RAPLEYS

Planning Department
Uttlesford District Council
Council Offices
London Road
Saffron Walden
CB11 4ER

Our ref: SRS/23-00403
Date: 19 March 2024

Dear Sir/Madam,

Re: Belcham's Lane & Maces Farm, Rickling Green, Saffron Walden, Essex, CB11 3YG – Town and Country Planning (Environmental Impact Assessment) (EIA) Regulations 2017 (as amended) – Request for Screening Opinion

Pre-application advice was sought and received from the Planning Inspectorate in relation to the development of the above mentioned site (ref: S62A/2023/0024 dated 24 November 2023). The advice letter advised that any EIA screening opinion request was to be made directly to the local authority. Consequently, we have been instructed by Pegasi Limited to submit a screening opinion request to you in accordance with the above-mentioned Regulations, specifically Regulation 6(1), to determine whether the Proposed Development on land at Belcham's Lane and Maces Farm, Rickling Green, is considered to be EIA development.

In accordance with Regulation 6(2), this request describes the characteristics of the Proposed Development and its location along with their likely significant effects on the environment, including potential mitigation. It is accompanied by a site location plan (Appendix 1), a Masterplan Concept (Appendix 2), A Flood Risk Note (Appendix 3), a Transport Note (Appendix 4), A Preliminary Ecological Appraisal for both the greenfield element and Maces Farmyard (Appendices 5 and 6), and an EIA Checklist (Appendix 7).

The Proposed Development

The Proposed Development covers a total Site area of 9.7ha, comprising the following –

Up to 110 residential dwellings (Class C3) for 'Build to Rent', with a range of 1-4 bed apartments, houses and bungalows on circa 3.7ha. Some 20% of the scheme will be affordable rent in accordance with the NPPF. The Development will be managed Pegasi Limited and retained as part of the Quendon Estate,

The relocation of the existing football pitch to the south of the area proposed for housing, alongside the provision of a new changing room and community pavilion,

New wetland and habitat creation,

A children's play area and amenity green space,

Vehicular access - one to the east along London Road and one to the west off Belcham's Lane. Five pedestrian access points are also proposed to the properties and sports facilities,

Two new bus stops on London Road,

Reconfiguration of the London Road/Belcham's Lane junction,

Enhancements to the public realm to the north of the Green to create an improved walking route connecting the Proposed residential Development with the facilities at Maces Farmyard, and

Within the 0.9ha of Maces Farmyard, new community and business facilities of up to 1,500sqm of space within a combination of new build and existing buildings - specifically within the retained listed barn (300sqm) a café and farm shop (Class E) will be provided; the existing poor quality barn to the south will be replaced with a new building of smaller footprint to provide some flexible community/retail/business space (Class E); three new buildings for Class E uses; a replacement B8 storage facility for Terrace and Gardens on the same footprint as the existing modern barns which are of poor quality; retention of the existing green at the front of the farmyard and the paddock to the rear.

An evolving Masterplan Concept is provided at Appendix 2. The Proposed Development parameters identified above are not anticipated to be exceeded. It is anticipated that any planning application will be HYBRID in nature, with the redevelopment of Maces Farmyard in FULL, and the development of the 110 dwellings, football pitch and other associated infrastructure in OUTLINE.

Site Location

The Site
The Site comprises a total of circa 9.7ha of land and is formed of two main areas of land which are joined by a connecting strip of public realm land to the north of the Green.

The main area of the Site includes land off Belcham's Lane which comprises a football pitch and a field. The football pitch has existing new built housing on its northern and western boundaries, with London Road providing the eastern boundary. The field is bounded on three sides by Belcham's Lane and London Road, with the playing field adjoining it to the north. This area of the Site is circa 8ha and is referred throughout this assessment as the 'greenfield Site'.

The connecting public realm comprises 0.8ha from the greenfield Site to the north of the Green through a proposed pedestrian access which will be located in between the existing residential properties accessed off Belcham's Lane. The application Site boundary has also been extended to include a section of London Road to the north-east. This will enable the Proposed Development to provide an additional bus stop for the village and to improve highway safety along London Road.

The north-east part of the Site, west of The Green, is referred to as Maces Farmyard (0.9ha) which contains three existing former agricultural buildings that are currently occupied by Terrace and Garden as a shop and for storage and distribution purposes and a large paddock to the north-west. The existing timber framed barn located within the Farmyard is Grade II listed.

Surrounding Area
The village of Rickling Green is located to the west of the B1383 London Road and is centred on the Green, a large open space and cricket pitch. To the north Rickling Green adjoins the village of Quendon, and both are within the jurisdiction of Rickling and Quendon Parish Council.

Rickling Green has a residential character nucleated around the Green and with housing fronting the roads running from it. Buildings are predominantly two storeys in height, comprising detached, semi-detached and small runs of terraces set behind front gardens with walls, fences and hedges to the street.

Rickling Green benefits from existing community facilities including an excellent primary school, public house, sports facilities including a well-used cricket pitch and pavilion, bowls club and football

pitch, a village Hall and informal allotments which are owned by the Quendon Estate and let to residents.

Much of the village is designated a conservation area, with the southern extent along the Belcham's Lane boundary of the greenfield site. The conservation area includes listed building on the southern edge of Maces Farmyard. A number of listed buildings are scattered throughout the conservation area.

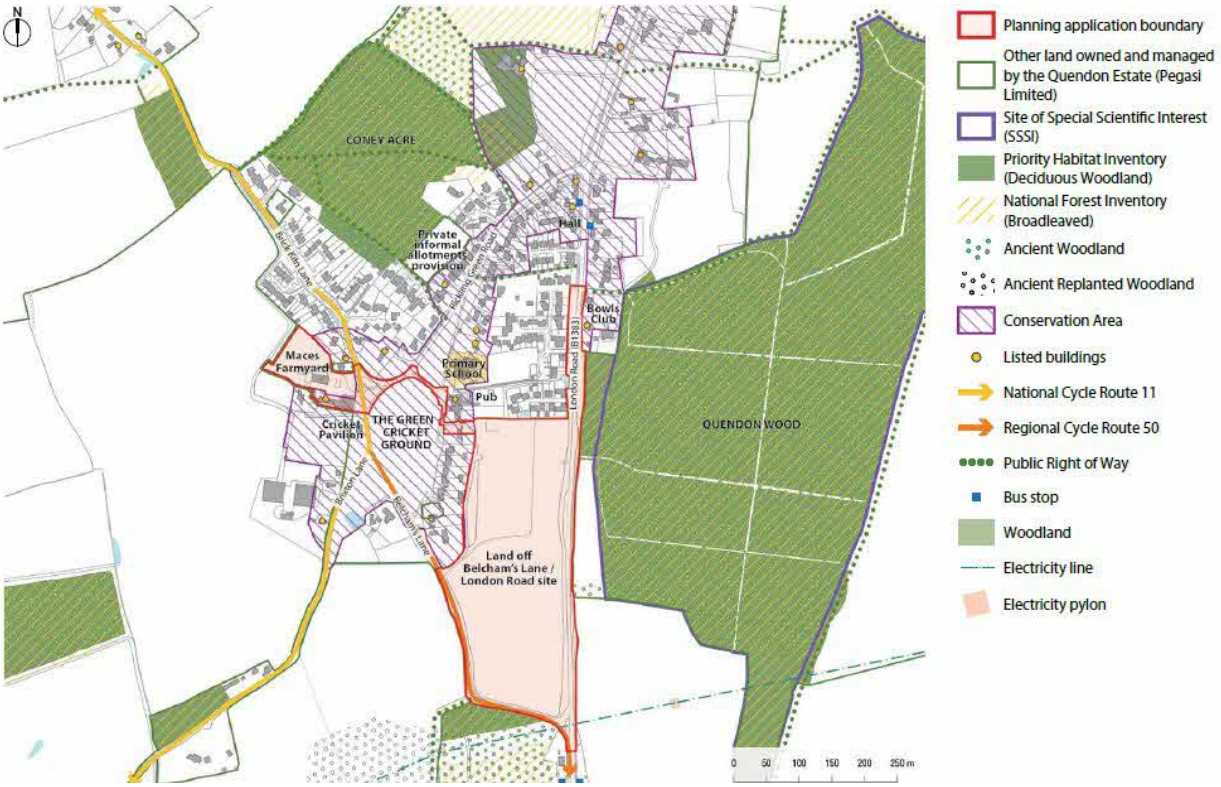


Figure 1 –Site and Village Context

The settlement is in close proximity to four larger centres, comprising Newport (less than 3 miles) which has the local secondary school, as well as Bishop's Stortford (approximately 7 miles), Stansted Mountfitchet (approximately 3 miles) and Saffron Walden (approximately 6 miles) which offer further facilities and services including supermarkets, GP surgeries and employment opportunities.

Newport Station located 2.8 miles to the northeast and Elsenham Station 3 miles to the south. Rickling Green is served by Buses 301 and 441 (stops on London Road). The Site is located 6 miles to the north of junction 8 of the M11, which provides strategic connections to the north and south.

Planning History

The planning history for the Site is limited to historic changes of use of agricultural buildings to commercial workshops in the 1990s at Maces Farmyard in the north west part of the Site. The only historic planning application associated with the main Site was for the "use of land for new football pitch" (Ref: SWR/0399/71) which was approved in 1971.

The draft local plan 2014 proposed two allocations within Rickling Green, comprising Policy QUE1, which was an allocation for 19 dwellings and Policy QUE2, which was a commitment for 12 dwellings. Planning permission was approved in 2015 for the "*Detailed application for the erection of 19 residential units (including 5 affordable units) and a new vehicular access point, incorporating public open space, hardstanding, landscaping and land for educational use*" (Ref: UTT/14/3662/FUL). This site is located to the north of the football pitch and is the last residential development to be built

out at Rickling Green. The permission was granted on the basis that the site is within an area that is situated close to the village settlement limits and would allow development to form part of the village. It was positioned adjacent to existing development.

There are no further planning applications of relevance to the Proposed Development.

A number of representations to promote development have been made by the client both to the Local Plan review and the Neighbourhood Plan over the period since 2017.

Planning Policy in Relation to Location and Environment

The Local Planning Authority's relevant adopted Development Plan consists of the Uttlesford Local Plan 2000-2011 (2005) (ULP) and the Newport, Quendon and Rickling Green Neighbourhood Plan (2021) (NQRGNP).

The ULP
The greenfield Site falls outside of the development limits and is therefore classed as countryside but is not located within the Green Belt or a specific Countryside Protection Zone. The greenfield Site does adjoin the existing built-up area on two sides and is enclosed by Belcham's Lane and London Road.

The NQRGNP
The neighbourhood plan does not contain any allocated housing sites. The designation for the Site therefore follows that of the ULP. The neighbourhood plan does identify that proposed development must be sensitive to the village setting within the surrounding countryside taking into account existing views. In this regard, a 'locally important view' is identified crossing the south of the Site looking northwards.

Requirement for Environmental Impact Assessment

The requirement for an EIA is derived from EU Directive no. 2011/92/EU. This directive is transposed into UK law through the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the Regulations'). The Regulations require that prior to the grant of planning permission the likely significant effects of a project on the environment should be assessed.

The process of 'screening' for the need to undertake an EIA is predicated on 3 key steps, namely:

(i) Establish whether the development is Schedule 1 Development, i.e. does it meet the descriptions of development listed in Schedule 1 of the Regulations. If so, an EIA is always required,
(ii) Establish whether the development is Schedule 2 Development i.e. does it meet the descriptions of development listed in Schedule 2; does it meet or exceed the thresholds in Schedule 2 or is it located in a 'sensitive area' as defined in Regulation 2(1), and
(iii) If the development can be defined as Schedule 2 Development, consider whether it is likely that the development will have significant effects on the environment (through consideration of factors identified within Schedule 3 of the EIA Regulations). If so, an EIA should be requested. If not, consider whether any further environmental information is necessary to supplement the planning application.

The Proposed Development does not meet any of the descriptions of development listed in Schedule 1 of the Regulations, and therefore it is not Schedule 1 development.

To determine whether the Proposed Development is Schedule 2 development, an assessment needs to be made as to whether:

(i) The Proposed Development meets the descriptions of development in Schedule 2; and
(ii) The Proposed Development meets or exceeds the thresholds in Schedule 2 and/or whether the Proposed Development is located in a 'sensitive area' as defined in Regulation 2(1).

Taking each of the above criteria in turn, the Proposed Development is considered to fall under category 10(b) Infrastructure projects where development thresholds for screening purposes are -

(i) The development includes more than 1ha non-residential development, or
(ii) The development includes more than 150 dwellings, or
(iii) The overall area of the development exceeds 5ha.

As the Proposed Development Site is circa 9.7ha in total (threshold (iii)), the need for screening is therefore triggered.

The Proposed Development is not located in a sensitive area as defined by the Regulations.

The Planning Policy Guidance (PPG) provides further assistance on the threshold criteria where the proposal may well be EIA development and the key issues to consider in making a judgement. The Proposed Development comprises a mix of brownfield and greenfield development. The PPG advises that EIA is unlikely to be required for the redevelopment of land unless the new development is on a significantly greater scale than the previous use or the types of impact are of a markedly different nature or there is high level of contamination –it is considered that the Proposed Development relating to the brownfield part of the Site does not conflict with any of these criteria. The PPG continues that in relation to sites that have not previously been intensively developed, the area of the proposed development is not more than 5ha or the development would have significant urbanising effects as for example a development of more than 1,000 dwellings –whilst the Proposed Development relating to the greenfield part of the Site at circa 8ha does exceed the 5ha it is for up to 110 dwellings and a community building confined to circa 3.7ha, the remainder as green infrastructure, including replacement playing fields (football pitch): even taken as a whole, the level of development proposed is unlikely to have significant urbanising effects. Further rationale is provided below through the technical analysis of the Proposed Development.

EIA Screening

The over-riding determinant as to whether a development is EIA development or not is whether it is likely to have SIGNIFICANT effects on the environment. The three key criteria that should be considered are –

(i) Characteristics of the development –size and scale (and in combination with other development), use of natural resources/environmental baseline, waste production, pollution and risk of accidents),

(ii) Location of the development and 'sensitivity of the site', and

(iii) Characteristics of the potential impact (magnitude, extent, probability, reversibility, duration, frequency).

Characteristics of the Proposed Development and Location

Size and Scale
The size and scale of the Proposed Development is set out earlier in this assessment. The size and scale are commensurate with the identified need for housing within the District as a whole and the Rickling area more specifically. Its size and scale is not disproportionate to the overall size of Rickling within the settlement hierarchy. Furthermore, a reasonable proportion of the overall scheme involves replacement facilities (the football pitch, the storage/warehouse building) and other

refurbishment within Maces Farmyard and is not new build development per se. Actual new build greenfield development (housing and sports pavilion) accounts for circa less than half of the overall site area. The redevelopment of the farmyard for E class uses is also for the benefit of the local community, potentially providing access to some job opportunities and retail/health/community services reducing the need for residents to travel on a daily basis for such provision.

The size of the Proposed Development on its own should not be the key determining factor in whether or not EIA is necessary. Moreover, indicative thresholds in the EA Regulations and PPG do not in any way compel or otherwise imply that the Council must adopt a positive screening opinion. Rather than the size of any particular development, the PPG advises that the key issues to consider are 'potential increases in traffic, emissions and noise' which are considered later in this Screening Opinion Request appraisal.

Environmental Baseline of Location
Baseline conditions of the key environmental considerations are provided below, none of which identify any over-riding environmental sensitivities that could not otherwise be accounted for through mitigation and careful design and management of the Proposed Development.

Flood Risk
A desktop based report has been provided by Alan Baxter which has considered the published flood maps from the .Gov website (Appendix 3).

The underlying geology of the Site is chalk bedrock with overlaying superficial deposits of clays, silts, sand and gravel.

There are no watercourses or features within the Site area itself, although a small pond is located between the eastern boundary of the greenfield Site and London Road (ownership unconfirmed). The Site is entirely within Flood Zone 1. However, the surface water flood risk map does indicate a surface water flood path across the greenfield Site north to south with some ponding in the south-west corner. Given the size of the Site a Flood Risk Assessment (FRA) would form part of any planning application submission in any event.

Notwithstanding the need for further investigative and modelling work, potential mitigation as part of the Proposed Development design and drainage strategy includes (i) incorporating a surface water flood route in the form of a ditch or swale through the greenfield Site, which would become an underground culvert where it passes under access roads, (ii) the possible raising of the ground levels of the dwellings within the current flood path with compensatory lowering elsewhere, and (iii) the use of Suds, including a Suds attenuation basin limited to the greenfield run off rate, together with rainwater harvesting and permeable paving in line with best practice. Such principles and techniques would also provide measures to improve the quality of the runoff –petrol interceptors and trapped gullies, where appropriate.

There is a gravity foul water sewer running south near to the western boundary of the greenfield Site and a foul rising main to the north on the eastern boundary.

Overall, with the embedded mitigation principles identified, the Proposed Development is unlikely to give rise to SIGNIFCANT effects and is not considered to be EIA development in water resource terms.

Transport
A Transport Note by Alan Baxter is attached as Appendix 4. The key points are summarised below.

Rickling Green lies on the B1383 London Road (formerly the A11 trunk road) between Saffron Walden and Bishop's Stortford. Both the M11 and the West Anglia Main Railway Line run north-south to the west of the settlement.

Quendon and Rickling Parish has high levels of car ownership (Census 2011) averaging at 1.8 cars/household. The predominant method of travel to work is the private car, but there is also a high level of rail usage with three stations available in the general area. Significant work locations are London, Saffron Walden, Cambridge and Bishop's Stortford.

The greenfield Site currently has one access point off Belcham's Lane. Maces Farmyard also has one access off Belcham's Lane. There are two public rights of way (PRoW) adjoining the Site –one footpath leading from the south-west corner to join surrounding PRoWs and the other footpath just north of Quendon Wood. Footpaths along village roads are limited, although there is one along London Road some 200m north of the greenfield Site, and south from the junction with Belcham's Lane. National Cycle Route 11 runs north-south along Brixton Land and Brick Kiln Lane through the village, joining Regional Cycle Route 50 on Belcham's Lane heading south-east –these are not designated cycle-only infrastructure.

The closest bus stops are both on the B1383, 'Quendon, Belcham's Lane' some 150m south of the Site and 'Quendon, The Potteries', some 300m north of the Site.

Trip generation for the Proposed Development has been estimated using the TRICS database and applied to the dwellings.

	AM Peak (0800-0900)			Early PM Peak (1500-1600)			PM Peak (1700-1800)			All day (0700-1900)		
Mode	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot
Car Drivers	14	31	45	25	16	41	31	15	46	223	227	450
Car Passengers	2	17	19	15	5	21	14	6	19	84	86	170
Cyclists	0	1	1	1	0	1	0	0	1	5	5	9
Pedestrians	4	11	15	13	8	21	5	4	9	64	67	131
Bus Passengers	0	3	3	3	1	4	1	0	1	10	11	21
Rail Passengers	0	1	1	0	0	0	1	0	1	2	2	4
Total People	**21**	**64**	**85**	**58**	**31**	**89**	**52**	**25**	**77**	**388**	**398**	**786**

AM/PM peak flows would have the most impact on the surrounding highway network. It should be noted that traffic is already generated from the Site in relation to both the existing football pitch and existing operations within Maces Farmyard which would need to be offset against the Proposed Development traffic generation in any impact analysis. In addition, a number of mitigation improvements both to road junctions and the footpath network in and around the Site, together with additional bus stop provision are proposed which would improve safety, encourage modal shift and enhance the accessibility and sustainability of the Site/Proposed Development.

Notwithstanding, it is anticipated that the Proposed Development will NOT result in a material or SIGNIFICANT impact on highway capacity or safety sufficient to make it EIA development in transport terms. A Transport Assessment would be prepared to accompany any planning application in any event.

Agricultural Land

No site specific Agricultural Land Classification Assessment has been undertaken, although it is noted that the broad classification map for the area identifies the greenfield Site as Grade 3 –there is no further distinction available between 3a or 3b (with Grade 3a and above being classed as best and most versatile). Notwithstanding this, the area of greenfield land is only circa 8 ha and is in part already removed from agricultural production for use as a playing field with the remainder of this part of the Site being in arable use. Maces Farmyard is of course, brownfield and already supports alternative uses to the original farm purpose. Consequently, the Site as a whole is considered very marginal for agricultural purposes and its loss is considered to be negligible in the context of the wider scale of best and most versatile agricultural land.

It is considered that the Proposed Development of the Site would NOT have SIGNIFICANT environmental impacts sufficient for it to be considered EIA development in agricultural land/business terms.

Ecology/Biodiversity

Preliminary Ecological Appraisals have been undertaken by Arbtech Consultants for both the greenfield Site and Maces Farmyard (Appendices 5 and 6). A preliminary (bat) roost assessment of the existing buildings on Maces Farmyard in the form of a non-invasive visual appraisal was also carried out. These confirm that the Site as a whole is of low ecological value.

There are two *designated sites* in the vicinity of the Proposed Development –Quendon Wood SSSI some 50m east, an ancient woodland of Pedunculate Oak-Hornbeam and the rare Brich-Hazel and Ash-Maple variant, and the Halls Quarry SSSI some 1,500m to the south-east designated for its Anglian glaciation and associated deposits.

Non-statutory designations within 2km of the Site include Brom/Burney Woods Local Wildlife Site (LWS) 50 m south; Coney Acre LWS 350m north; Catherine Grove LWS 500m west; Northey Wood LWS 1,000m west; London Jock Wood LWS 1,700m north-east; Paynsden Wood LWS 1,700m north-east and Quendon Park LWS 1,900m north.

Arable land comprises the southern half of the greenfield Site. *Modified grassland with ruderal vegetation* is found east of the playing field and in the north-west corner as well as the playing field itself –it is species poor. This habitat is also found on the western edge of the Farmyard, grazed by horses. *Native hedgerows* are present along the eastern boundary and the southern half of the western boundary of the greenfield Site –both are mature and in good condition with a variety of plant species. There are no trees with roosting features for bats within the hedgerows. A *non-native hedgerow* of laurel forms the north-western boundary and is generally unmanaged. A *pond* is located on the eastern boundary which was dry at the time of survey and does not appear to be connected to any other water bodies; it is heavily overgrown. *Mature trees* (sycamore, ash, maple, oak and lime) are present along the southern and western Site boundaries. Tree condition is generally good and no roosts were observed. All the *buildings* at Maces Farmyard were considered to be of negligible value for roosting bats.

