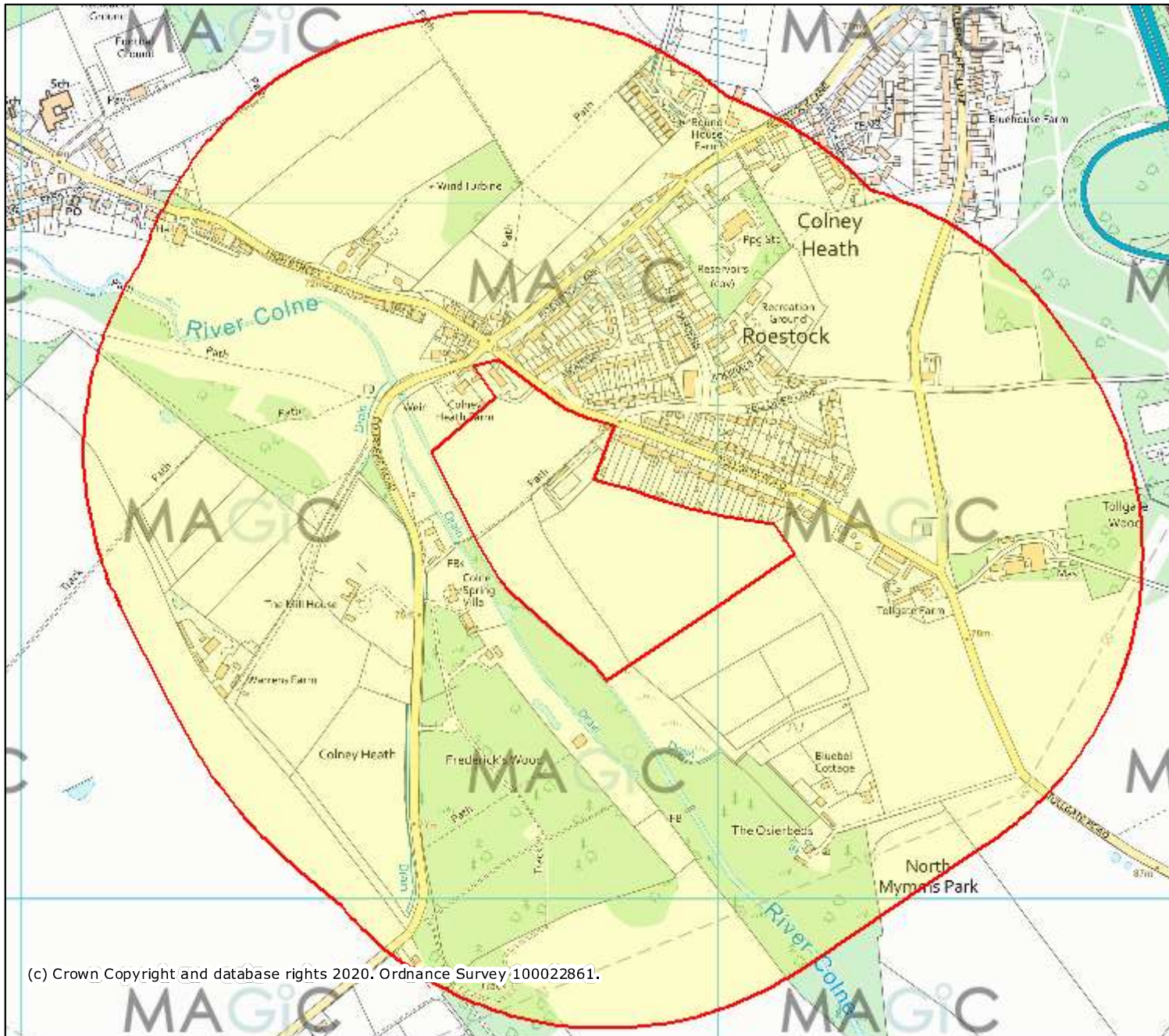
- Priority Habitat Inventory - Calaminarian Grassland (England)
- Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England)
- Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority) (England)
- Priority Habitat Inventory - Lowland Calcareous Grassland (England)
- Priority Habitat Inventory - Lowland Dry Acid Grassland (England)
- Priority Habitat Inventory - Lowland Meadows (England)
- Priority Habitat Inventory - Purple Moor Grass and Rush Pasture (England)
- Priority Habitat Inventory - Upland Calcareous Grassland (England)
- Priority Habitat Inventory - Upland Hay Meadows (England)
- Priority Habitat Inventory - Lowland Heathland (England)
- Priority Habitat Inventory - Mountain Heaths and Willow Scrub (England)
- Priority Habitat Inventory - Upland Heathland (England)
- Priority Habitat Inventory - Limestone Pavements (England)