In terms of protected species, trees and hedgerows provide opportunities for foraging and commuting *bats;* whilst no bat roosts were observed in the trees in and around the Site, the potential cannot be ruled out entirely. No *badger* activity was recorded on or within 30 m of the Site and the Site is considered to have little habitat value to them. Hedgehog were not observed but hedgerows potentially provide refuge opportunities. Hazel Dormouse is considered unlikely to be on the Site due to the lack of suitable habitats. Whist hedgerows have some terrestrial value for *reptiles*, the dominant habitat is arable land and short sward grassland which Is less suitable and sub optimal, consequently, their presence is considered unlikely. The Site is considered unsuitable for *amphibians (Great Crested Newts)* due to the managed grassland and arable cropping and the distance of other ponds to the Site. The pond on the Site boundary is considered to be of poor potential to support amphibians. There is no suitable habitat to support the presence of *otters or water vole*. Habitats are suitable for common and widespread *invertebrates* and *birds.*

It is considered that there will be no direct impacts to any designated or non-designated sites. However, the greenfield Site is within the impact risk zone for Quendon Wood SSSI with the nature of the Proposed Development potentially increasing recreational pressures on it. Arable land and some loss of hedgerow and trees are also likely. The introduction of lighting could impact on potential bat roosts and foraging/commuting habitat of both bats and birds.

Mitigation including best practice Construction Environmental Management Plans, retaining as much hedgerow and as many trees as possible, adopting a low impact lighting strategy to avoid light spill particularly along boundaries and avoiding habitat removal during the nesting season where possible will be employed.

Biodiversity enhancement opportunities will also be maximised through, for example, Suds pond creation, wetland habitat creation, new native hedgerow, tree and shrub planting, provision of bird and bat boxes and hedgehog friendly fencing and brash piles for hibernating.

Given the generally low ecological value of the Site as a whole, together with the incorporation of appropriate mitigation and enhancement, it is considered that the Proposed Development will NOT have SIGNIFICANT impacts sufficient for it to be EIA development in ecological terms.

Landscape/Visual/Townscape

The general character of the landscape in and around the Site and Rickling village is described as Debden Farmland Plateau in the 'Landscape Character Assessment of Uttlesford', which reflects the arable farming landscape interspersed with woodland. Much of the surrounding farmland and woodland around the village is owned and managed by the Quendon Estate (Pegasi Limited). The topography of the area is gently undulating, falling to the east. The greenfield Site topography is relatively flat, falling gently to the south-west.

There are no protected landscape designations on the Site or in the wider locality.

Quendon Wood SSSI and Ancient Woodland lies to the east of the Site and village with public access restricted to perimeter PRoW. Coney Acre Ancient Woodland lies to the north of the village.

As noted earlier in this assessment, the Site lies adjacent to the Rickling conservation area which contains a number of listed buildings. The village has a loose, low density character nucleated around the Green. Buildings of 1-2 storeys predominate, although more recent estate building does include some 2.5 storey development.

A locally important view has been identified in the Neighbourhood Plan crossing the greenfield Site looking northwards, with two further views looking towards this part of the Site from the west and south-east. It will be important to retain and appropriately mitigate potential impacts of the development on these views.

The Site as a whole is visually contained - the greenfield Site by existing boundary trees and hedgerows and consequently relates well to the existing settlement. The Proposed Development creates an opportunity to soften the rather hard existing edge to this end of the settlement created by the new properties on Ventor Road, providing an attractive transition to the countryside alongside the recreation area. Maces Farmyard is compact and contained by its existing buildings. Replacement of some of these is not anticipated to increase the visual impact on the village as a whole, the conservation area or the wider landscape; the existing paddock on the western edge is to be retained; further planting along the Farmyard boundaries with soften and enhance its appearance within the conservation area and village..

The following embedded mitigation measures would be implemented to minimise the effects of the Proposed Development on the surrounding landscape and visual receptors –

Retention of existing boundary planting and woodland belts, including the provision of suitable buffers to development to protect root protection areas and ensure their long-term contribution to the landscape framework,

Appropriate long-term management of existing and new vegetation,

Retention of the existing hedges around the Site through incorporation as a plot boundary,

Planting of native trees and hedgerows around and throughout the housing area,

Use of appropriate building materials and finishes representative of the local vernacular, and

Siting of the housing to the northern part of the greenfield Site.

Any planning application would be accompanied by a Landscape and Visual Impact Assessment (LIVIA) in any event. Given the small scale of the Proposed Development and embedded mitigation

planting, it is considered that the Proposed Development will NOT have SIGNIFICANT impacts sufficient for it to be EIA development in landscape and visual terms.

Pollution/Nuisance/Noise/Air Quality

Any specific measures to avoid pollution and nuisances will be implemented at the detailed design stage, supported by technical assessments (eg, contamination, transport, water, as appropriate). Pollution abatement equipment and operational procedures will be employed in accordance with environmental legislation and local policy requirements as well as Quendon Estates high standards of estate management.

Both the construction and operational phases of the Proposed Development have the ability to generate a degree of *noise*, however, this is considered to be no greater than would normally be expected of a new residential development and associated facilities. Use of a CEMP during construction would assist in keeping noise nuisance to a minimum.

There are no Air Quality Management Areas in the vicinity of the Site or nearby. Defra background map pollutant concentrations, predicted for 1km by 1km gird squares for the entire UK, are below the Air Quality Strategy objectives in Rickling. Baseline data suggests that there are unlikely to be any existing *air quality* concerns across the Site.

During the construction phase of the Proposed Development, there is the potential for air quality impacts resulting from fugitive dust emissions associated with the construction works as would be case with any construction works of a similar scale. Stnadard good practice mitigation measures would be employed in any event (damping down trucks before leaving the Site, covering lorries transporting materials, etc) which would reduce the potential for air quality impacts arising from the construction process.

Based on the available information at this stage, its considered UNLIKELY that the Proposed Development impacts in either noise or air quality terms will show SIGNIFICANT effect sufficient to conclude it is EIA development.

Waste And Use of Natural Resources

The Proposed Development will comply with local and regional/county waste policies. In terms of the use of natural resources, the Proposed Development will not utilise non-renewable or other resources in short supply, to the extent that an EIA should be required. The Development will not release pollutants or hazardous, toxic or noxious substances to the air. The Development would also not lead to the contamination of the land. Sustainable building practices will also be considered to further enhance the environmental design of the Site and reduce the consumption of natural resources and the generation of waste.

Risks of Accidents

The nature of the Proposed Development is such that a significant environmental effect is highly unlikely to result from an accident.

Cumulative Effects

The Proposed Development itself will not lead to a further consequential development or other infrastructure and is unlikely to result in any cumulative impacts when considered within its surroundings.

It is not considered that there are other developments of note in the locality that would, in combination with the Proposed Development, create or lead to significant effects on the environment either during construction or operation of the development.

Characteristics of Potential Impacts

In order to assist the Council's consideration of this EIA screening opinion request, the characteristics of the potential impacts of the Proposed Development have been assessed against a standard screening checklist. This is attached as Appendix 7.

Duration and Irreversibility
As is the nature of any Proposed Development of this scale, it is expected that it will have long term (although potentially reversible) effect with regard to its physical existence on the land. The conversion of 'agricultural' land to provide new housing and recreation space will lead to the sterilisation of the existing land. This change in land use will, however, result in a long-term increase in much needed housing within the area enabling people to remain in the village, move into the area and help maintain a thriving local community. The re-use of an under-utilised Farmyard for economic, social and community uses will provide local job opportunities, helping to secure inward investment to the village, helping it thrive as a sustainable location.

Further Mitigation
An overarching CEMP will be developed by the applicant to inform and manage the potential construction impacts if planning permission is secured for the Proposed Development.

The implementation of the procedures and 'site rules' set out in the CEMP (including a commitment to sign up to the UK Considerate Contractors scheme) will be a pre-condition for the appointment for main contractors. This will ensure that a consistent approach to site environmental management is employed in line with good practice guidance, thereby avoiding, minimising or compensating for any potential impact to the environment and people during the construction phase.

Conclusions

The PPG on Screening Schedule 2 developments states *"Only a very small proportion of Schedule 2 development will require an assessment…".*

The proposed development falls under Schedule 2, category 10 where the threshold is either development on more than 5ha or above 150 dwellings, or more than 1ha of non-residential development. It is recognised that the Proposed Development is above the 5ha threshold by 4.7ha. However, this exceedance merely triggers the need for a Screening Opinion and does not imply that an EIA will be necessary, as this depends on the sensitivity and characteristics of the site and the likelihood of significant environmental effects arising from its development.

The Proposed Development (described herein) is located in an area of relatively low environmental sensitivity. As set out above, the future development of the Site would be very unlikely to give rise to significant adverse environmental effects, either individually or cumulatively.

The evidence presented in this Screening Opinion Request appraisal demonstrates that there is no reasonable likelihood of significant environmental effects arising from either the future construction or operation of the Proposed Development, provided that conventional and proportionate planning controls are imposed upon the development that, among other things, encompass the identified embedded mitigation. Accordingly, with reference to the EIA Regulations and accompanying Government guidance, we believe that the Council should conclude that EIA is NOT required.

Should you require anything further to assist in your determination of this Screening Opinion Request, please do not hesitate to contact me.

Yours faithfully,

Sarah R Smith
BA (Hons) MRTPI
Consultant - Town Planning

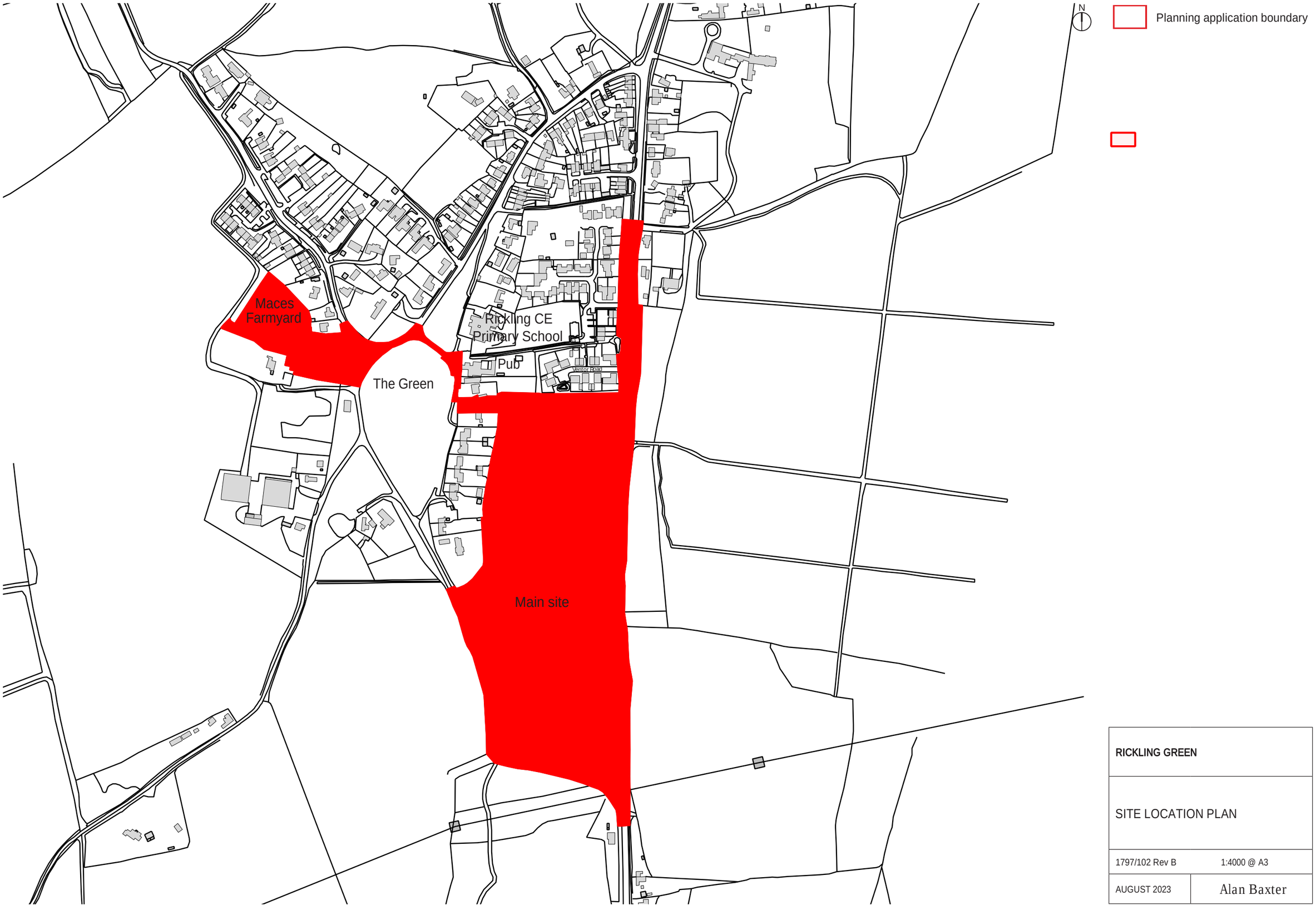
Encs. Appendices 1-7

cc. The Planning Inspectorate

Victoria Bennion - Rapleys

APPENDIX 1

Site location Plan



RICKLING GREEN	
SITE LOCATION PLAN	
1797/102 Rev B	1:4000 @ A3
AUGUST 2023	Alan Baxter

APPENDIX 2

Masterplan Concept

RICKLING GREEN

OVERALL ILLUSTRATIVE MASTERPLAN

1797/102 Rev B	1:4000 @ A3
AUGUST 2023	Alan Baxter

APPENDIX 3

Flood Risk & Damage Note

Belcham's Lane, Rickling Green

Flood Risk and Drainage Considerations

1.0 Introduction

This note sets out the broad flood risk and drainage considerations to inform the pre-application discussions in relation to the proposed residential, sports and community use development to the east of Belcham's Lane, Rickling Green (see Figure 01). The flood risk review is based on published flood maps from the .Gov website. Further detailed modelling of the surface water flood paths will be required to inform a future planning application.

Figure 01. Site Location Plan

2.0 Site Overview

The site is located to the south of Rickling Green and is currently used as playing fields and farmland. Geological maps (Figure 02) indicate that there are superficial deposits of clays, silts sands and gravel on the site overlying the chalk bedrock. There does not seem to be any formal drainage on the site and so it is assumed that any water falling onto it permeates into the ground. Site investigations need to be undertaken to determine if the ground underlying the site is sufficiently permeable to allow infiltration of surface water.

Thames Water asset maps submitted for a planning application for a nearby development seem to show a gravity foul sewer running south to the west of the site and a foul rising main running north on the eastern side of the site. There do not seem to be any Thames Water surface water sewers in the vicinity of the site. The map does show a thick blue line crossing the site but this is not referenced in the Thames Water key. As such it may be that this is an administrative boundary line – this will need to be confirmed with Thames Water. (Figure 03)

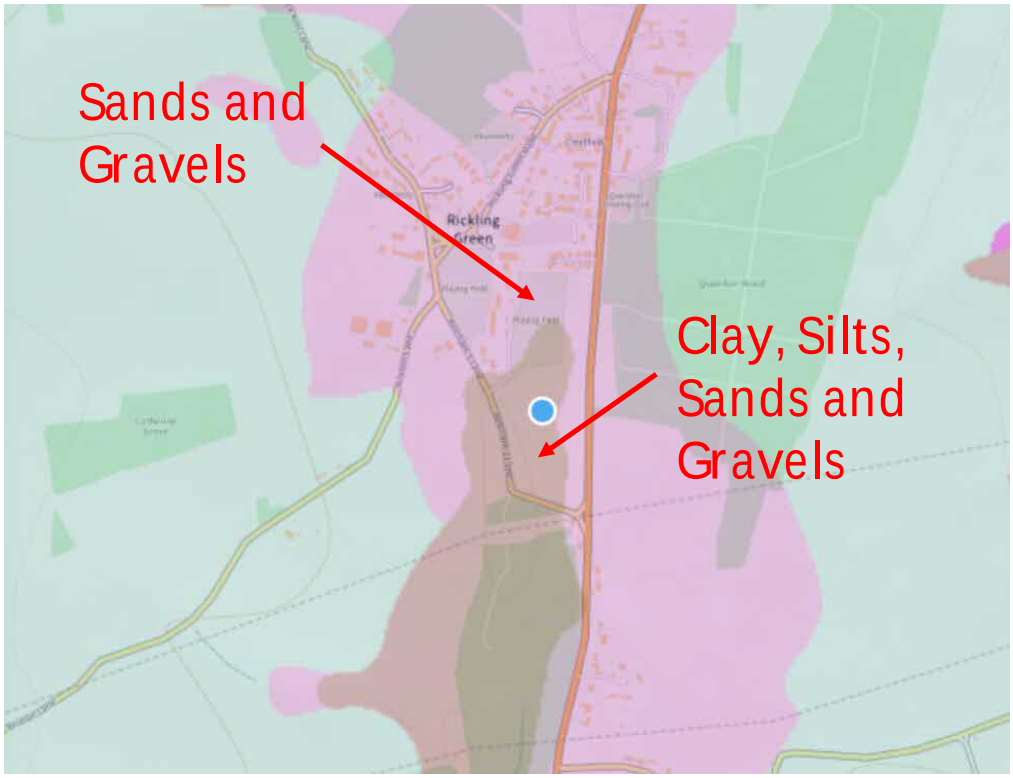


Figure 02 Geological Map (BGS Website)

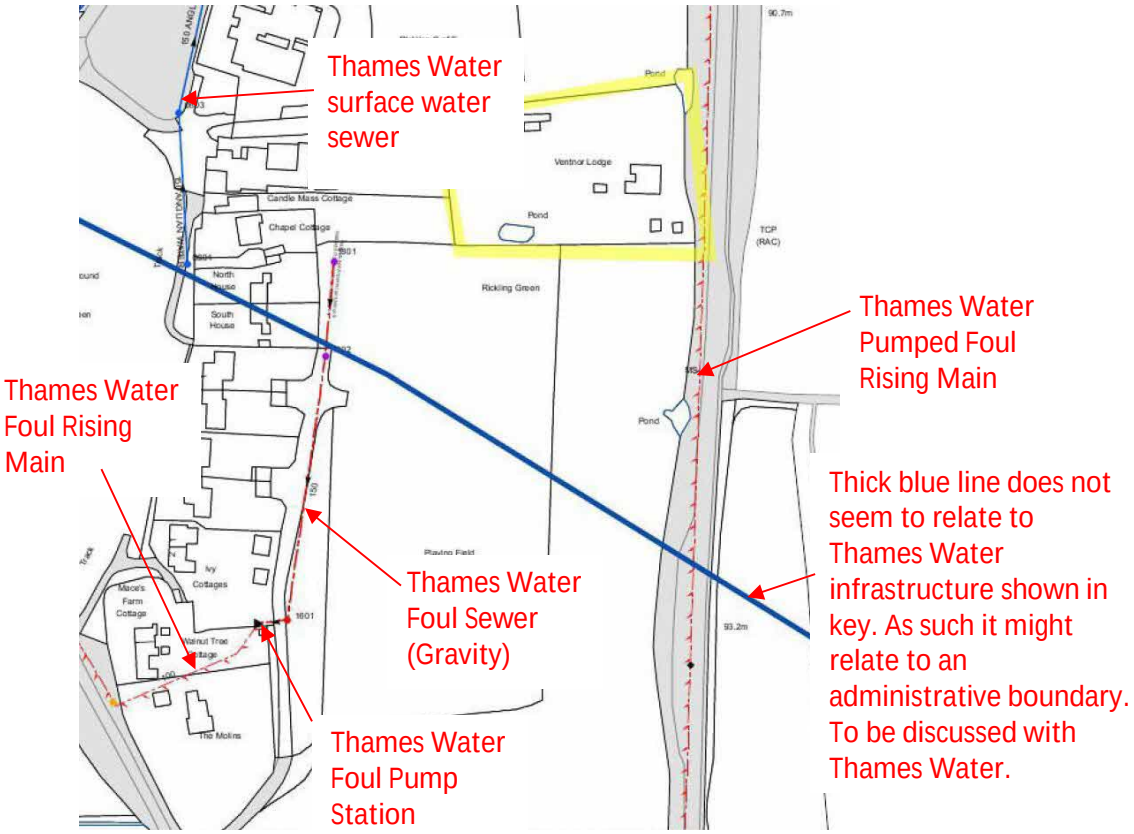


Figure 03 Thames Water Asset Map from Previous Planning Application on Adjacent Site

2.0 Flood Risks

2.1 Fluvial Flooding (Figure 04)

The site is entirely located within Flood Zone 1. This flood zone is defined as having a fluvial flood risk of less than 1:1000. There are no areas shown to be at increased risk of fluvial flooding within the local area.

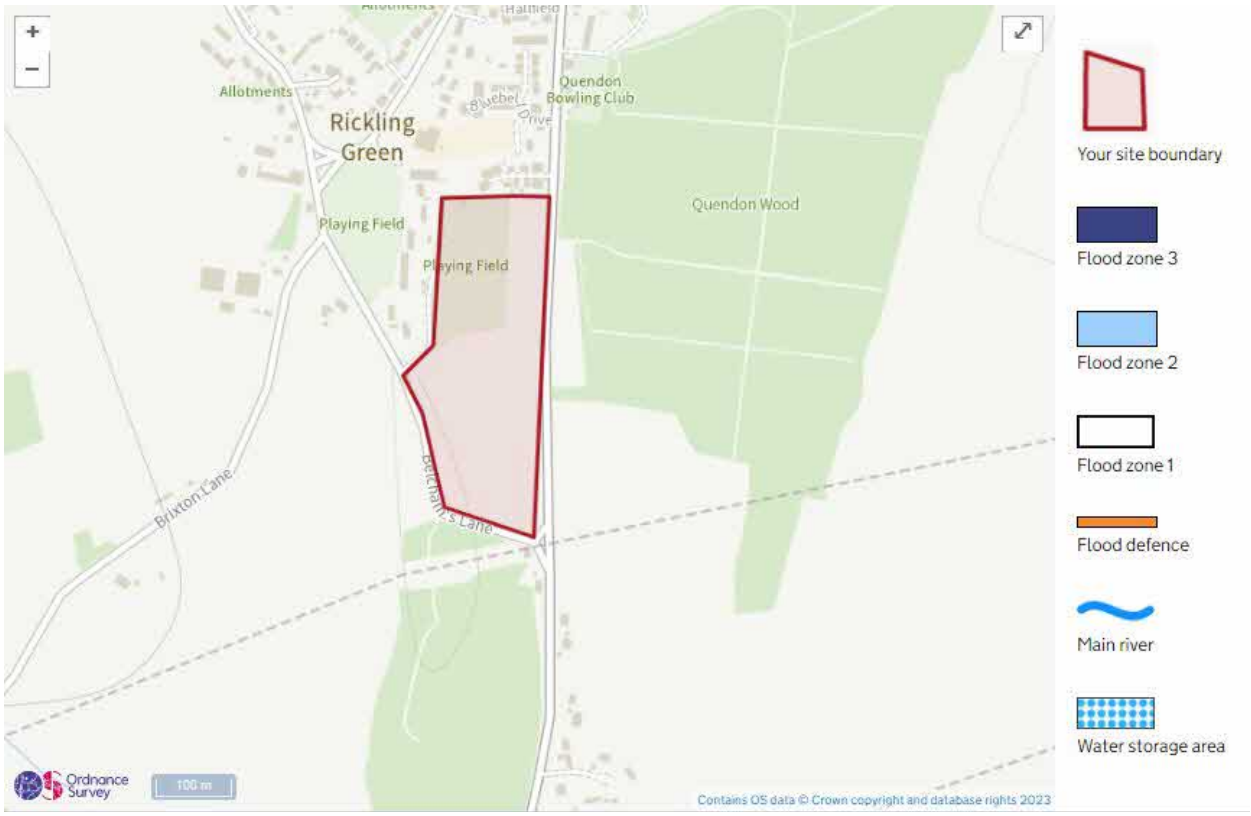


Figure 04 Fluvial Flood Map From .Gov Website

2.2 Surface Water Flooding

The surface water flood risk map (Figure 05) shows a surface water flood path crossing the site from north to south. The map also suggests there is the potential for flood water to pond in the south west quarter of the site. The extent of surface water flooding indicated on the maps is shown overlaid on the masterplan on Figure 06.

It is generally accepted that the published surface water flood maps are relatively broad in nature and do not always accurately represent potential flood extents. A review of the wider surface water flood map (Figure 07) suggests that there may be flood routes through Burney Wood to the south of the site that are not modelled, which may increase the degree of predicted surface water flood extent on the site. As such, detailed flood modelling will need to be undertaken following the preapplication process to verify the likelihood, potential routing and expected flow rates of any surface water flooding downstream and on the site.

For the purpose of this pre-application review a strategy is set out in section 2.3 to allow flood water to cross the site without flooding the new properties.

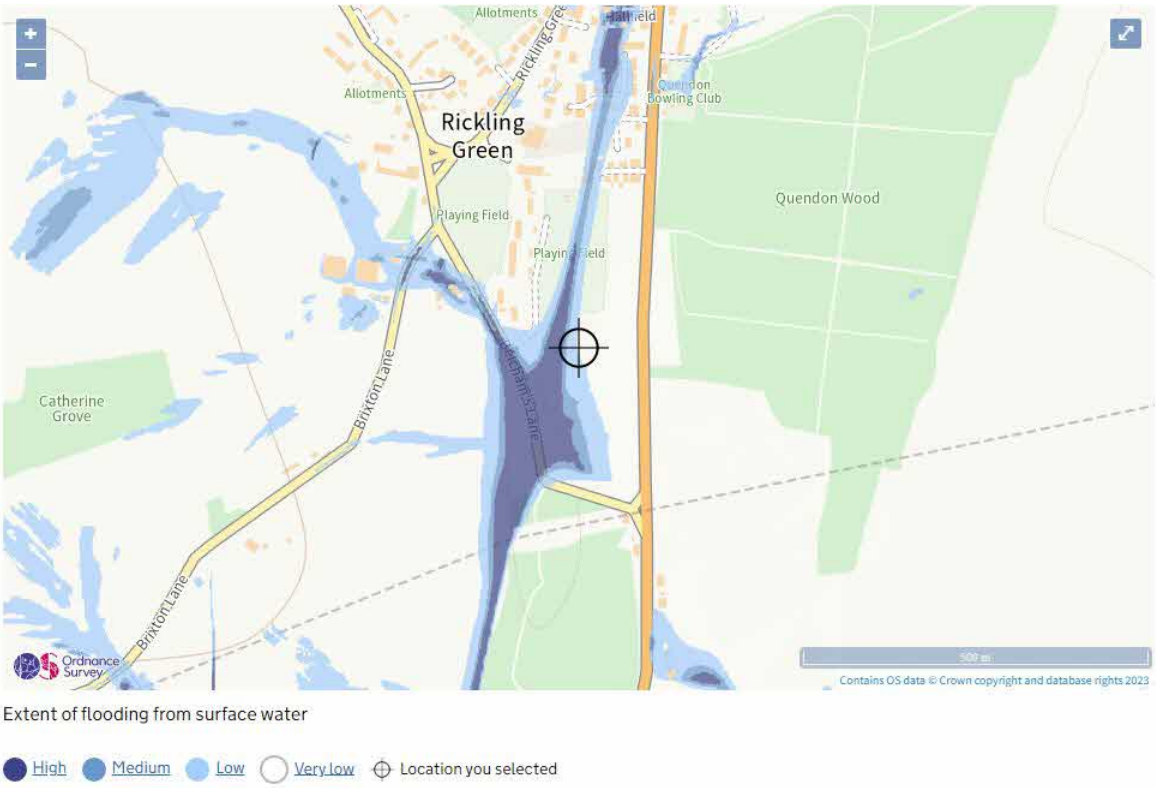


Figure 05 Surface Water Flood Map From .Gov Website

Figure 06 Surface Water Extent Overlain on Masterplan (Defra Website)

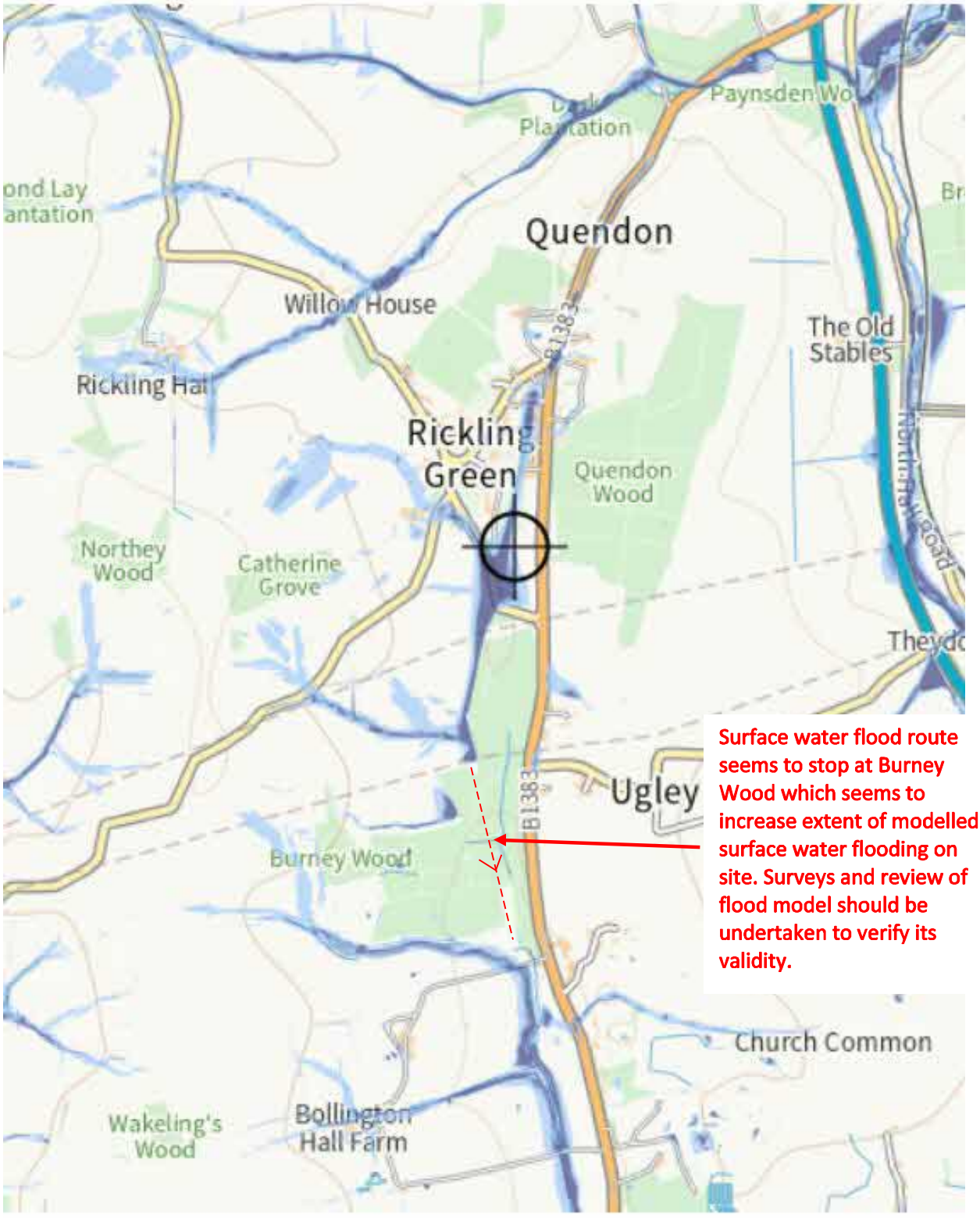


Figure 07 Summary of Surface Water Flood Map Downstream

2.3 Flood Risk Mitigation

To mitigate the risk of surface water flooding on the site, it is proposed to incorporate a surface water flood route to convey flood water without causing flooding to the new buildings. The indicative route for this is shown on Figure 08. It is envisaged that this would be an open feature wherever possible (eg a ditch or swale) and only enter a below ground culvert where the route needs to pass under roads.

At this stage it is sensible to allow for raising the ground levels of the buildings that are located within the current flood path as indicated on Figure 08. Figure 08 also identifies an area not currently shown as being at risk of surface water flooding that could be lowered to act as 'flood compensation' for the areas being raised.

The details of any flood routing, extent of any land raising and requirements for compensation will need to be agreed with the LLFA, once the detailed flood modelling has been carried out.

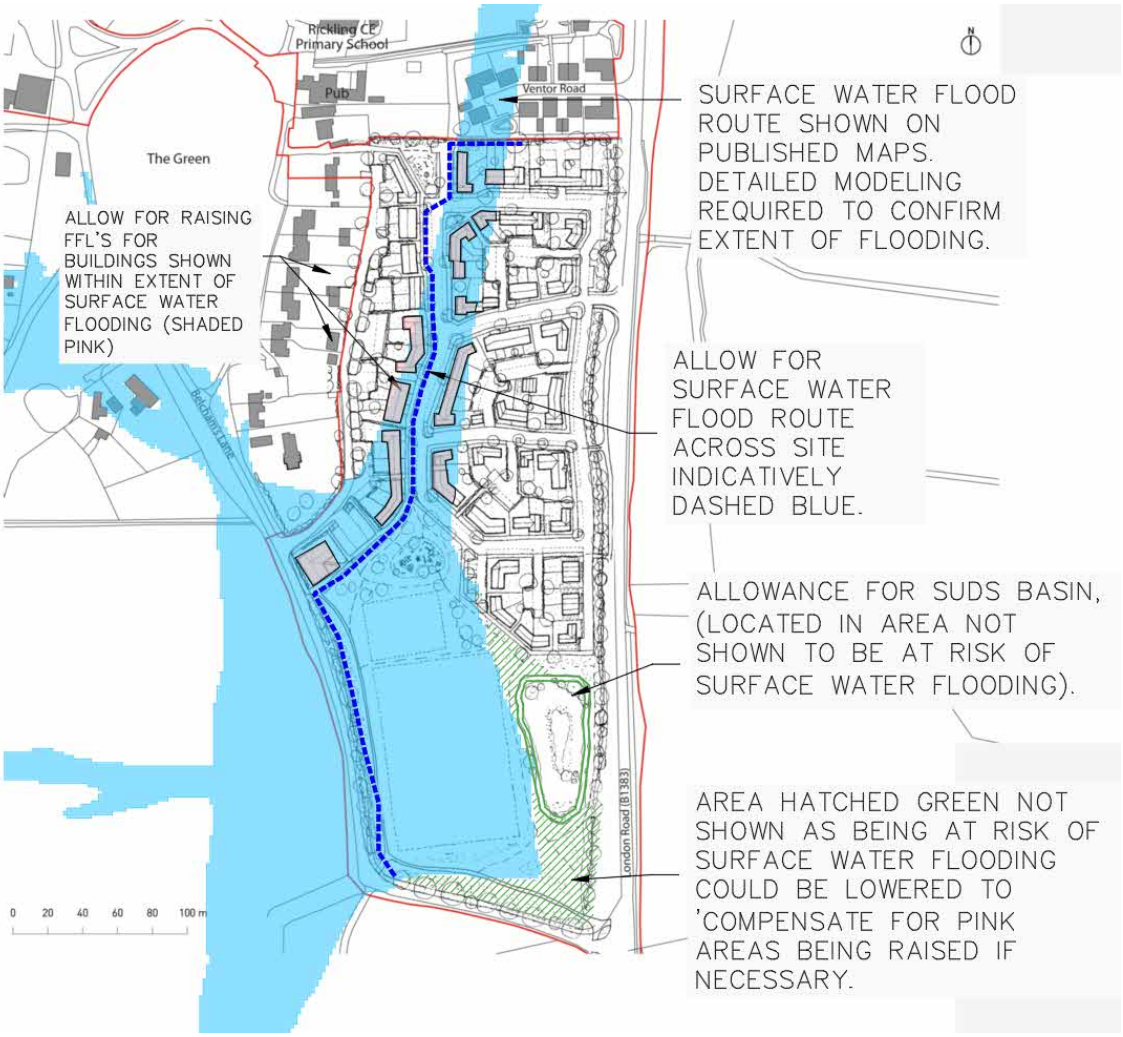


Figure 08 Summary of Surface Water Flood Mitigation Strategy

2.4 Proposed Drainage Strategy & SuDS

Figure 09 summarises the outline drainage strategy for the site.

Foul water will probably need to drain to the west of the site so that it can discharge into the existing gravity Thames Water foul drainage system. Foul water from some of the southernmost properties on the proposed site might need to be pumped in order to drain this way. Discussions will be required with Thames Water to determine if their network has sufficient capacity to accommodate the site – it is possible that the existing Thames Water pump station located to the west of the site might need to be upgraded.

So as not to increase flood risk in the local area, a broad Sustainable Drainage Systems (SuDS) strategy for the development has been considered. The aim is re-use rainwater that falls on the site where possible and dispose of any excess water in a sustainable way.

To this end, it is planned to incorporate the following.

Rainwater harvesting (e.g. water butts to all houses)

Permeable Paving to all private hard landscaped areas (driveways and patios)

House soakaways (subject to permeability testing).

Raingardens in the streets.

The masterplan allows for the provision of a landscape detention basin sized to restrict the discharge rate from the site to that of the existing greenfield runoff rate (estimated to be around 10.3 l/s). Note that the outline size for this assumes no infiltration. The discharge route for the attenuated surface water from the site needs to be confirmed with site surveys. However, at this stage it is assumed that a connection can be made into the assumed ditch running up the eastern boundary of the site.

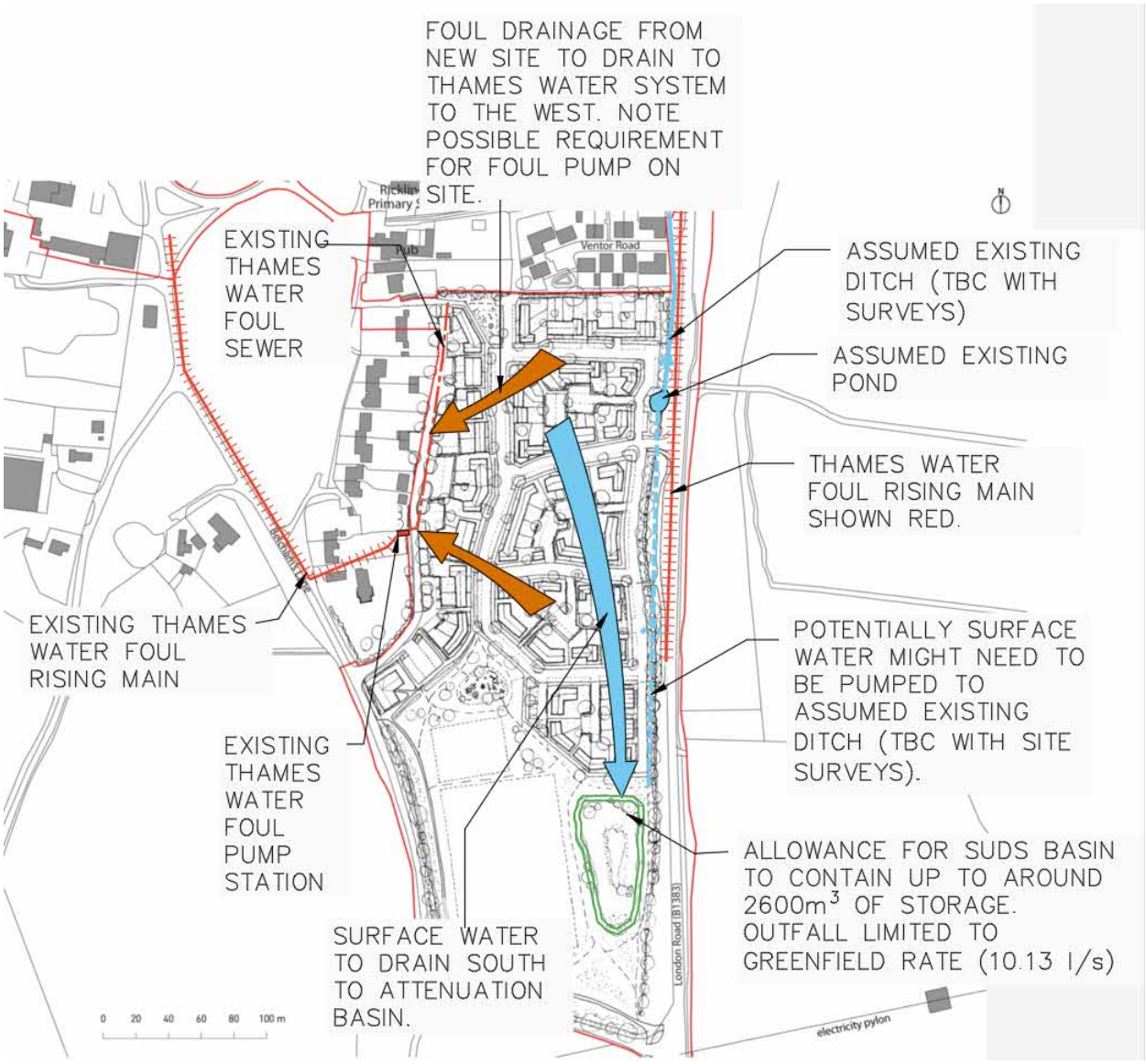


Figure 09 Summary of Proposed Drainage Strategy

www.uksuds.com | Storage estimation tool

Calculated by:	David Bowles
Site name:	Rickling Green
Site location:	

This is an estimation of the storage volume requirements that are needed to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). It is not to be used for detailed design of drainage systems. It is recommended that hydraulic modelling software is used to calculate volume requirements and design details before finalising the design of the drainage scheme.

Site Details

Latitude:	51.94478° N
Longitude:	0.19801° E
Reference:	259260637
Date:	May 18 2023 14:52

Site characteristics

Total site area (ha):	4.16
Significant public open space (ha):	0
Area positively drained (ha):	4.16
Impermeable area (ha):	2.5
Percentage of drained area that is impermeable (%):	60
Impervious area drained via infiltration (ha):	0
Return period for infiltration system design (year):	10
Impervious area drained to rainwater harvesting (ha):	0
Return period for rainwater harvesting system (year):	10
Compliance factor for rainwater harvesting system (%):	66
Net site area for storage volume design (ha):	4.16
Net impermable area for storage volume design (ha):	2.68
Pervious area contribution to runoff (%):	30

* where rainwater harvesting or infiltration has been used for managing surface water runoff such that the effective impermeable area is less than 50% of the 'area positively drained', the 'net site area' and the estimates of Q_{BAR} and other flow rates will have been reduced accordingly.

Methodology

esti	IH124
Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	3	3
SPR:	0.37	0.37

Hydrological characteristics

	Default	Edited
Rainfall 100 yrs 6 hrs:	--	63
Rainfall 100 yrs 12 hrs:	--	88.55
FEH / FSR conversion factor:	1.15	1.15
SAAR (mm):	608	608
M5-60 Rainfall Depth (mm):	20	20
'r' Ratio M5-60/M5-2 day:	0.4	0.4
Hydological region:	5	5
Growth curve factor 1 year:	0.87	0.87
Growth curve factor 10 year:	1.65	1.65
Growth curve factor 30 year:	2.45	2.45
Growth curve factor 100 years:	3.56	3.56
Q_{BAR} for total site area (l/s):	10.13	10.13
Q_{BAR} for net site area (l/s):	10.13	10.13

Design criteria

Climate change allowance factor:	1.4
Urban creep allowance factor:	1.1
Volume control approach	Flow control to max of 2 l/s/ha or Qbar
Interception rainfall depth (mm):	5
Minimum flow rate (l/s):	2

Site discharge rates

	Default	Edited
1 in 1 year (l/s):	8.8	8.8
1 in 30 years (l/s):	10.1	10.1
1 in 100 year (l/s):	10.1	10.1

Estimated storage volumes

	Default	Edited
Attenuation storage 1/100 years (m³):	2571	2571
Long term storage 1/100 years (m³):	0	0
Total storage 1/100 years (m³):	2571	2571

Figure 10 Outline Surface Water Drainage Calculations

3.0 Next Steps

To develop the flood risk considerations and drainage strategy to a level appropriate to support a full planning application for the site the following are considered necessary.