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland
- Priority Habitat Inventory - Deciduous Woodland (England)
- Forestry Commission
- Legal Boundary (England)

Projection = OSGB36
 xmin = 518700
 ymin = 204500
 xmax = 522800
 ymax = 206500

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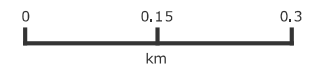
Projection = OSGB36

xmin = 518700

ymin = 204500

xmax = 523000

ymax = 206600



Map produced by MAGiC on 1 October, 2020.

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Appendix D

Habitats and Flora Species List

Habitat	Flora	
	Common name	Latin name
Improved Grassland (F2, F3, F4)	Bristly ox-tongue	<i>Helminthotheca echioides</i>
	Broad-leaved dock	<i>Rumex obtusifolius</i>
	Chickweed	<i>Stellaria media</i>
	Cock's-foot	<i>Dactylis glomerata</i>
	Common nettle	<i>Urtica dioica</i>
	Creeping buttercup	<i>Ranunculus repens</i>
	Creeping cinquefoil	<i>Potentilla reptans</i>
	Daisy	<i>Bellis perennis</i>
	Dandelion	<i>Taraxacum officinale</i> agg.
	Dock sp.	<i>Rumex</i> sp.
	Dove's-foot crane's-bill	<i>Geranium molle</i>
	Elder	<i>Sambucus nigra</i>
	False oat-grass	<i>Arrhenatherum elatius</i>
	Fat-hen	<i>Chenopodium album</i> agg.
	Field bindweed	<i>Convolvulus arvensis</i>
	Garlic mustard	<i>Alliaria petiolata</i>
	Mallow sp.	<i>Malva</i> sp.
	Meadow vetchling	<i>Lathyrus pratensis</i>
	Mouse-ear	<i>Cerastium</i> sp.
	Nipplewort	<i>Lapsana communis</i>
	Perennial ryegrass	<i>Lolium perenne</i>
	Ragwort	<i>Senecio jacobaea</i>
	Red-dead nettle	<i>Lamium purpureum</i>
	Ribwort plantain	<i>Plantago lanceolata</i>
	Selfheal	<i>Prunella vulgaris</i>
	Spear thistle	<i>Cirsium vulgare</i>
	Spurge	<i>Euphorbia</i> sp.
	White campion	<i>Silene latifolia</i>
	White clover	<i>Trifolium repens</i>
	White dead-nettle	<i>Lamium album</i>
Yarrow	<i>Achillea millefolium</i>	
Semi-improved Grassland	Blackthorn (self-seeded saplings)	<i>Prunus spinosa</i>
	Bramble	<i>Rubus fruticosus</i> agg.
	Broad-leaved dock	<i>Rumex obtusifolius</i>
	Cat's ear	<i>Hypochaeris radicata</i>
	Cock's-foot	<i>Dactylis glomerata</i>
	Common bent	<i>Agrostis capillaris</i>
	Common bird's-foot trefoil	<i>Lotus corniculatus</i>
	Common nettle	<i>Urtica dioica</i>
	Creeping buttercup	<i>Ranunculus repens</i>
	Creeping cinquefoil	<i>Potentilla reptans</i>
	Creeping thistle	<i>Cirsium arvense</i>
	Crested dog's-tail	<i>Cynosurus cristatus</i>
	Daisy	<i>Bellis perennis</i>
	Dandelion	<i>Taraxacum officinale</i> agg.
	Dock sp.	<i>Rumex</i> sp.
	Dove's-foot crane's-bill	<i>Geranium molle</i>
	False oat-grass	<i>Arrhenatherum elatius</i>