Obtaining current Thames Water Asset Maps

Topographical surveys of site.

Infiltration tests on site.

Surveys of verge to B1383 to confirm the presence and details of any drainage infrastructure.

CCTV drainage surveys to confirm details of local Thames Water sewer network.

Detailed surface water flood modelling.

Potential need for surveys in Burney Wood to inform flood modelling.

Discussions with Thames Water regarding capacity in their system to accommodate drainage from the proposed development.

APPENDIX 4

Transport Note

Land off Belcham's Lane, Rickling Green
Transport Note

Prepared for

The Quendon Estate, Pegasi

August 2023

Alan Baxter

Land off Belcham's Lane, Rickling Green
Transport Note
Prepared for
The Quendon Estate, Pegasi
August 2023

Contents

Appendices

1.0
Introduction

Alan Baxter (ABA) has been commissioned to provide transport advice in relation to the proposed development of land off Belcham's Lane / London Road in the village of Rickling Green, in Uttlesford District, Essex to accommodate around 110 new homes and various facilities in the village. The land forms part of the Quendon Estate, which is managed by Pegasi.

This transport note has been prepared to inform pre-application discussions with the local planning authority (the Planning Inspectorate on behalf of Uttlesford District Council) and the local highway authority (Essex County Council). It summarises existing transport and movement conditions and relevant policy, outlines the proposed development and related access strategies and highway improvements, presents an initial trip generation exercise, and sets out the anticipated scope of transport-related surveys and submittals to support a future outline planning application.

Figures are included in **Appendix A** for information.

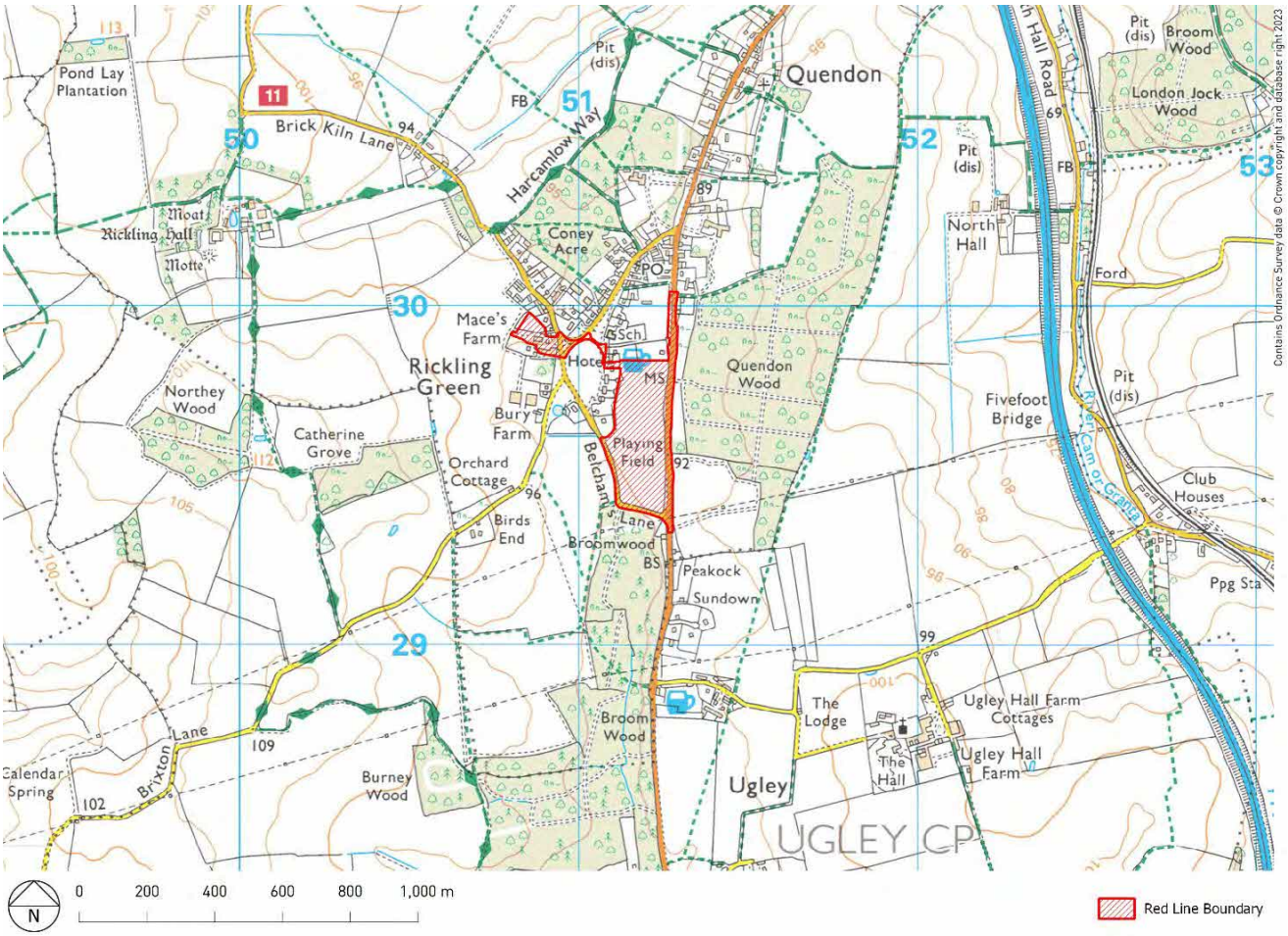


Figure 1.1 Site Location

2.0
Existing Conditions

2.1 Strategic Context

The site lies within the village of Rickling Green in Uttlesford District in Essex (see **Figure 1** in **Appendix A**), approximately 20 miles south of Cambridge and 40 miles north of London.

Rickling Green lies on the B1383 London Road (formerly the A11 trunk road) between Saffron Walden (7 miles/10km) and Bishop's Stortford (6 miles/9km), and is around 8 miles from London Stansted Airport (see **Figure 2** in **Appendix A**). The M11 motorway runs north-south past the settlement (to the west), but is only accessible from Junction 8a (6 miles south near Bishop's Stortford) or Junction 10 (14 miles north near Duxford).

The West Anglia Main Line also runs north-south past the settlement (to the west). Greater Anglia services between London Liverpool Street and Cambridge North (hourly) and between London Liverpool Street and Stansted Airport (hourly) are accessible from Stansted Mountfitchet Station (3 miles south / 5 min by 301 bus + 10 min walk). The hourly services to/from Cambridge are also accessible from Newport Station (3 miles north / 15 min by 301 bus) or Elsenham Station (3 miles southeast / 7 min by 441 bus). From Audley End station (5m north / 17 min by 301 bus) one can also take Greater Anglia's Stansted Airport to Norwich service (hourly).

Rickling Green has its own primary school a short walk from the site, with others in nearby settlements including Henham, Newport, Elsenham, Manuden, Bentfield and Stansted Mountfitchet. The nearest secondary schools are Joyce Frankland Academy in Newport, Forest Hall School in Stansted Mountfitchet, and Saffron Walden County High School and Stephen Perse Foundation School in Saffron Walden, all of which are accessible from the site via bus 301 or 441.

2.2 Movement Profile

Rickling Green, together with the adjoining village of Quendon and nearby village of Rickling, make up Quendon and Rickling Parish, which has around 250 households and 600 residents.

Car ownership levels are relatively high, with an average of 1.8 cars per household[1].

Residents of the Census area, MSOA Uttlesford 003, which includes the villages of Uttlesford district to the west and southwest of Saffron Walden, predominantly use the car (75%) as their method of travel to work (see Figure 2.1). Rail usage is comparatively high with 19% of residents choosing this mode of travel to work, likely using the area's three railway stations. The place of work for residents of the area (see Figure 2.2) reveals that the most common place of work is London (21%) which likely contributes to the high percentage of commuting by rail. Other significant work attractors include Saffron Walden (12%), Cambridge (8%) and Bishop's Stortford (7%). 11% of residents work within the MSOA (local area). As active travel only accounts for 5% of commuting trips, it follows that a significant number of residents use the car to commute relatively short distances within the local area.

[1] Census 2011, Local Area Report, Quendon and Rickling Parish

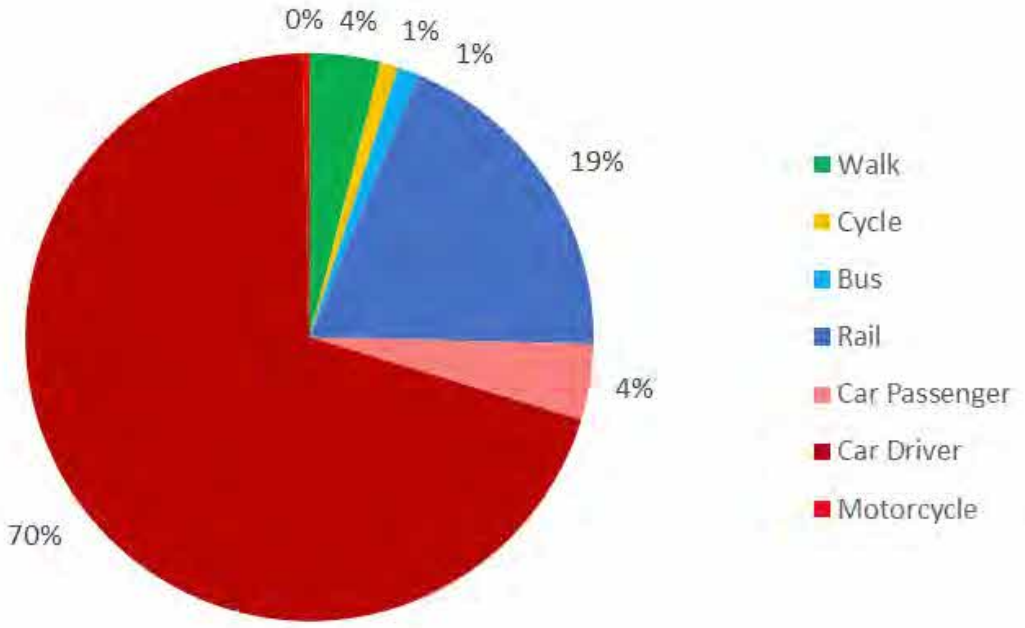


Figure 2.1 Method of Travel to Work from MSOA Uttlesford 003 (Census 2011)

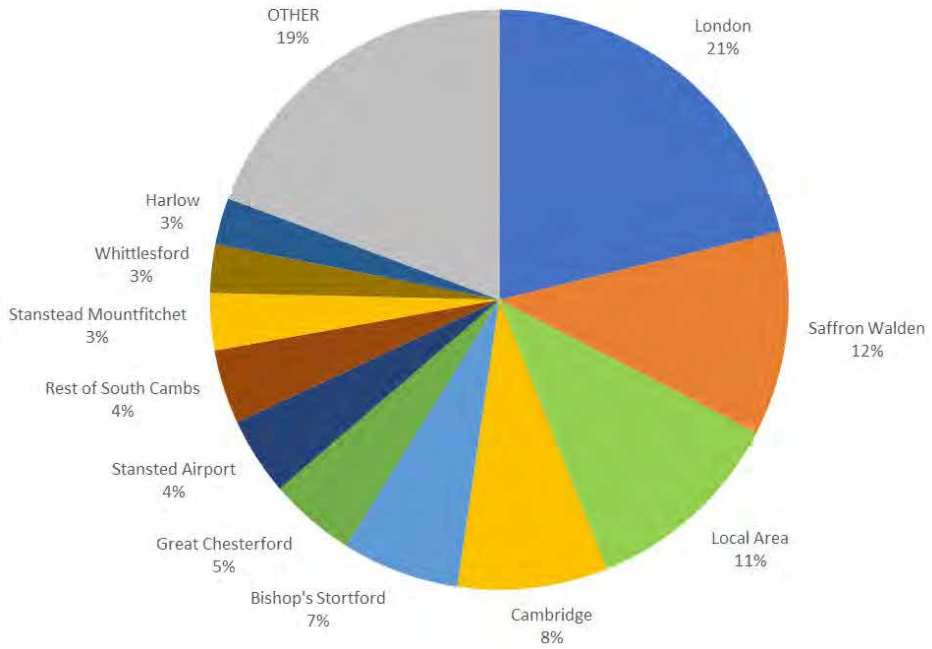


Figure 2.2 Place of Work for Residents of MSOA Uttlesford 003 (Census 2011)

2.3 Site Location and Access

The site is located in the Parish of Quendon and Rickling, see **Figures 3 to 5** in **Appendix A**. It includes various parcels of land managed by Pegasi Ltd, some public highway land and some parts of the registered common land (The Green), see **Figure 10** in **Appendix A**. There is also a small pond located between the Main Site and London Road, the ownership of which is unconfirmed.

The site can be roughly divided into three parcels:

Land off Belcham's Lane / London Road (the Main Site), where residential development and replacement leisure/community facilities are proposed;

Maces Farmyard, where redevelopment of farm buildings is proposed to accommodate flexible community space, business hub or space for small businesses, and;

Complementary footway and highway improvements (public highway land, common land, "North House")

The Main Site is predominantly arable agricultural use and an approximately 1.5 ha area leased to the Parish Council by the Estate for use as a football pitch.

Maces Farmyard to the west of the Green consists of former agricultural buildings which are currently occupied for commercial and distribution purposes.

Figure 11 in **Appendix A** shows the existing site location and accesses. The Main Site currently has one site access point via an access road off Belcham's Lane. A number of properties fronting the Green have a right of access over this road to access garages to the rear of their land.

Maces Farmyard has one access off Belcham's Lane.

There are two public rights of way (PRoW) adjoining the site (see **Figure 9** in **Appendix A**). The first is a footpath leading from the southwest corner to various other PRoWs and local villages to the south and west. The second, also a footpath, is just north of Quendon Wood, part of an extensive PRoW network to Widdington, Newport and beyond.

Figure 12 in **Appendix A** shows proposed access points, footways and further highway proposals.

Figure 2.3 Site viewed from Belcham's Lane

Figure 2.4 Site viewed from London Road

Figure 2.5 Maces Farmyard viewed from Belcham's Lane

2.4 Walking

A public footpath connects the southwestern corner of the site to an extensive network of footpaths that connect various local villages and to the Harcamlow Way. The Harcamlow Way connects Cambridge and Harlow and passes to the west of the village.

Generally, the village roads have few footways. No footways connect directly to the Main Site, although there are footways along London Road, 200m north of the Main Site and south from the junction with Belcham's Lane, and along the northern edge of Rickling Green Road.

There are some facilities within walking distance of the site, including bus stops (see below), a primary school, pub, church and various playing fields for football (on the site), cricket and bowls. Maces Farmyard currently hosts a garden shop with more uses such as a café forming part of the proposals.

There are numerous opportunities for improving the walking environment in the village, in particular by creating direct and safe walking routes to the Green, bus stops and primary school, and between the Main Site and Maces Farmyard. These include a connection from the north-western corner of the Main Site to the Green and the addition of footpaths along the London Road (see Chapter 5.2 and **Figure 12** in **Appendix A** for further detail).

2.5 Cycling

National Cycle Route 11 runs north-south through the village on Brixton Lane and Brick Kiln Lane and joins with Regional Cycle Route 50 on Belcham's Lane which heads to the south east (see **Figure 8** in **Appendix A**). However, there is no designated cycling infrastructure along these routes around the village.

Opportunities for improvement include the provision of cycle stands for visitors to the development, at the playing fields, and at Maces Farmyard.

2.6 Public Transport

Bus

The closest bus stops to the site are "Quendon, Belcham's Lane" 150m south of the Main Site and "Quendon, The Potteries" 300m north of the site, both on the B1383 (see **Figure 7** in **Appendix A**). To reach the bus stops on foot one must walk along the side of the London Road, as there are no footways. Both stops are served by routes 301 and 441. Bus 301 runs from Bishop's Stortford to Saffron Waldon hourly Monday to Saturday. Bus 441 is a weekday school service running once daily in each direction between Takeley and Saffron Walden.

The Potteries bus stop offers a bus shelter at both stops, physical timetable information and a raised kerb for step-free access.

There is an opportunity for an additional set of bus stops with shelters on both sides of the London Road roughly half way between the above (which are approximately 850m apart), at two existing laybys on the eastern site boundary. These new stops would put all new homes within 250m (less than a 5-minute walk) from a bus stop and would improve accessibility in the southern part of the village. The site would then be better connected to the local centres Bishop's Stortford, Stansted Mountfitchet and Saffron Walden and local rail stations.

The secondary school of Stansted Mountfitchet is not easily reached by bus from the site as a change onto bus 510 is required.

Rail

For an overview of nearby stations and their rail services see Chapter 2.1 and **Figure 6** in **Appendix A**. Elsenham, Newport and Stansted Mountfitchet all offer a ticket office, ticket machines and cycle parking. Newport and Stansted Mountfitchet also have station car parks making them convenient for onward journeys.

Despite Newport and Elsenham being the closest railway stations, combined bus and rail journeys are best made either via Bishop's Stortford, Stansted Mountfitchet or Audley End, due to timetabling.

Newport, Elsenham and Stansted Mountfitchet stations can all be reached in just over 15 minutes by bicycle from the site with the latter being the most attractive as it offers two services per hour to London.

2.7 Vehicular

The Main Site is bound by the London Road (B1383) to the east and Belcham's Lane to the south and southwest. The former connects Bishop's Stortford with Stansted Mountfitchet, Newport, Saffron Walden and ultimately Cambridge. From Bishop's Stortford one can reach the M11 towards Harlow and London. Belcham's Lane leads to Rickling Green and Rickling and other local villages such as Clavering. An access road runs along the western edge of the site which provides access to the properties along it as well as the football pitch. The speed limit on the London Road and Belcham's Lane is generally 50mph until they reach the village. On Belcham's Lane the limit changes to 30mph at the location of the access road mentioned above. On London Road the speed limit changes to 40mph between the two laybys and then 30mph where the footway commences north of the site (see **Figure 11** in **Appendix A**).

Maces Farmyard fronts onto the Green and is accessed directly off Belcham's Lane, where the speed limit is 30mph. An unadopted lane connects to the access from Rickling Green Road to the east.

There are no parking restrictions in Rickling Green and Quendon nor EV charge points. The pub, primary school, town hall and church offer some off-street parking for staff and visitors.

2.8 Collision Records

Figure 2.6 shows a cluster of collisions over the last ten year at the London Road / Belcham's Lane junction.

Belcham's Lane, the B1383 and the quality of the Belcham's Lane/B1383 junction have been flagged as local concerns.

There is an opportunity to improve safety at this junction by reconfiguring as a more compact priority junction and reducing speed limits. A reduction of the speed limit to 40 and 30mph respectively on the roads surrounding the new development would also reduce noise levels and increase safety (**Figure 12** in **Appendix A** shows an early draft of these proposals).

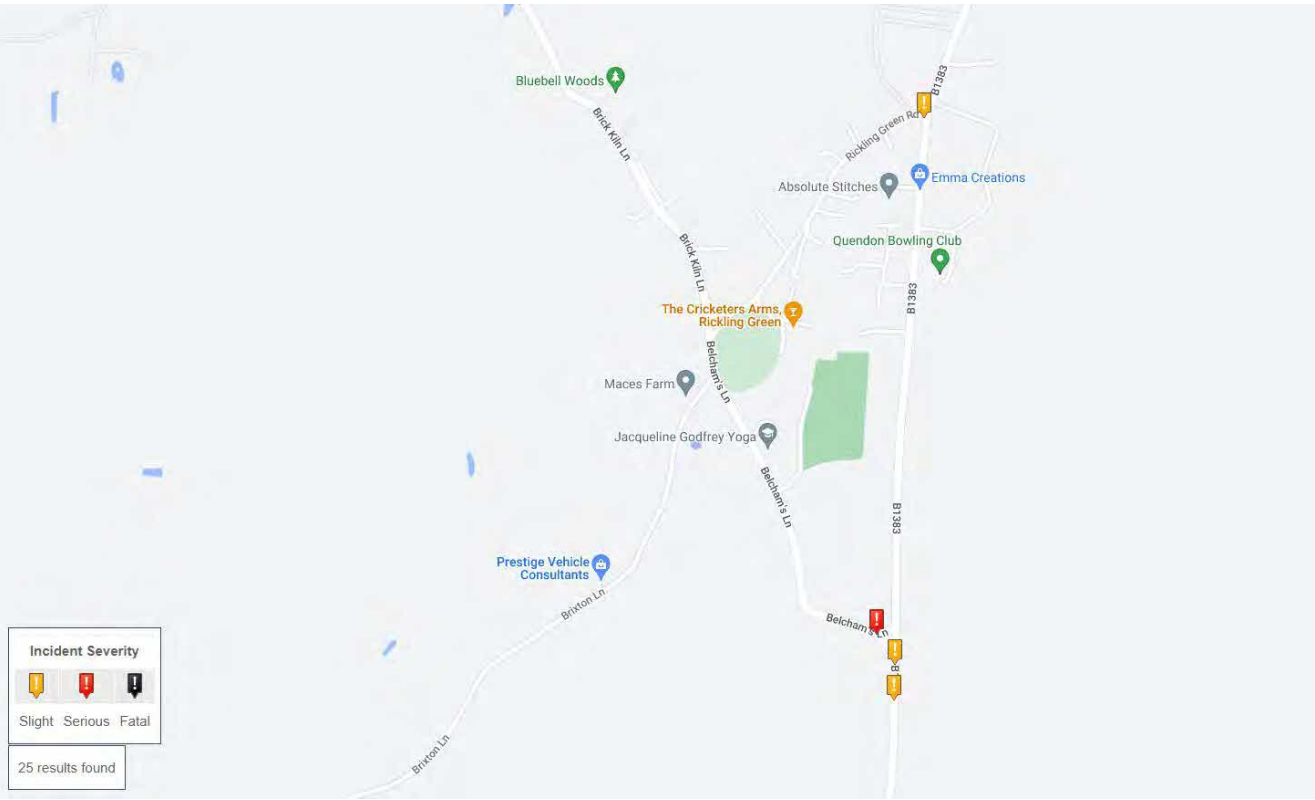


Figure 2.6 Killed and Seriously Injured (KSI) incidents for Quendon 2010-2021, Source: Crashmap

2.9 Planned Improvements

We are not aware of any major development sites or planned transport and highway improvements in and around Rickling Green.

3.0
Policy Context

3.1 Uttlesford Local Plan (2005)

It is understood that a new Uttlesford Local Plan is currently being developed with a consultation draft pending this summer with final adoption scheduled for October 2025.

Policies in the current Uttlesford Local Plan (adopted 2005) that are particularly relevant to the transport aspects of development are: GEN1 Access, GEN8 Vehicle Parking Standards and T1 Transport Improvements.

There are no major transport improvements in the Local Plan that affect Quendon and Rickling Green. The plan specifies a higher car parking quantum for large homes (4 bed and more) than the Essex County Council Parking Standards. The parking applicable standards can be seen in Table 3.1.

Table 3.1 Uttlesford District Parking Standards

Unit Type	1 Bedroom	2 Bedroom	3 Bedroom	4+ Bedroom*
Minimum vehicle parking spaces per dwelling**	1	2	2	3
Minimum unallocated visitor car parking per dwelling	0.25	0.25	0.25	0.25
Minimum cycle parking spaces per dwelling***	1	2	2	2
Minimum unallocated visitor cycle parking***	0.125	0.125	0.125	0.125

* defined by Uttlesford District Council rather than Essex County Council
** garages smaller than 7m x 3m (internal dimension) do not count towards parking standards
*** if garage or secured covered area provided within dwelling then not required

3.2 Uttlesford Design Code (Consultation Draft)

The design code is currently under development with a community update on its progress having taken place in March 2023. The code will seek to encourage high quality development.

3.3 Essex Transport Strategy (2011)

The Essex Transport Strategy's vision is "for a transport system that supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex." This is underpinned by five outcomes:

1. Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration

2. Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology

3. Improve safety on the transport network and enhance and promote a safe travelling environment

4. Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use

5. Provide sustainable access and travel choice for Essex residents to help create sustainable communities

Uttlesford is identified in the strategy as the district with the highest transport-related CO_2 emissions per person of all twelve Essex districts, about twice the national average. Therefore, the strategy aims to promote sustainable travel choices.

Particular priorities for the West of Essex (which includes Uttlesford district) are:

Improving access to and from the M11 corridor;

Tackling congestion and improving the management of traffic in Harlow town centre;

Providing the transport improvements needed to support housing and employment growth;

Improving cycling networks and walking routes and encouraging their greater use;

Improving the attractiveness of public spaces and their ease of use

4.0
Proposed Development

The following development is proposed:

110 new homes

The scheme proposes a mix of 2-4 bedroom semi-detached and terraced houses and a limited number of detached housing, 1-2 bedroom bungalows, and 1-3 bedroom apartments. No larger executive homes.

All to be ‘build to rent’, with management by Pegasi

Sports and play delivering a quantitative and qualitative enhancement on the existing

Introducing additional commercial or community uses by utilising the former agricultural buildings and yard space at Maces Farmyard Buildings immediately west of the Green. Proposals include new purpose-built storage and retail units for the existing Terrace and Gardens business use, flexible community/retail/employment units, and a farm shop and cafe.

Primary access off London Road for the Main Site

A new set of bus stops on London Road and various improvements to the walking and highway infrastructure around the site including a junction improvement

A detailed illustrative masterplan can be found in **Appendix B**.

Figure 4.1 Illustrative Masterplan

5.0
Highway Improvements

5.1 Site Accesses

The Main Site's primary access is to be off the London Road between the two existing laybys and serve about 100 units. The remaining units and the playing field would be served from the existing access road to the west of the proposed development. A simple priority junction is proposed on the London Road with informal pedestrian crossings (dropped kerbs) proposed across the minor arm and the London Road to allow access to the proposed bus stops on either side of the road and the centre of Quendon (see **Figure 13** in **Appendix A**).

Minor improvements to the access arrangement at Maces Farmyard to support operations will also be considered.

5.2 Further Improvements

London Road / Belcham's Lane Junction

To improve safety and visibility, reduce speeds and provide a new gateway to the village, a reconfiguration of the London Road / Belcham's Lane junction is proposed, as a more compact priority junction. A draft sketch of the this can be found in **Figure 14** in **Appendix A**.

New Footways

Figure 12 in **Appendix A** shows the extent of proposed new footways. These include:

- a 2m wide continuation of the footway north of the site on London Road, running southwards on the western side of the road to the Main Site and the new bus stops (either tarmac or pavers);
- a new 2m wide footway (in tarmac or pavers) connecting the southeast corner of the Main Site, across the London Road / Belcham's Lane junction to the existing footway further south, and;
- a new 2m wide footway (tarmac or pavers) on Pegasi's property between the Main Site's north-western corner and the Green, and;
- improvements to the route connecting the above to Maces Farmyard such as resurfacing works and the construction of dropped kerbs.

Speed Limit Changes

It is proposed that speed limits along the site boundary (currently 40 and 50mph) could be reduced as indicated in **Figure 12** in **Appendix A**.

6.0
Trip Generation

6.1 Trip Rates

Trip generation for the proposed development has been estimated using average trip rates from the TRICS database of travel surveys. Sites were selected using the following criteria:

TRICS Categories: 03-A: Residential –Houses Privately Owned

Regions: All England, except London

Location Types: All locations, excluding Town Centres, Edge of Town Centres, Free standing

Number of units: 50-200

Survey Type: Multi-modal

Survey Days: Mon-Fri

Population within 1 Mile: <10,001

Resultant average trip rates for the various residential categories are set out in Table 6.1 below.

Table 6.1 Residential Trip Rates from TRICS

	AM Peak (0800-0900)			Early PM Peak (1500-1600)			PM Peak (1700-1800)			All day (0700-1900)		
Mode	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot
Car Drivers	0.13	0.28	0.41	0.23	0.14	0.37	0.28	0.14	0.42	2.03	2.07	4.09
Car Passengers	0.02	0.15	0.17	0.14	0.05	0.19	0.13	0.05	0.18	0.77	0.78	1.55
Cyclists	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.04	0.04	0.08
Pedestrians	0.04	0.10	0.14	0.12	0.08	0.20	0.05	0.04	0.08	0.58	0.61	1.20
Bus Passengers	0.00	0.03	0.03	0.03	0.01	0.04	0.01	0.00	0.01	0.09	0.10	0.19
Rail Passengers	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.02	0.04
Total People	0.19	0.58	0.77	0.53	0.28	0.81	0.47	0.23	0.70	3.53	3.62	7.14

6.2 Trips Generated

Using the upper estimated development quantum of 110 units, this produces the following trip generation for the site:

Table 6.2 Trips Generated by 110 units

	AM Peak (0800-0900)			Early PM Peak (1500-1600)			PM Peak (1700-1800)			All day (0700-1900)		
Mode	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot
Car Drivers	14	31	45	25	16	41	31	15	46	223	227	450
Car Passengers	2	17	19	15	5	21	14	6	19	84	86	170
Cyclists	0	1	1	1	0	1	0	0	1	5	5	9
Pedestrians	4	11	15	13	8	21	5	4	9	64	67	131
Bus Passengers	0	3	3	3	1	4	1	0	1	10	11	21
Rail Passengers	0	1	1	0	0	0	1	0	1	2	2	4
Total People	21	64	85	58	31	89	52	25	77	388	398	786

Peak hour vehicle trips generated are likely to have the most significant impact on the surrounding highway network. Therefore, the **AM peak and PM peak** vehicular flows will be taken forward for analysis in the Transport Assessment. The modal split of the above trips for the AM + PM peak hours and the daily average are illustrated in Figure 6.1.

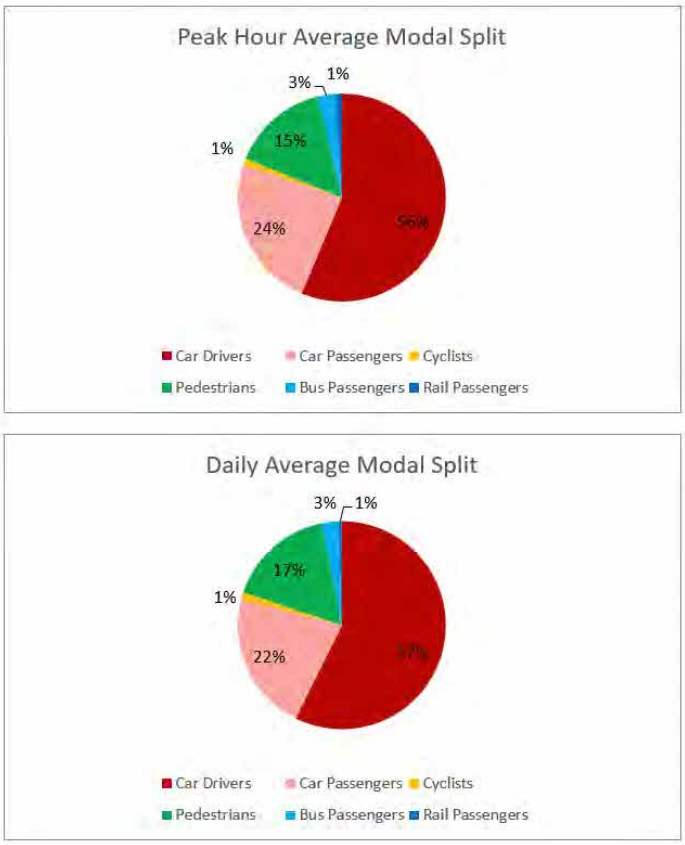


Figure 6.1 AM + PM Peak hour and daily average modal split for the proposed development quantum

When comparing this modal split for the peak hour to that of the travel to work census data (see Chapter 2.2) there are a few noticeable differences. The National Travel Survey suggests only 16% of AM peak hour (0800-0900) trips are for commuting purposes while education escort makes up 26% of trips in that hour[2]. This explains the higher percentage of car passenger and pedestrian trips in the trip generation compared to the census as they are likely to stem from education and education escort trips.

6.3 Trip Distribution and Traffic Impact

For outline planning a full Transport Assessment will be undertaken that could include the following steps:

Establishing existing movement patterns and traffic flows (based on Census travel to work patterns)

Estimate the trip distribution and traffic impact of existing and proposed vehicle trips on the B1383

Assess what transport infrastructure upgrades may be required to mitigate the transport impact of the development (e.g. junction improvements) and how to achieve modal shift

Perform junction modelling for the new site access and the London Road / Belcham's Lane junction

[2] NTS0502: Trip start time by trip purpose

7.0
Next Steps

7.1 Scope of Surveys

For outline planning a number of transport-related surveys will be required. These shall only cover the Main Site off Belcham's Road and Maces Farmyard unless otherwise indicated:

Topographical Survey

Utility Survey

Arboricultural Survey

Traffic Survey (Automatic traffic counts and speed surveys on London Road and Belcham's Lane, manual turning counts at London Road / Belcham's Lane junction)

7.2 Scope of Planning Submittals

The currently assumed transport-related submittals for outline planning are:

Access Parameter Plan

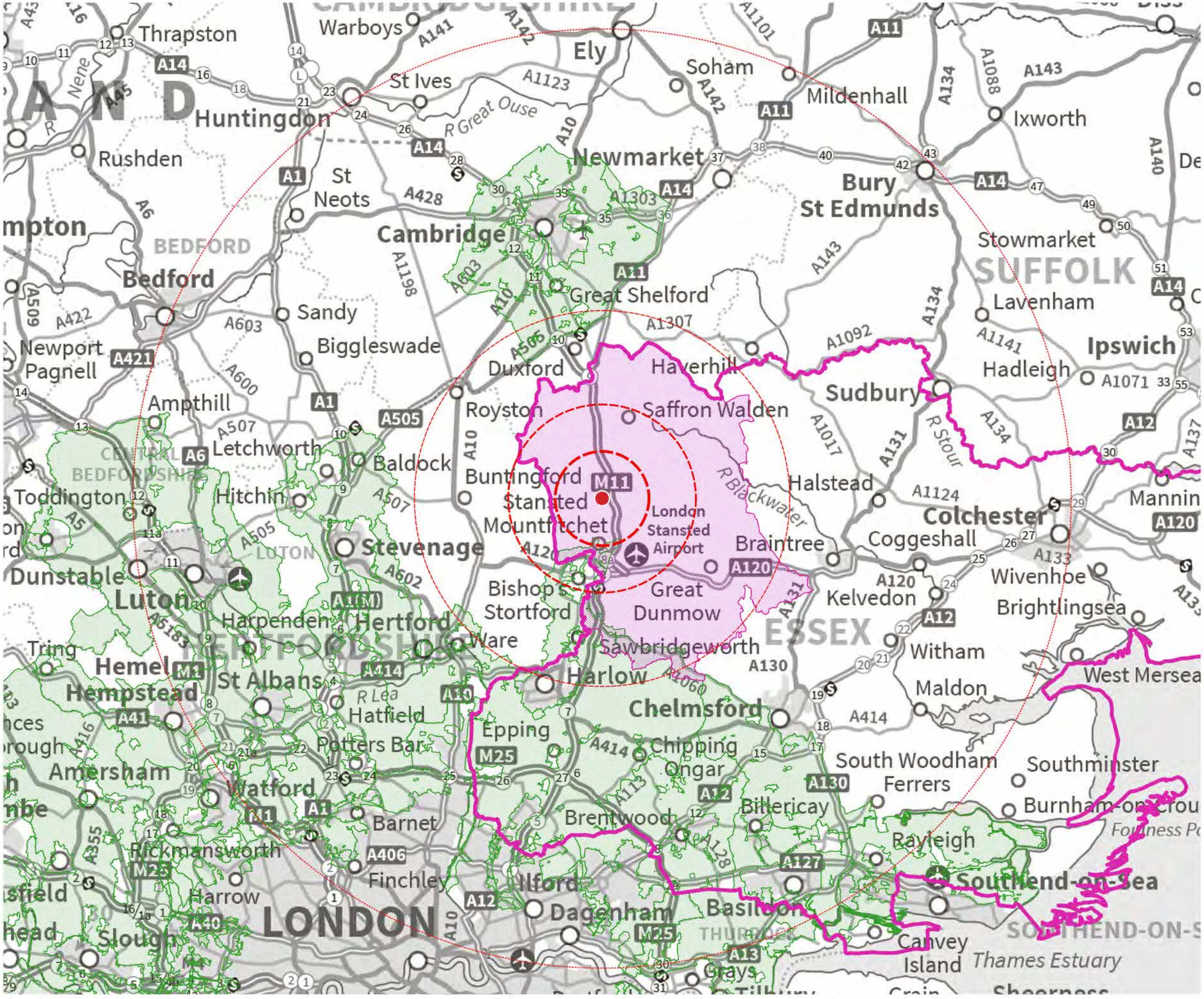
Detailed Access plans (1:500 plans, supported by independent Stage 1 Road Safety Audit) for the following:

- Main Site Access 1 (London Road)
- Main Site Access 2 (Belcham's Lane)
- Maces Farmyard Access (Belcham's Lane)
- London Road / Belcham's Lane Junction