	Field speedwell	<i>Veronica persica</i>
	Goat's-beard	<i>Tragopogon pratensis</i>
	Hogweed	<i>Heracleum sphondylium</i>
	Knotgrass	<i>Polygonum sp.</i>
	Lady's bedstraw	<i>Galium verum</i>
	Meadow vetchling	<i>Lathyrus pratensis</i>
	Perennial ryegrass	<i>Lolium perenne</i>
	Ragwort	<i>Senecio jacobaea</i>
	Red clover	<i>Trifolium pratense</i>
	Red fescue	<i>Festuca rubra</i>
	Ribwort plantain	<i>Plantago lanceolata</i>
	Smooth sow-thistle	<i>Sonchus oleraceus</i>
	Spurge sp.	<i>Euphorbia sp.</i>
	St John's-wort	<i>Hypericum sp.</i>
	Teasel	<i>Dipsacus fullonum</i>
	Timothy	<i>Phleum pratense</i>
	White campion	<i>Silene latifolia</i>
	White clover	<i>Trifolium repens</i>
	White dead-nettle	<i>Lamium album</i>
	Wood avens	<i>Geum urbanum</i>
	Yarrow	<i>Achillea millefolium</i>
Amenity Grassland	Bindweed	<i>Convolvulus sp.</i>
	Common nettle	<i>Urtica dioica</i>
	Daisy	<i>Bellis perennis</i>
	Dandelion	<i>Taraxacum officinale agg.</i>
	Dock sp.	<i>Rumex sp.</i>
	Dove's-foot crane's-bill	<i>Geranium molle</i>
	False oat-grass	<i>Arrhenatherum elatius</i>
	Fat-hen	<i>Chenopodium album agg.</i>
	Field speedwell	<i>Veronica persica</i>
	Mallow	<i>Malva sp.</i>
	Perennial ryegrass	<i>Lolium perenne</i>
	Ribwort plantain	<i>Plantago lanceolata</i>
	White clover	<i>Trifolium repens</i>
	Yarrow	<i>Achillea millefolium</i>
Hedgerows	Apple	<i>Malus sp.</i>
	Ash	<i>Fraxinus excelsior</i>
	Beech	<i>Fagus sylvatica</i>
	Blackthorn	<i>Prunus spinosa</i>
	Bramble	<i>Rubus fruticosus agg.</i>
	Cleavers	<i>Galium aparine</i>
	Common nettle	<i>Urtica dioica</i>
	Common toadflax	<i>Linaria vulgaris</i>
	Cow parsley	<i>Anthriscus sylvestris</i>
	Dandelion	<i>Taraxacum officinale agg.</i>
	Elder	<i>Sambucus nigra</i>
	False oat-grass	<i>Arrhenatherum elatius</i>
	Firethorn	<i>Pyracantha sp.</i>
	Garlic mustard	<i>Alliaria petiolata</i>
	Ground ivy	<i>Glechoma hederacea</i>

	Hawthorn	<i>Crataegus monogyna</i>
	Herb Robert	<i>Geranium robertianum</i>
	Holly	<i>Ilex aquifolium</i>
	Ivy	<i>Hedera helix</i>
	Leyland cypress	<i>Leylandii</i> x <i>Cupressocyparis leylandii</i>
	Lilac	<i>Syringa vulgaris</i>
	Mugwort	<i>Artemisia vulgaris</i>
	Plum	<i>Prunus</i> sp.
	Purple toadflax	<i>Linaria purpurea</i>
	Red dead-nettle	<i>Lamium purpureum</i>
	Ribwort plantain	<i>Plantago lanceolata</i>
	Rose sp.	<i>Rosa</i> sp.
	Smooth meadowgrass	<i>Poa pratensis</i>
	Spurge sp.	<i>Euphorbia</i> sp.
	White dead-nettle	<i>Lamium album</i>
	Yorkshire fog	<i>Holcus lanatus</i>
River Colne	Alder	<i>Alnus glutinosa</i>
	Ash	<i>Fraxinus excelsior</i>
	Aspen	<i>Populus tremula</i>
	Blackthorn	<i>Prunus spinosa</i>
	Bramble	<i>Rubus fruticosus</i> agg.
	Burdock sp	<i>Arctium</i> sp.
	Cock's-foot	<i>Dactylis glomerata</i>
	Comfrey	<i>Symphytum</i> spp.
	Creeping thistle	<i>Cirsium arvense</i>
	Elder	<i>Sambucus nigra</i>
	False oat-grass	<i>Arrhenatherum elatius</i>
	Garlic mustard	<i>Alliaria petiolata</i>
	Goat willow	<i>Salix caprea</i>
	Hawthorn	<i>Crataegus monogyna</i>
	Herb Robert	<i>Geranium robertianum</i>
	Hogweed	<i>Heracleum sphondylium</i>
	Ivy	<i>Hedera helix</i>
	Meadow foxtail	<i>Alopecurus pratensis</i>
	Meadowsweet	<i>Filipendula ulmaria</i>
	Nettle	<i>Urtica dioica</i>
Perennial ryegrass	<i>Lolium perenne</i>	
Rose	<i>Rosa</i> sp.	
Willow	<i>Salix</i> sp.	
Colonising Bare Ground	Broad-leaved dock	<i>Rumex obtusifolius</i>
	Common nettle	<i>Urtica dioica</i>
	Common poppy	<i>Papaver rhoeas</i>
	Dandelion	<i>Taraxacum officinale</i> agg.
	Dove's-foot crane's-bill	<i>Geranium molle</i>
	False oat-grass	<i>Arrhenatherum elatius</i>
	Greater plantain	<i>Plantago major</i>
	Knotgrass	<i>Polygonum</i> sp.
	Mallow	<i>Malva</i> sp.
	Mugwort	<i>Artemisia vulgaris</i>
	Nipplewort	<i>Lapsana communis</i>