Transport Assessment

Travel Plan

Appendix A
Figures

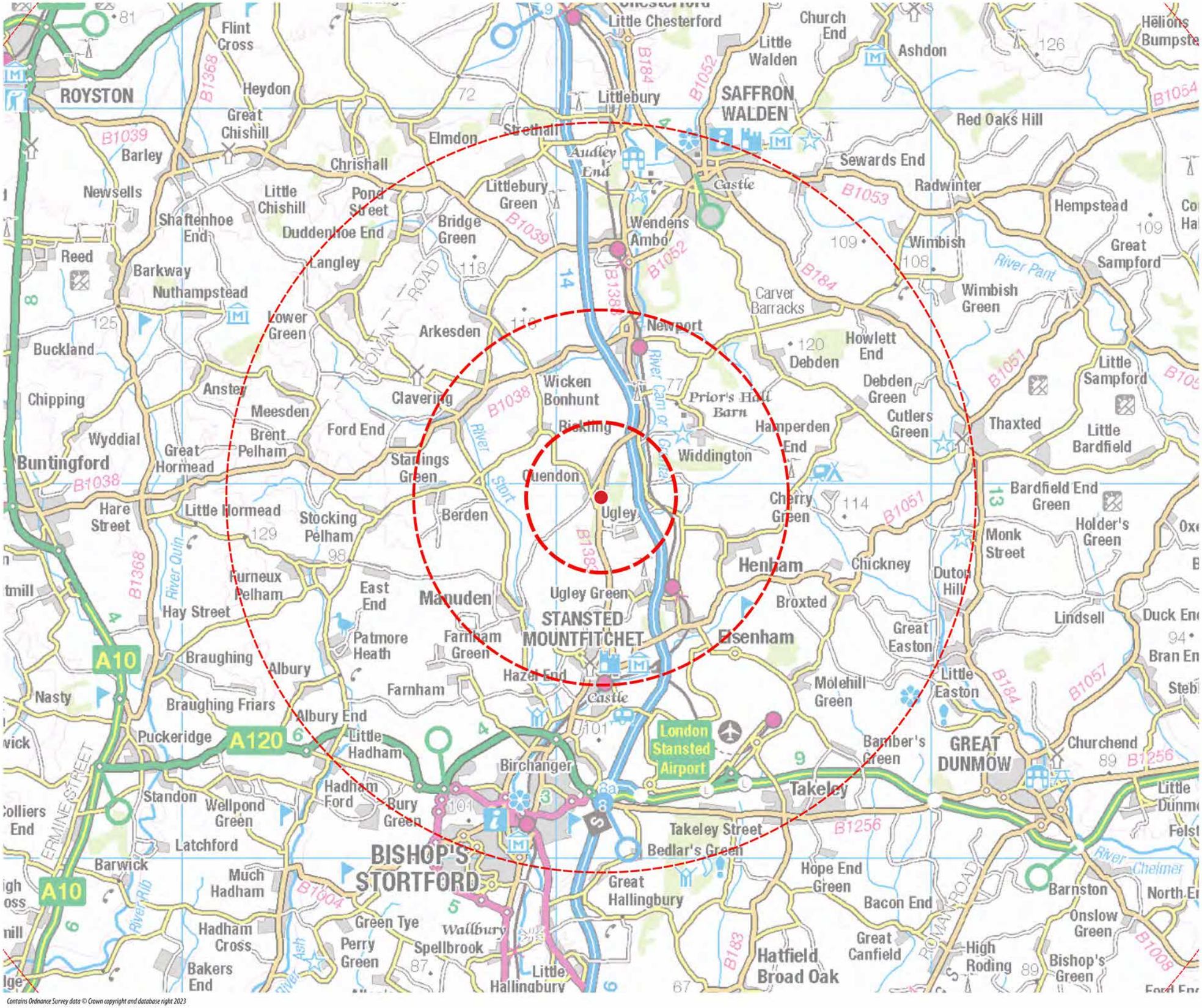


LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 1: STRATEGIC CONTEXT

1797/101/001

APR 2023 | Alan Baxter



N

0 1 2 3 4 5 Km

1:100,000

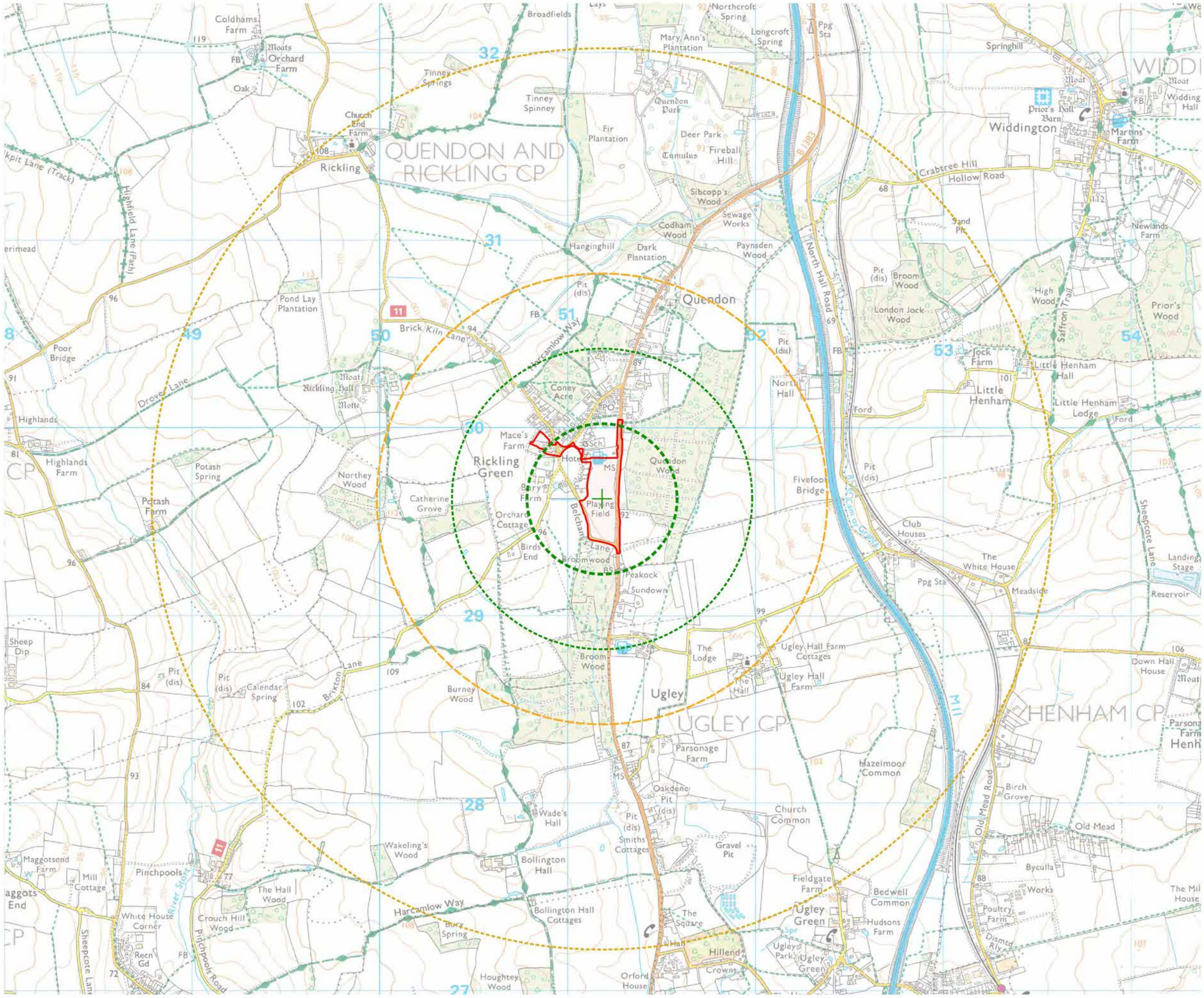
- Site
- 2km
- 5km
- 10km

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 2: DISTRICT CONTEXT

1797/101/002 A

MAY 2023 | Alan Baxter



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N

0 200 400 600 800 1,000 m

1:20,000

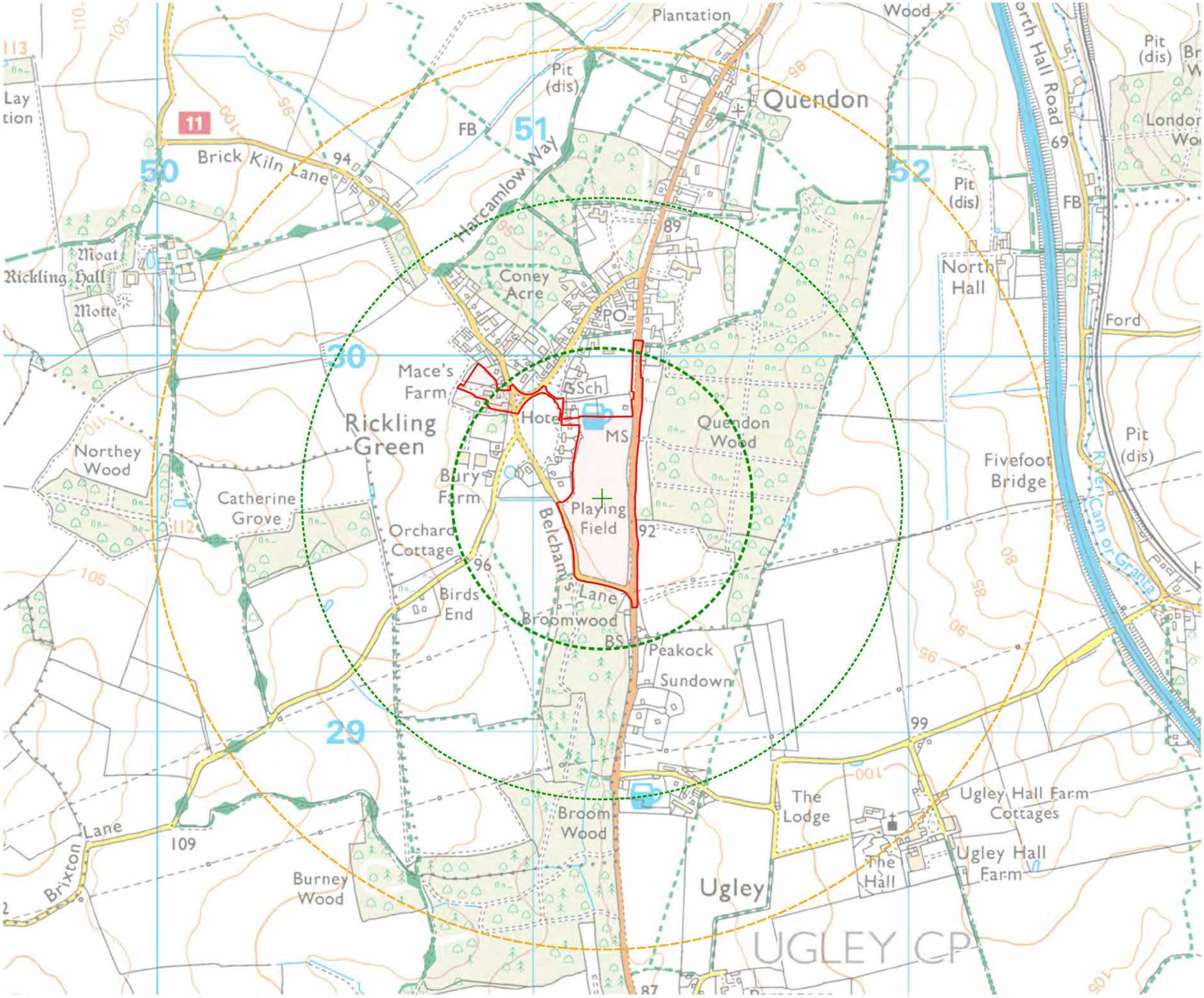
- ABA Red Line v2 copy
- 400m / 5min walk
- 800m / 10min walk
- 1200m / 15min walk / 5min cycle
- 2400 / 30min walk / 10min cycle

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 3: LOCAL CONTEXT

1797/101/003 B

JUNE 2023 | Alan Baxter



LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 4: SITE CONTEXT

1797/101/004 B

JUNE 2023

Alan Baxter

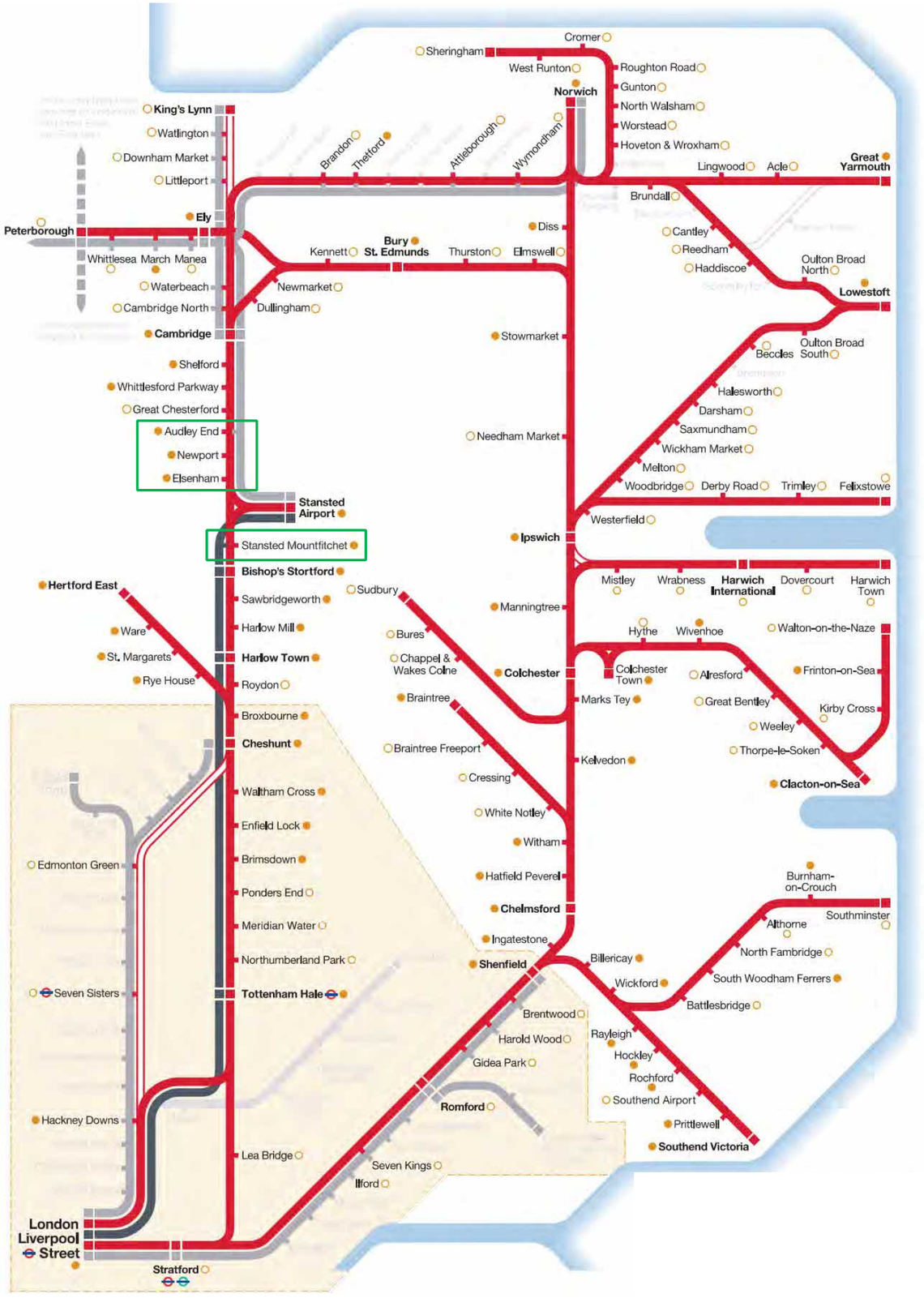
LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 5: RED LINE BOUNDARY

1797/101/005 B

JUNE 2023

Alan Baxter



Greater Anglia route

Greater Anglia limited service route

Greater Anglia Sunday service only

Greater Anglia limited service

Stansted Express route

Other operators route

East Coast route

London Underground interchange

Docklands Light Railway interchange

Airport interchange

Ferry service interchange

Smart Card Season Tickets available for use, collection and purchase at the station ticket office.

Smart Card Season Tickets available for use and collection.

London and Travelcard Area. Travelcards on Smart can be used in this area. For journeys wholly within this area use contactless or Oyster Pay As You Go.

Local Stations

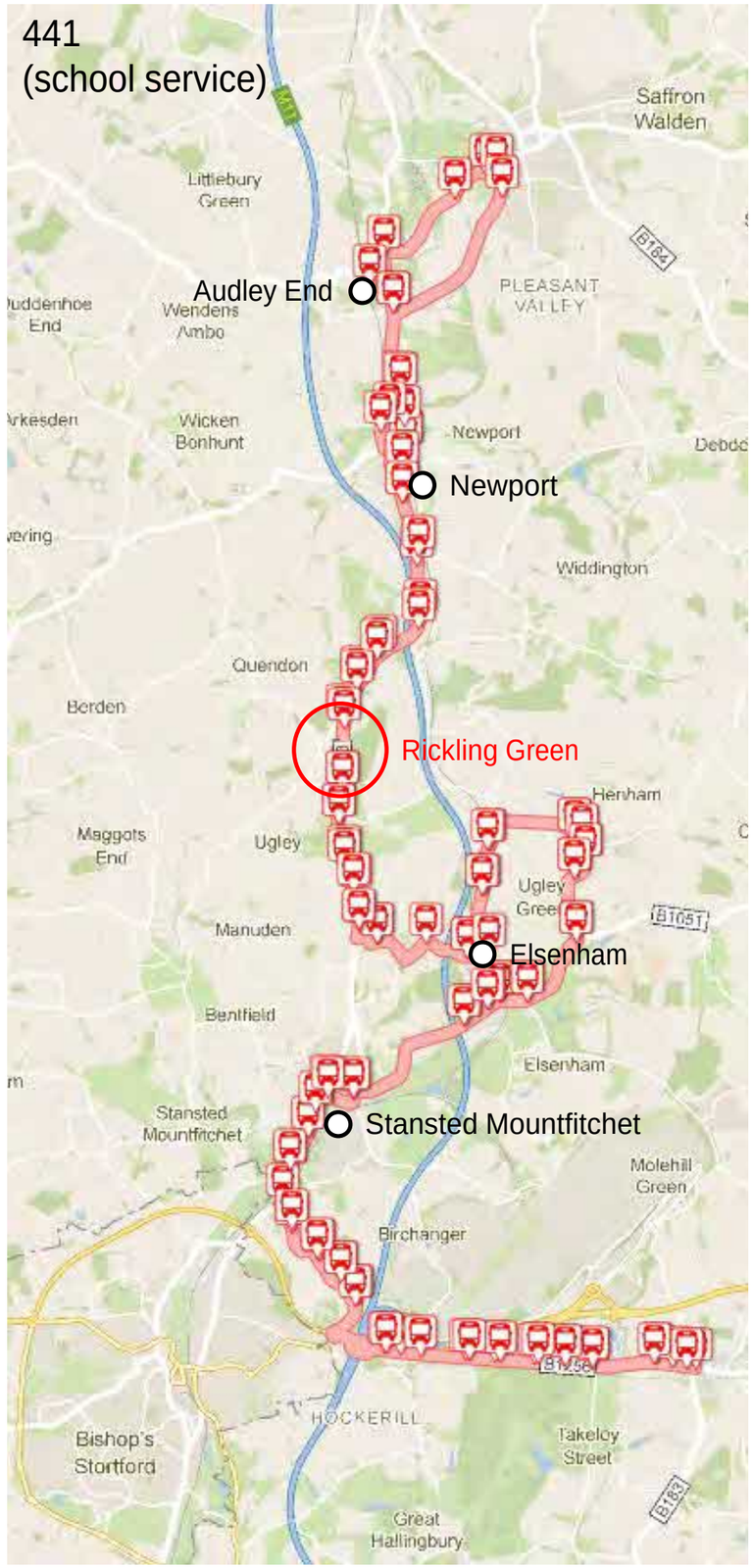
Source: www.greateranglia.co.uk

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 6: RAIL ROUTES

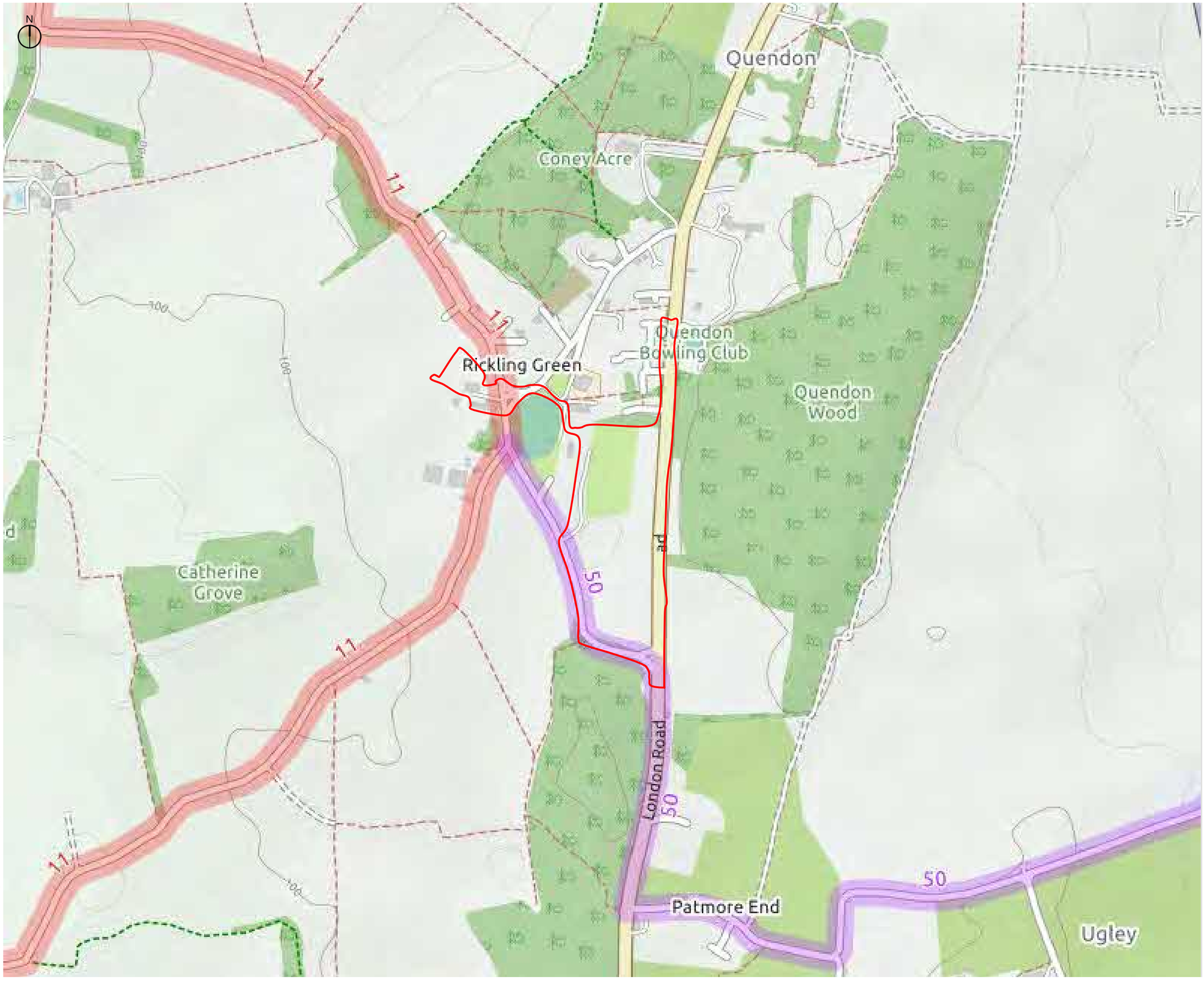
1797/101

MAY 2023 | Alan Baxter



Source: www.essexbus.info

LAND OFF BELCHAM'S LANE RICKLING GREEN	
FIGURE 7: BUS ROUTES	
1797/101	
JUNE 2023	Alan Baxter



National Cycle Route

Regional Cycle Route

Local Cycle Route

National Node Network

Regional Node Network

Local Node Network

Cyclepath

Footpath (no cycling)

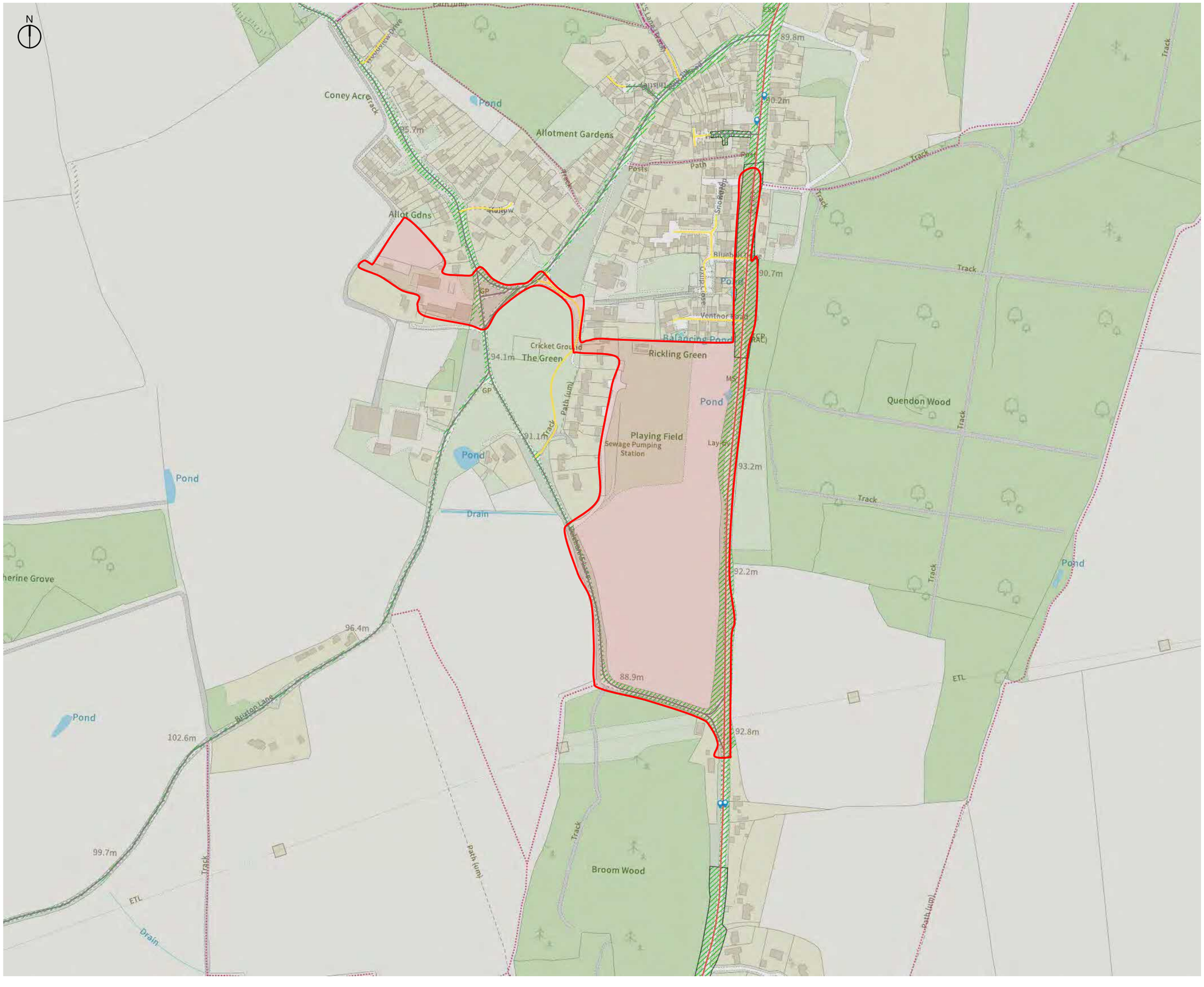
Source: opencyclemap.org

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 8: CYCLE ROUTES

1797/101

JUNE 2023 | Alan Baxter



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Bus stops

Highway & Footway network

- PR1 Road
- PR2 Road
- Local Road
- Remote Footway
- Private Road
- Private Remote Footway
- PRoW Footpath
- PRoW Bridleway
- PRoW Byway
- National Highways Road
- DBFO CountyRoute

Highway record

- Maintained / Unconfirmed Extent
- Maintained / Confirmed Extent
- Not Maintained / Unconfirmed Extent
- Not Maintained / Confirmed Extent

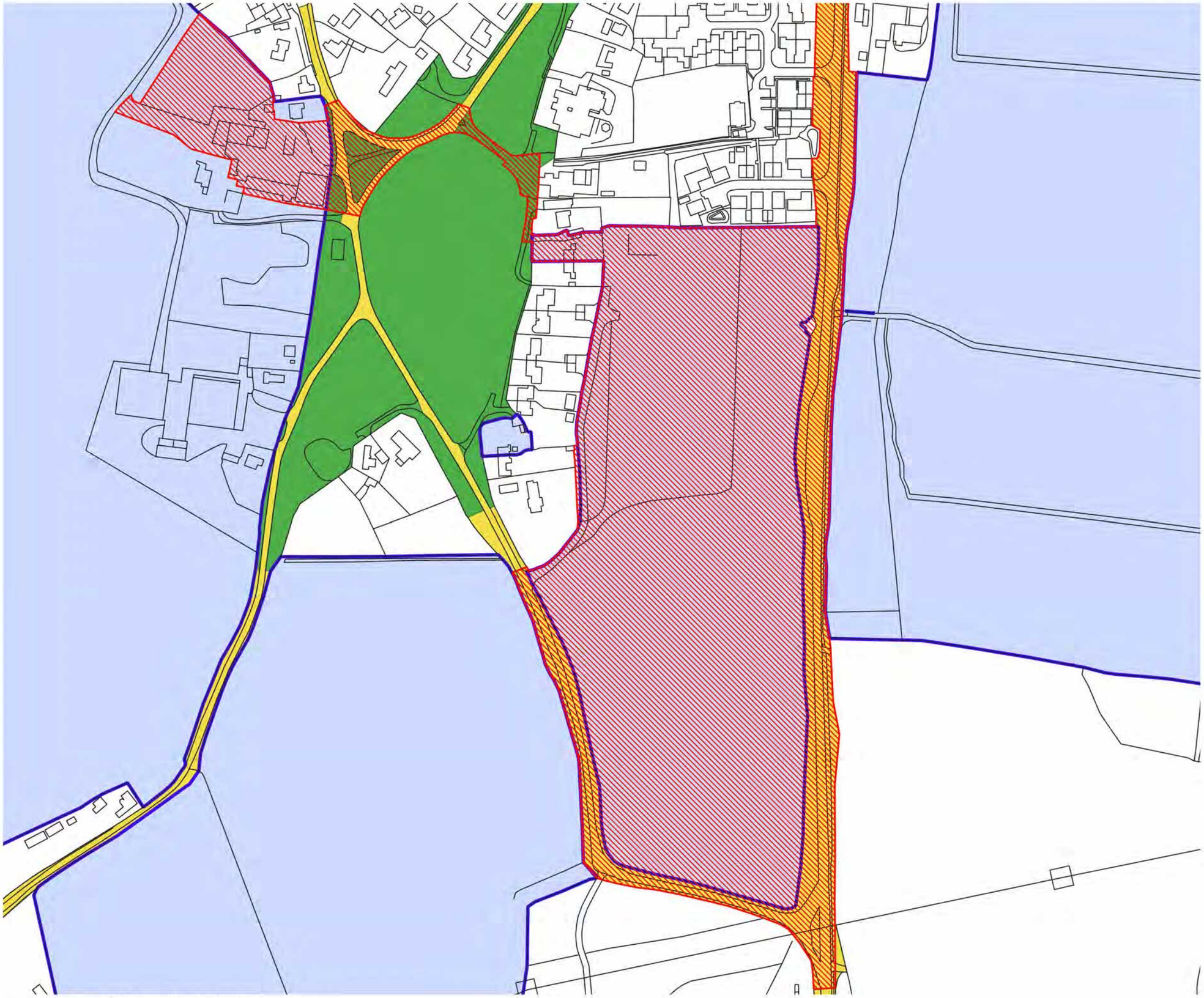
Source: www.essexhighways.org/interactive-maps-and-live-travel-information/highways-information-map

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 9: ADOPTED HIGHWAYS AND PUBLIC RIGHTS OF WAY

1797/101

JUNE 2023 | Alan Baxter



N

0 20 40 60 80 100 m

1:2,500

Red Line Boundary
Pegasi Ltd Land
Common Land*
Highway Boundary*

*Highway boundary and Common Land extent assumed in some areas; full extent to be confirmed.

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 10: LAND OWNERSHIP

1797/101/010A

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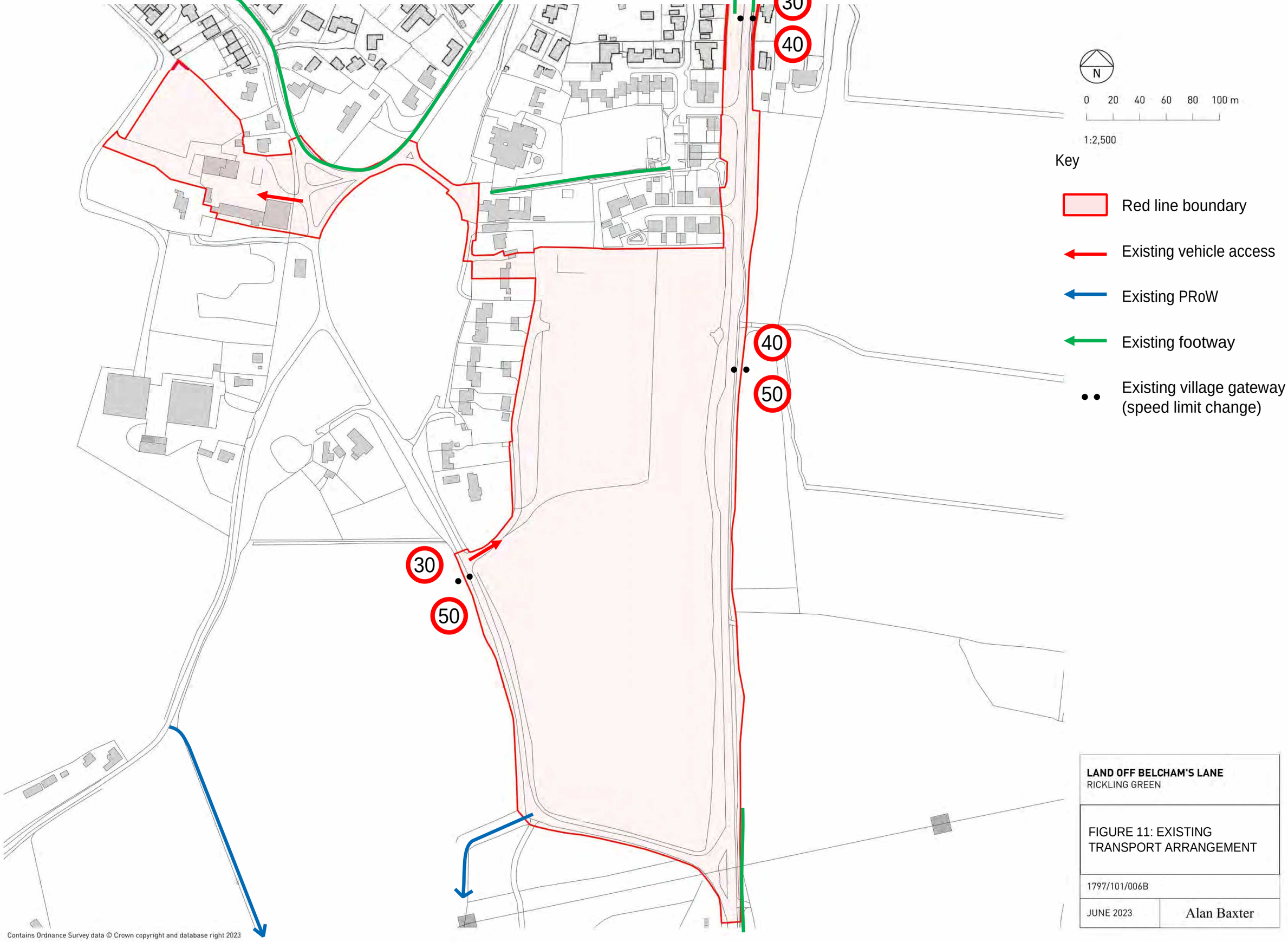


LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 11: EXISTING TRANSPORT ARRANGEMENT

1797/101/006B

JUNE 2023 | Alan Baxter

N

0 20 40 60 80 100 m

1:2,500

Key

- Red line boundary
- Existing vehicle access
- Existing PRoW
- Existing footway
- Proposed vehicle access
- Proposed bus stops (using existing layby)
- Proposed footway (paved)
- Improved pedestrian route
- Proposed village gateway (speed limit change)
- Proposedjunction redesign
- Proposed development parcels

30
40
30
40
40
50

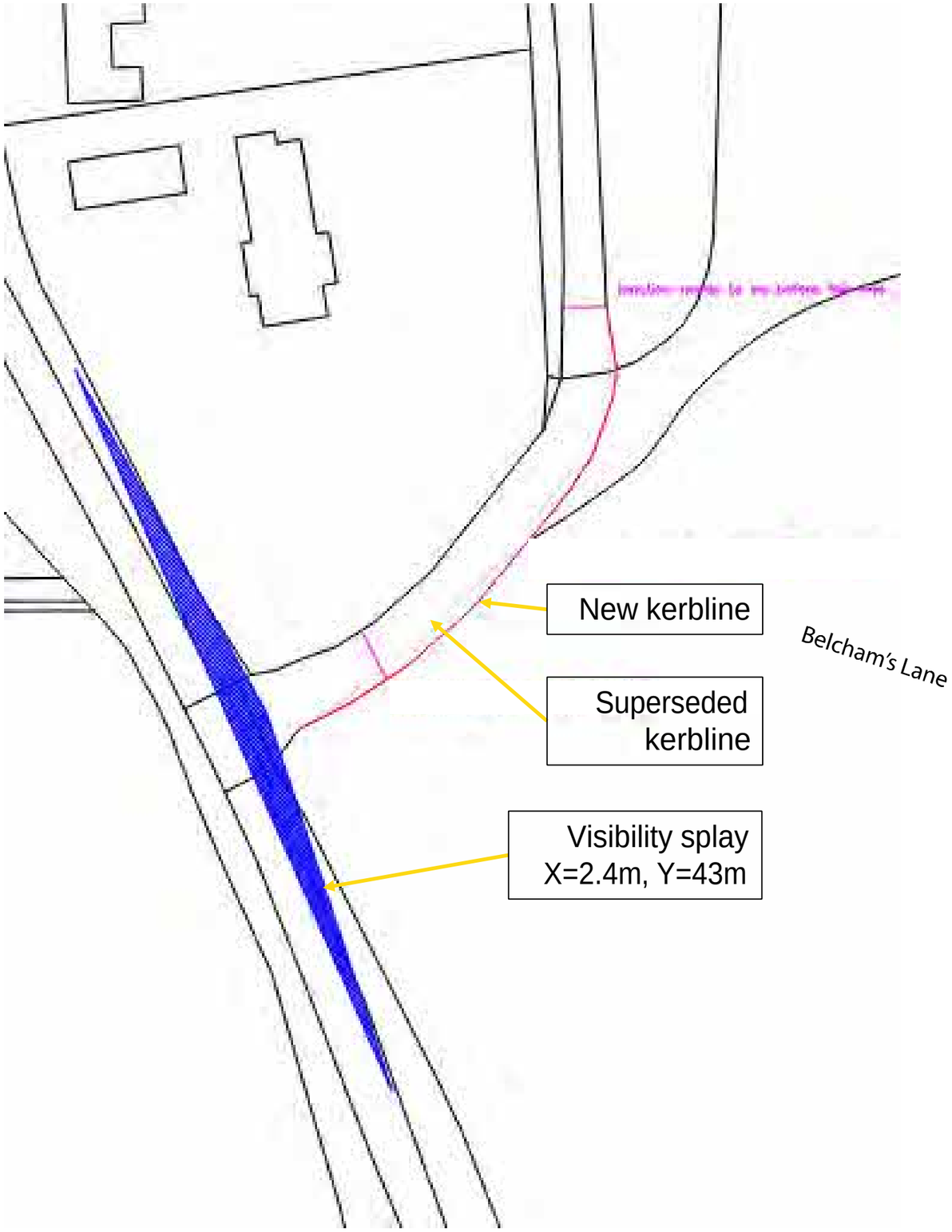
LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 12: PROPOSED TRANSPORT ARRANGEMENT

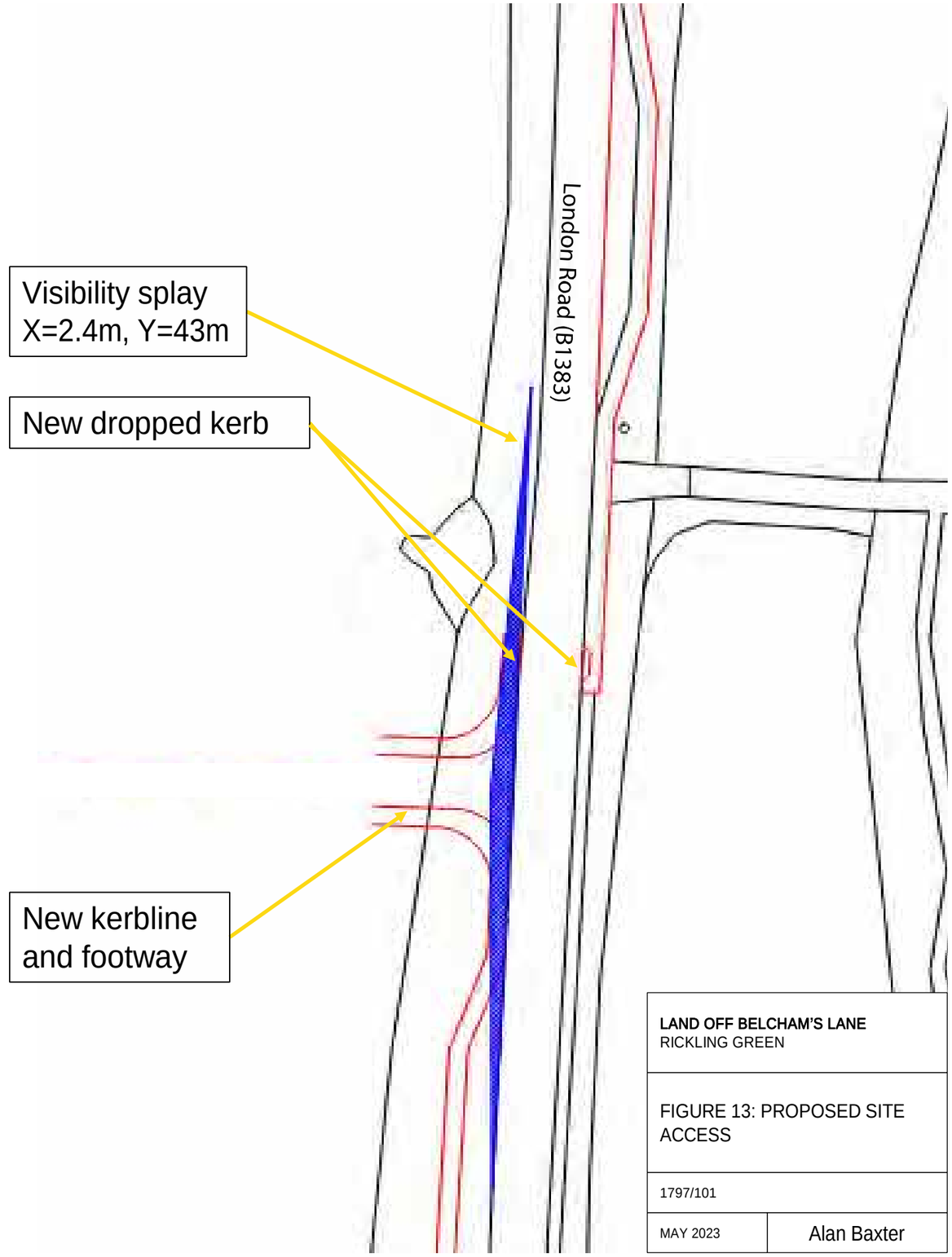
1797/101/006B

JUNE 2023 | Alan Baxter

Belcham's Lane Access



London Road Access



LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 13: PROPOSED SITE ACCESS

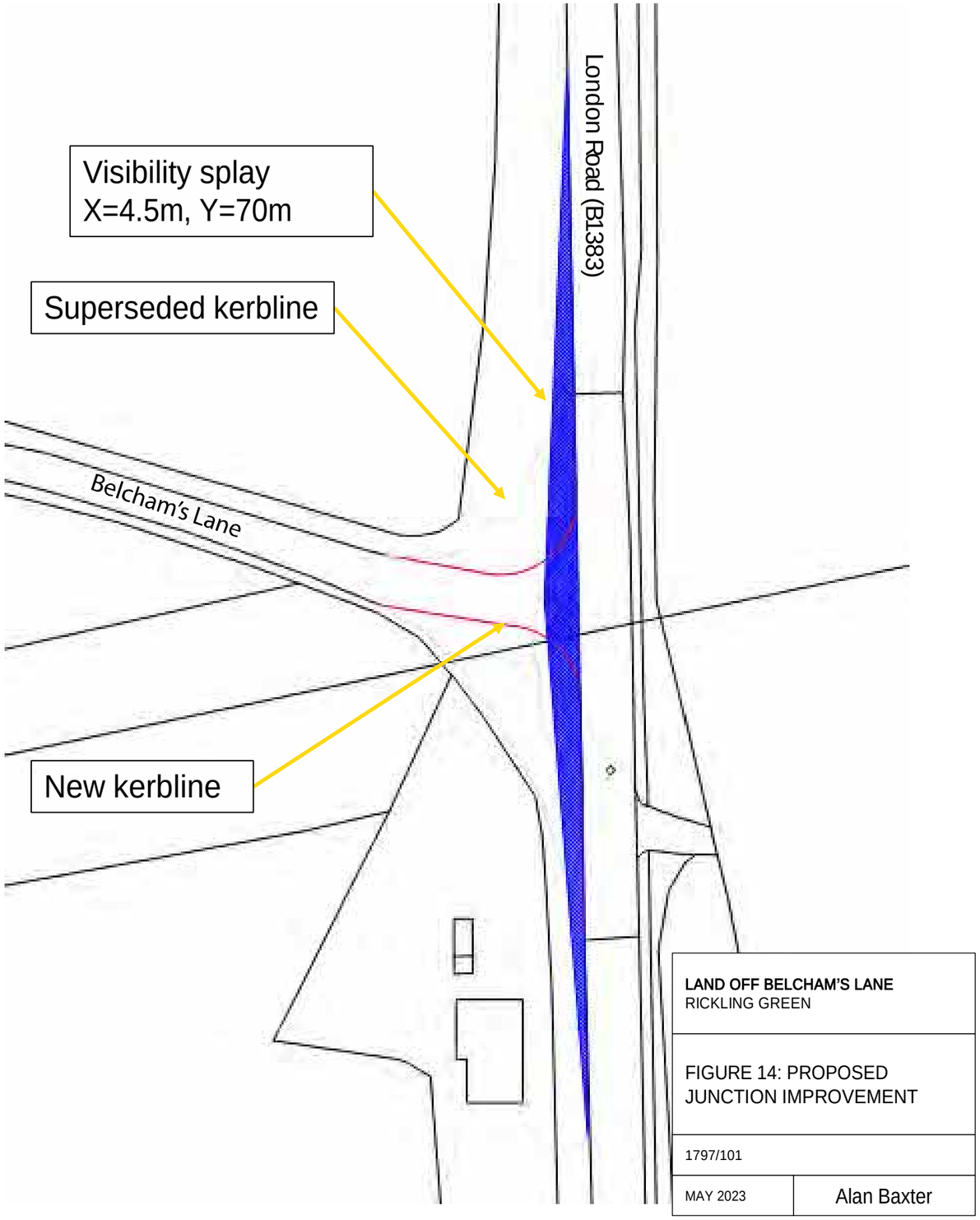
1797/101

MAY 2023 | Alan Baxter

LondonRoad / Belcham’s Road Junction Improvement

Belcham’s Lane looking east

B1383 south of junction, looking north



Appendix B
Illustrative Masterplan

RICKLING GREEN

OVERALL ILLUSTRATIVE MASTERPLAN

1797/102 Rev B	1:4000 @ A3
AUGUST 2023	Alan Baxter

RICKLING GREEN
BELCHAM'S LANE

MAIN SITE MASTERPLAN

1797/102 Rev B	1:2000 @ A3
AUGUST 2023	Alan Baxter

Planning application boundary

Existing building footprint

Retained and renovated Grade II Listed Building

New building Community / retail / employment (approx. GEA 500m²)

New storage barn for Terrace & Gardens (approx. 390m²)

Site access

RICKLING GREEN
MACES FARMYARD

CONCEPT PLAN

1797/102 Rev B	1:2000 @ A3
AUGUST 2023	Alan Baxter

Alan Baxter

Prepared by	SHs
Reviewed by	TWm
Issued	29.08.2023

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APPENDIX 5

PEA, Land North East of Belcham's Lane

Land off Belcham's Lane, Rickling Green
Transport Note

Prepared for
The Quendon Estate, Pegasi

August 2023

Alan Baxter

Land off Belcham's Lane, Rickling Green
Transport Note
Prepared for
The Quendon Estate, Pegasi
August 2023

Contents

Appendices

1.0
Introduction

Alan Baxter (ABA) has been commissioned to provide transport advice in relation to the proposed development of land off Belcham's Lane / London Road in the village of Rickling Green, in Uttlesford District, Essex to accommodate around 110 new homes and various facilities in the village. The land forms part of the Quendon Estate, which is managed by Pegasi.

This transport note has been prepared to inform pre-application discussions with the local planning authority (the Planning Inspectorate on behalf of Uttlesford District Council) and the local highway authority (Essex County Council). It summarises existing transport and movement conditions and relevant policy, outlines the proposed development and related access strategies and highway improvements, presents an initial trip generation exercise, and sets out the anticipated scope of transport-related surveys and submittals to support a future outline planning application.

Figures are included in **Appendix A** for information.