	Perennial ryegrass	<i>Lolium perenne</i>
	Pineappleweed	<i>Matricaria discoidea</i>
	Red-dead nettle	<i>Lamium purpureum</i>
	Shepherd's purse	<i>Capsella bursa-pastoris</i>
	Spurge	<i>Euphorbia</i> sp.
	Yarrow	<i>Achillea millefolium</i>

Appendix E

Preliminary Bat Roost Assessment

Methods

- 1.1. The aim of the preliminary roost assessment is to assess the potential for, or any evidence of, the presence of roosting bats associated with specific habitat features. Where significant potential for roosting is identified, further bat roost surveys are generally necessary to determine the presence or likely absence of a roost, and to characterise any roost present. The method described below has been followed with due consideration for the current best practice guidelines (Collins, 2016).

Structures

- 1.2. A detailed inspection of the exterior and interior of structures at the Site was undertaken to (i) identify any Potential Roost Features (PRFs) and potential bat ingress/egress points, and (ii) locate any evidence of bats such as live or dead specimens, droppings, urine splashes, fur-oil staining, feeding remains (e.g. moth wings) and/or squeaking noises. Equipment used included ladders, high-powered torches and close-focusing binoculars, as appropriate.
- 1.3. Where any droppings were present, samples were collected to enable species identification via DNA analysis, if required.

Limitations

- 1.4. Building B1 was not accessible at the time of survey, therefore descriptions of this habitat are based on aerial photography and observations from adjacent land.

Evaluation

- 1.5. Following the assessments, each structure was assigned one of the following categories in respect of its potential to support roosting bats (adapted from Collins, 2016):
 - *Negligible* – no obvious PRFs
 - *Low* – a structure with one or more PRFs that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats. A tree of sufficient size and age to contain PRFs but none seen from the ground or features seen only with very limited roost potential.
 - *Moderate* – a structure or tree with one or more PRFs that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat; but unlikely to support a roost of high conservation status.
 - *High* – a structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Results

Table E.1. Results of Preliminary Roost Assessment - Structures

Building Ref.	Building Description	External Evidence /Features	Internal Evidence /Features	Bat Roost Potential
B1	Single storey with pitched roof and skylight style windows. Machine made roofing tiles and wooden cladding. Dormer style window with hanging tiles.	Roof tiles and cladding appeared in tact from a distance, however further more detailed inspection is required. Hanging tiles on dormer window provide potential.	NA – no internal access.	To be confirmed – further survey work required
B2	Stable block. Pitched roof with bitumen felt. Corrugated metal sheeting on top of bitumen in places. Pitched roof lined with chipboard. Outer structure wood panelling.	No evidence of bats. Some small gaps in wood panelling and small gap in overhang of roof.	None.	Negligible



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**HERTFORDSHIRE COUNTY COUNCIL
PROPERTY (PROPERTY PLANNING TEAM)**

ST ALBANS CITY AND DISTRICT COUNCIL

SUBMISSION TO CALL FOR SITES CONSULTATION

**ON BEHALF AS HERTFORDSHIRE COUNTY COUNCIL AS
LANDOWNER**

March 2021

1.0 Introduction

1.1 This document is submitted by Hertfordshire County Council (HCC) Property (Property Planning Team) in response to the St Albans City and District Council Call for Sites consultation.

2.0 Identified Sites in HCC Ownership

2.1 A total of 10 sites in the ownership of the County Council have been identified for submission to the District Council's Call for Sites. These are:

- Rural Estate land south of Napsbury (Land West of London Colney)
- Rural Estate land north of Napsbury
- Land East of Kay Walk, St Albans
- Land at Stephens Way and Flamsteadbury Lane Redbourn
- Rural Estate land at Waterdell, adj to Mount Pleasant JMI
- Rural estate land at Highfield Farm, Tyttenhanger
- Carpenter's Nursery, Sandridge
- Former Radlett Aerodrome, Radlett
- Smallford Farm and Smallford Pit, Smallford
- Former Ariston Works, Harpenden Road, St Albans

2.2 The forms previously submitted in September 2017 have been updated with an additional form included for the former Ariston Site.

2.0 Conclusion

3.1 HCC Property welcomes the opportunity to participate in the Call for Sites consultation. Further information can be provided on any of the submitted sites by contacting the Property Planning Team.

Smallford Farm and Smallford Pit, Smallford

Site address: Please provide a brief description e.g. land to the south west of (settlement), between the A500 and railway.

Smallford Farm and Smallford Pit are located to the north and south of Colney Heath Lane.

Ownership details: Please indicate whether freehold or leasehold and length of lease (it is possible that a site may be in multiple ownership).

Freehold.

Area of site (hectares)

Smallford Farm is approximately 18ha;
Smallford Pit is approximately 55ha.

Current use(s)

Smallford Farm is in agricultural use and includes farm buildings.
Smallford Pit is a former landfill site and gravel pit.

Are there any factors that could make the site unavailable for development? (Please provide any details in the boxes labelled a to d below)

a. Ownership Constraints (e.g. multiple ownerships, ransom strips, tenancies, operational requirements)

Smallford Farm is part of the HCC Rural Estate.

b. Awaiting relocation of current use

n/a

c. Level of developer interest (i.e. low, medium, high)

n/a

d. Likely timeframe for development (i.e. completion). Please indicate if you anticipate that development may be split over different time periods.

Likely timescale for delivery of suggested development / land use

Solar Farm 1 to 5 years. Other uses 5+ years

Are you aware of any particular constraints that might make the site unsuitable for development? (Please provide any details in the boxes labelled a to d below)

a. Environmental Constraints e.g. floodplain, Sites of Special Scientific Interest (SSSIs) or Local Nature Reserve, sites of geological importance.

Part of the Smallford Pit site falls within Floodzone 2/3.

b. Other Designations e.g. Conservation Area, Listed Buildings, Archaeological Sites.

n/a

c. Physical Constraints e.g. poor access, steep slopes, uneven terrain, ground contamination, Tree Preservation Orders

Smallford Pit is a former landfill site.

d. Policy Constraints e.g. Green Belt, Landscape Character Area, high quality agricultural land, designated employment area, public or private green space, site with social or community value.

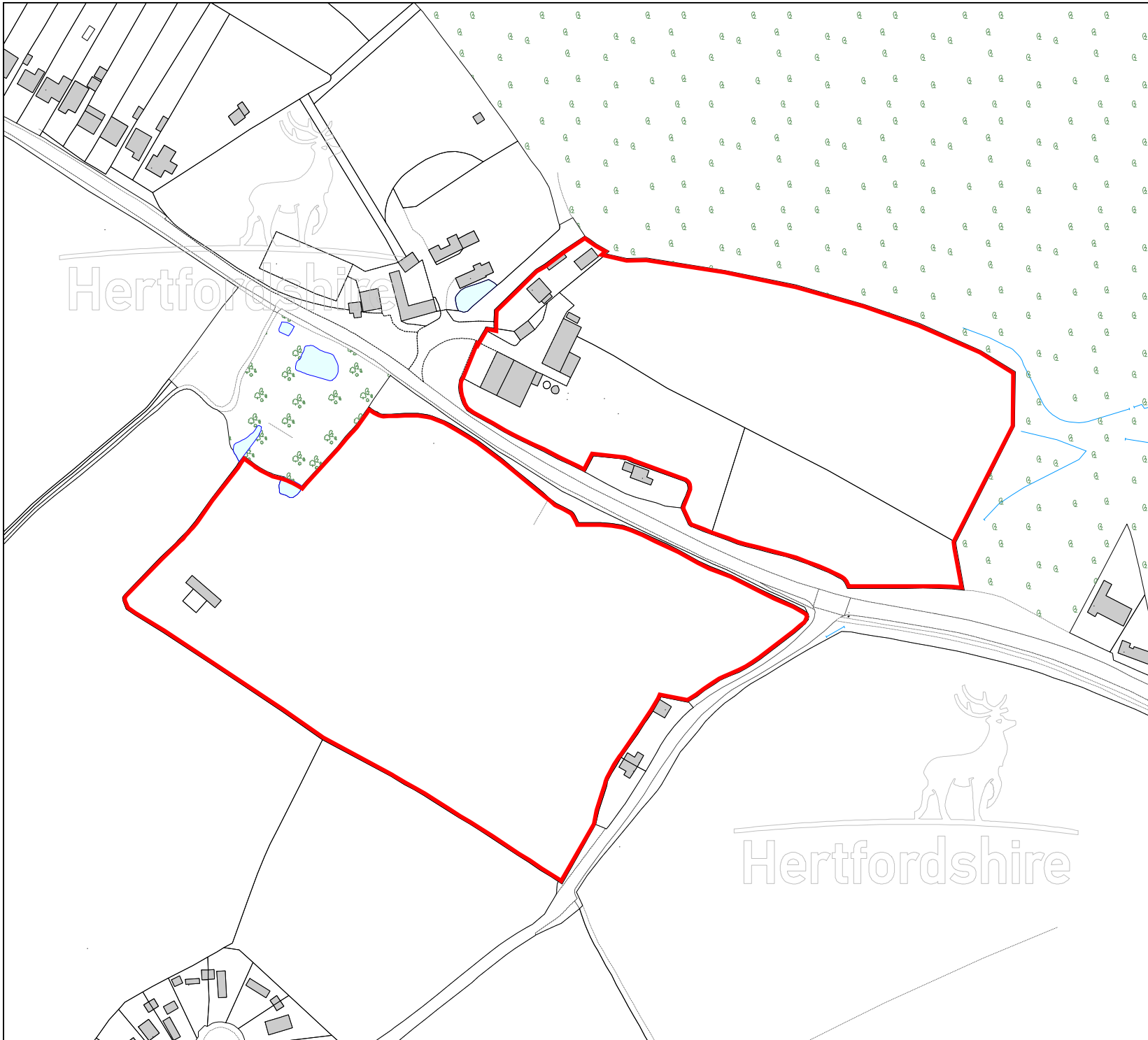
Green Belt, Landscape Development Area

If any constraints have been identified above, do you think that they could be overcome? If so, how?

Smallford Pit is a former landfill site where remediation would be required. Indications are that onsite remediation has the potential to provide a build area on 50% of the site. The identified environmental constraint of part of the site lying within a flood zone can be mitigated by appropriate land use, together with good design and layout in any development scheme.

What is the estimated number of dwellings that could be provided on the site?

At 30 to 40 dwellings per hectare the Smallford Farm site could provide between 500 and 700 dwellings.





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HCC Land Asset Plan

	Freehold
	Leasehold

Asset Name
**Smallford Farm
Colney Heath Lane
Smallford, St Albans**

Terrier Ref.	SCH60
Site area	6.289ha
Land Registry Title No.	HD14291
Ordnance Survey map ref.	TL 1906
Reference Date	01/04/2009
Event Change Date	28/09/2016
Operational Designation	-
Drawn	Jo-Ann Burke
Checked	JC
Scale	1:2500



Asset Code **00219701**



**Lambert
Smith
Hampton**



HCC Land Asset Plan

	Freehold
	Leasehold

Asset Name
**Land at Smallford Farm
Colney Heath Lane
Smallford, St Albans**

Terrier Ref.	SCH60
Site area	13.364ha
Land Registry Title No.	HD14291
Ordnance Survey map ref.	TL1906
Reference Date	28/09/2016
Event Change Date	00/00/0000
Operational Designation	-
Drawn	Jo-Ann Burke
Checked	JC
Scale	1:2500
Asset Code	80104350