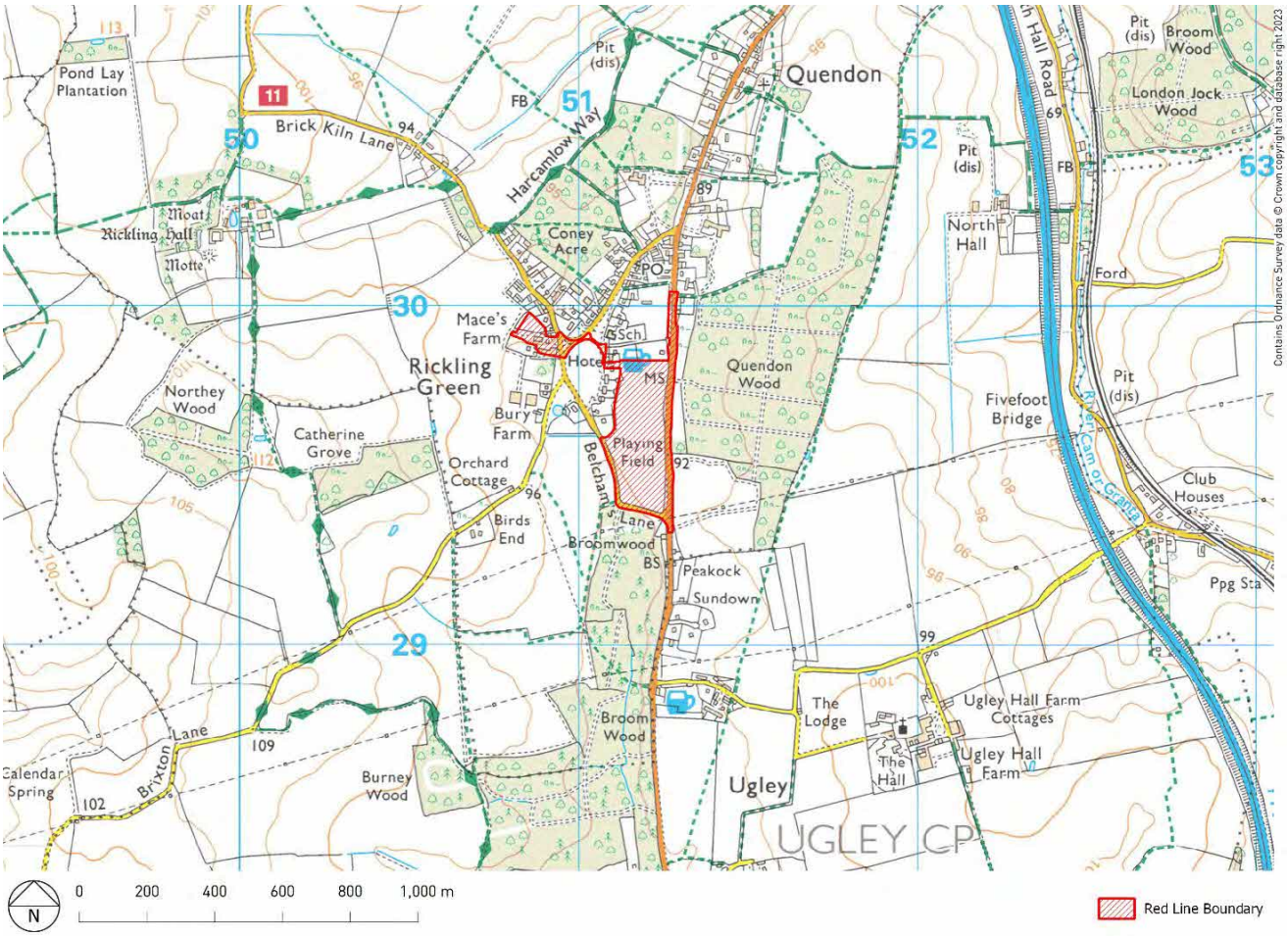


Figure 1.1 Site Location

2.0
Existing Conditions

2.1 Strategic Context

The site lies within the village of Rickling Green in Uttlesford District in Essex (see **Figure 1** in **Appendix A**), approximately 20 miles south of Cambridge and 40 miles north of London.

Rickling Green lies on the B1383 London Road (formerly the A11 trunk road) between Saffron Walden (7 miles/10km) and Bishop's Stortford (6 miles/9km), and is around 8 miles from London Stansted Airport (see **Figure 2** in **Appendix A**). The M11 motorway runs north-south past the settlement (to the west), but is only accessible from Junction 8a (6 miles south near Bishop's Stortford) or Junction 10 (14 miles north near Duxford).

The West Anglia Main Line also runs north-south past the settlement (to the west). Greater Anglia services between London Liverpool Street and Cambridge North (hourly) and between London Liverpool Street and Stansted Airport (hourly) are accessible from Stansted Mountfitchet Station (3 miles south / 5 min by 301 bus + 10 min walk). The hourly services to/from Cambridge are also accessible from Newport Station (3 miles north / 15 min by 301 bus) or Elsenham Station (3 miles southeast / 7 min by 441 bus). From Audley End station (5m north / 17 min by 301 bus) one can also take Greater Anglia's Stansted Airport to Norwich service (hourly).

Rickling Green has its own primary school a short walk from the site, with others in nearby settlements including Henham, Newport, Elsenham, Manuden, Bentfield and Stansted Mountfitchet. The nearest secondary schools are Joyce Frankland Academy in Newport, Forest Hall School in Stansted Mountfitchet, and Saffron Walden County High School and Stephen Perse Foundation School in Saffron Walden, all of which are accessible from the site via bus 301 or 441.

2.2 Movement Profile

Rickling Green, together with the adjoining village of Quendon and nearby village of Rickling, make up Quendon and Rickling Parish, which has around 250 households and 600 residents.

Car ownership levels are relatively high, with an average of 1.8 cars per household[1].

Residents of the Census area, MSOA Uttlesford 003, which includes the villages of Uttlesford district to the west and southwest of Saffron Walden, predominantly use the car (75%) as their method of travel to work (see Figure 2.1). Rail usage is comparatively high with 19% of residents choosing this mode of travel to work, likely using the area's three railway stations. The place of work for residents of the area (see Figure 2.2) reveals that the most common place of work is London (21%) which likely contributes to the high percentage of commuting by rail. Other significant work attractors include Saffron Walden (12%), Cambridge (8%) and Bishop's Stortford (7%). 11% of residents work within the MSOA (local area). As active travel only accounts for 5% of commuting trips, it follows that a significant number of residents use the car to commute relatively short distances within the local area.

[1] Census 2011, Local Area Report, Quendon and Rickling Parish

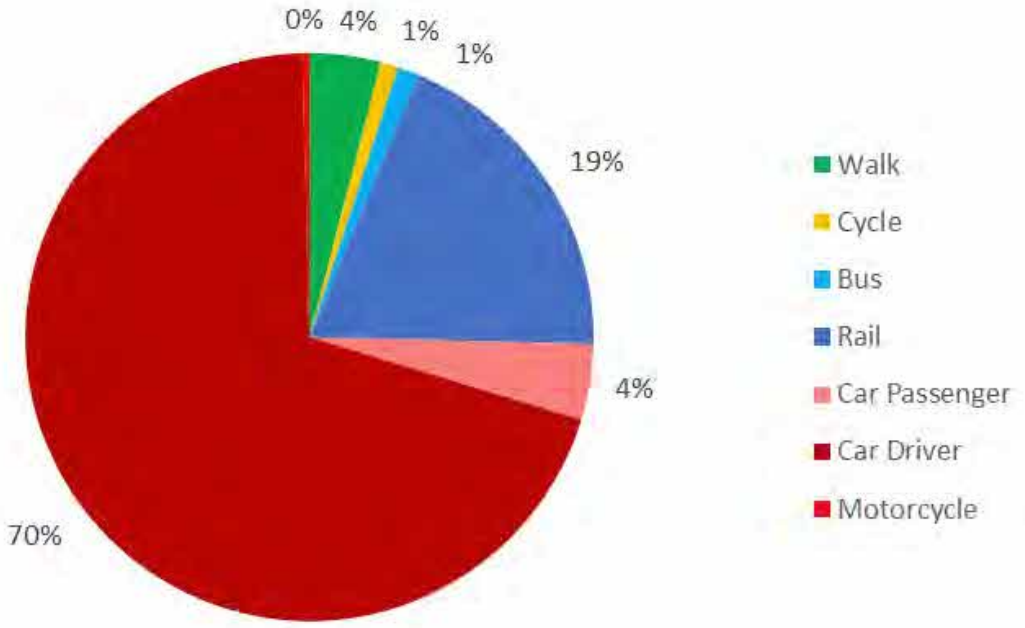


Figure 2.1 Method of Travel to Work from MSOA Uttlesford 003 (Census 2011)

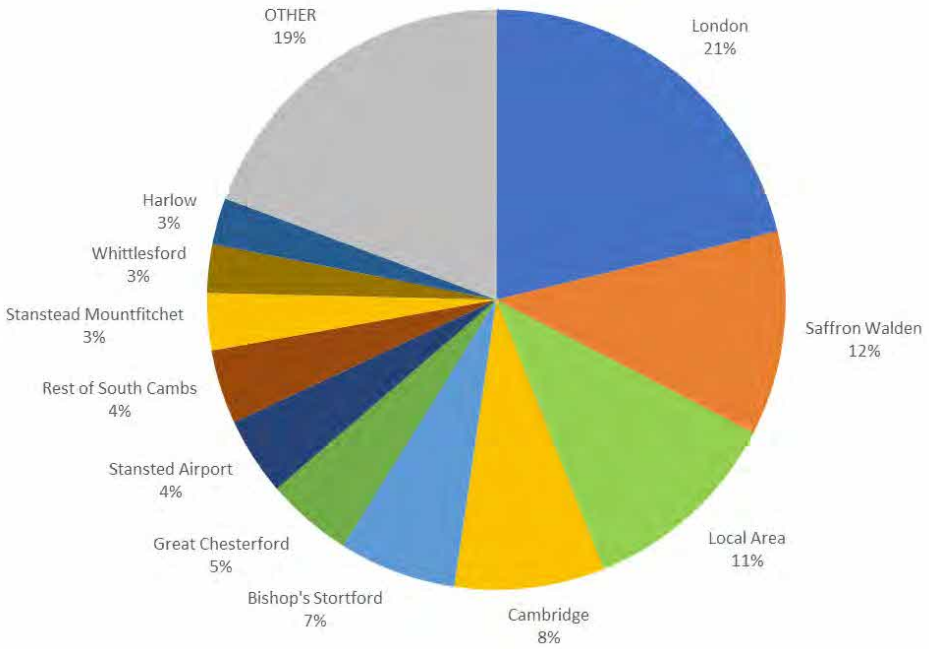


Figure 2.2 Place of Work for Residents of MSOA Uttlesford 003 (Census 2011)

2.3 Site Location and Access

The site is located in the Parish of Quendon and Rickling, see **Figures 3 to 5** in **Appendix A**. It includes various parcels of land managed by Pegasi Ltd, some public highway land and some parts of the registered common land (The Green), see **Figure 10** in **Appendix A**. There is also a small pond located between the Main Site and London Road, the ownership of which is unconfirmed.

The site can be roughly divided into three parcels:

Land off Belcham's Lane / London Road (the Main Site), where residential development and replacement leisure/community facilities are proposed;

Maces Farmyard, where redevelopment of farm buildings is proposed to accommodate flexible community space, business hub or space for small businesses, and;

Complementary footway and highway improvements (public highway land, common land, "North House")

The Main Site is predominantly arable agricultural use and an approximately 1.5 ha area leased to the Parish Council by the Estate for use as a football pitch.

Maces Farmyard to the west of the Green consists of former agricultural buildings which are currently occupied for commercial and distribution purposes.

Figure 11 in **Appendix A** shows the existing site location and accesses. The Main Site currently has one site access point via an access road off Belcham's Lane. A number of properties fronting the Green have a right of access over this road to access garages to the rear of their land.

Maces Farmyard has one access off Belcham's Lane.

There are two public rights of way (PRoW) adjoining the site (see **Figure 9** in **Appendix A**). The first is a footpath leading from the southwest corner to various other PRoWs and local villages to the south and west. The second, also a footpath, is just north of Quendon Wood, part of an extensive PRoW network to Widdington, Newport and beyond.

Figure 12 in **Appendix A** shows proposed access points, footways and further highway proposals.

Figure 2.3 Site viewed from Belcham's Lane

Figure 2.4 Site viewed from London Road

Figure 2.5 Maces Farmyard viewed from Belcham's Lane

2.4 Walking

A public footpath connects the southwestern corner of the site to an extensive network of footpaths that connect various local villages and to the Harcamlow Way. The Harcamlow Way connects Cambridge and Harlow and passes to the west of the village.

Generally, the village roads have few footways. No footways connect directly to the Main Site, although there are footways along London Road, 200m north of the Main Site and south from the junction with Belcham's Lane, and along the northern edge of Rickling Green Road.

There are some facilities within walking distance of the site, including bus stops (see below), a primary school, pub, church and various playing fields for football (on the site), cricket and bowls. Maces Farmyard currently hosts a garden shop with more uses such as a café forming part of the proposals.

There are numerous opportunities for improving the walking environment in the village, in particular by creating direct and safe walking routes to the Green, bus stops and primary school, and between the Main Site and Maces Farmyard. These include a connection from the north-western corner of the Main Site to the Green and the addition of footpaths along the London Road (see Chapter 5.2 and **Figure 12** in **Appendix A** for further detail).

2.5 Cycling

National Cycle Route 11 runs north-south through the village on Brixton Lane and Brick Kiln Lane and joins with Regional Cycle Route 50 on Belcham's Lane which heads to the south east (see **Figure 8** in **Appendix A**). However, there is no designated cycling infrastructure along these routes around the village.

Opportunities for improvement include the provision of cycle stands for visitors to the development, at the playing fields, and at Maces Farmyard.

2.6 Public Transport

Bus

The closest bus stops to the site are "Quendon, Belcham's Lane" 150m south of the Main Site and "Quendon, The Potteries" 300m north of the site, both on the B1383 (see **Figure 7** in **Appendix A**). To reach the bus stops on foot one must walk along the side of the London Road, as there are no footways. Both stops are served by routes 301 and 441. Bus 301 runs from Bishop's Stortford to Saffron Waldon hourly Monday to Saturday. Bus 441 is a weekday school service running once daily in each direction between Takeley and Saffron Walden.

The Potteries bus stop offers a bus shelter at both stops, physical timetable information and a raised kerb for step-free access.

There is an opportunity for an additional set of bus stops with shelters on both sides of the London Road roughly half way between the above (which are approximately 850m apart), at two existing laybys on the eastern site boundary. These new stops would put all new homes within 250m (less than a 5-minute walk) from a bus stop and would improve accessibility in the southern part of the village. The site would then be better connected to the local centres Bishop's Stortford, Stansted Mountfitchet and Saffron Walden and local rail stations.

The secondary school of Stansted Mountfitchet is not easily reached by bus from the site as a change onto bus 510 is required.

Rail

For an overview of nearby stations and their rail services see Chapter 2.1 and **Figure 6** in **Appendix A**. Elsenham, Newport and Stansted Mountfitchet all offer a ticket office, ticket machines and cycle parking. Newport and Stansted Mountfitchet also have station car parks making them convenient for onward journeys.

Despite Newport and Elsenham being the closest railway stations, combined bus and rail journeys are best made either via Bishop's Stortford, Stansted Mountfitchet or Audley End, due to timetabling.

Newport, Elsenham and Stansted Mountfitchet stations can all be reached in just over 15 minutes by bicycle from the site with the latter being the most attractive as it offers two services per hour to London.

2.7 Vehicular

The Main Site is bound by the London Road (B1383) to the east and Belcham's Lane to the south and southwest. The former connects Bishop's Stortford with Stansted Mountfitchet, Newport, Saffron Walden and ultimately Cambridge. From Bishop's Stortford one can reach the M11 towards Harlow and London. Belcham's Lane leads to Rickling Green and Rickling and other local villages such as Clavering. An access road runs along the western edge of the site which provides access to the properties along it as well as the football pitch. The speed limit on the London Road and Belcham's Lane is generally 50mph until they reach the village. On Belcham's Lane the limit changes to 30mph at the location of the access road mentioned above. On London Road the speed limit changes to 40mph between the two laybys and then 30mph where the footway commences north of the site (see **Figure 11** in **Appendix A**).

Maces Farmyard fronts onto the Green and is accessed directly off Belcham's Lane, where the speed limit is 30mph. An unadopted lane connects to the access from Rickling Green Road to the east.

There are no parking restrictions in Rickling Green and Quendon nor EV charge points. The pub, primary school, town hall and church offer some off-street parking for staff and visitors.

2.8 Collision Records

Figure 2.6 shows a cluster of collisions over the last ten year at the London Road / Belcham's Lane junction.

Belcham's Lane, the B1383 and the quality of the Belcham's Lane/B1383 junction have been flagged as local concerns.

There is an opportunity to improve safety at this junction by reconfiguring as a more compact priority junction and reducing speed limits. A reduction of the speed limit to 40 and 30mph respectively on the roads surrounding the new development would also reduce noise levels and increase safety (**Figure 12** in **Appendix A** shows an early draft of these proposals).

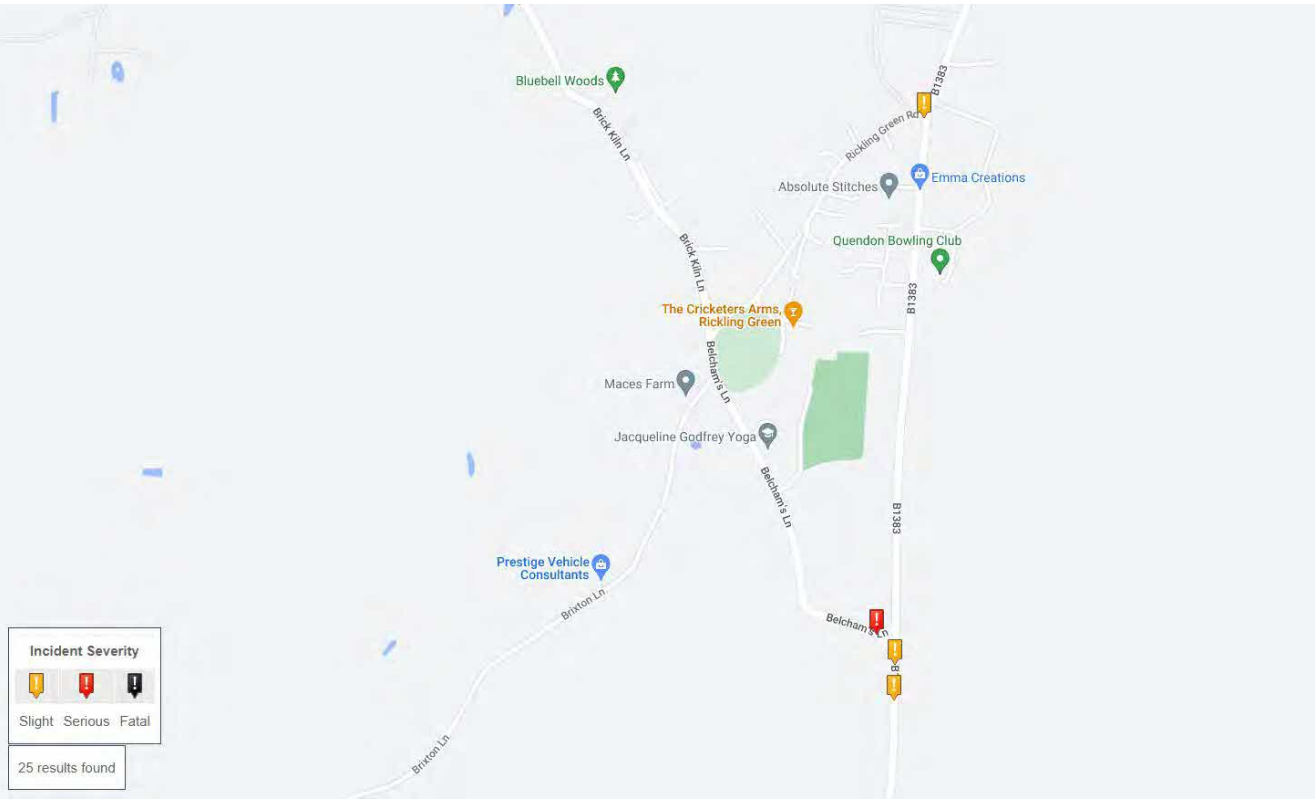


Figure 2.6 Killed and Seriously Injured (KSI) incidents for Quendon 2010-2021, Source: Crashmap

2.9 Planned Improvements

We are not aware of any major development sites or planned transport and highway improvements in and around Rickling Green.

3.0
Policy Context

3.1 Uttlesford Local Plan (2005)

It is understood that a new Uttlesford Local Plan is currently being developed with a consultation draft pending this summer with final adoption scheduled for October 2025.

Policies in the current Uttlesford Local Plan (adopted 2005) that are particularly relevant to the transport aspects of development are: GEN1 Access, GEN8 Vehicle Parking Standards and T1 Transport Improvements.

There are no major transport improvements in the Local Plan that affect Quendon and Rickling Green. The plan specifies a higher car parking quantum for large homes (4 bed and more) than the Essex County Council Parking Standards. The parking applicable standards can be seen in Table 3.1.

Table 3.1 Uttlesford District Parking Standards

Unit Type	1 Bedroom	2 Bedroom	3 Bedroom	4+ Bedroom*
Minimum vehicle parking spaces per dwelling**	1	2	2	3
Minimum unallocated visitor car parking per dwelling	0.25	0.25	0.25	0.25
Minimum cycle parking spaces per dwelling***	1	2	2	2
Minimum unallocated visitor cycle parking***	0.125	0.125	0.125	0.125

* defined by Uttlesford District Council rather than Essex County Council
** garages smaller than 7m x 3m (internal dimension) do not count towards parking standards
*** if garage or secured covered area provided within dwelling then not required

3.2 Uttlesford Design Code (Consultation Draft)

The design code is currently under development with a community update on its progress having taken place in March 2023. The code will seek to encourage high quality development.

3.3 Essex Transport Strategy (2011)

The Essex Transport Strategy's vision is "for a transport system that supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex." This is underpinned by five outcomes:

1. Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration

2. Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology

3. Improve safety on the transport network and enhance and promote a safe travelling environment

4. Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use

5. Provide sustainable access and travel choice for Essex residents to help create sustainable communities

Uttlesford is identified in the strategy as the district with the highest transport-related CO_2 emissions per person of all twelve Essex districts, about twice the national average. Therefore, the strategy aims to promote sustainable travel choices.

Particular priorities for the West of Essex (which includes Uttlesford district) are:

Improving access to and from the M11 corridor;

Tackling congestion and improving the management of traffic in Harlow town centre;

Providing the transport improvements needed to support housing and employment growth;

Improving cycling networks and walking routes and encouraging their greater use;

Improving the attractiveness of public spaces and their ease of use

4.0
Proposed Development

The following development is proposed:

110 new homes

The scheme proposes a mix of 2-4 bedroom semi-detached and terraced houses and a limited number of detached housing, 1-2 bedroom bungalows, and 1-3 bedroom apartments. No larger executive homes.

All to be ‘build to rent’, with management by Pegasi

Sports and play delivering a quantitative and qualitative enhancement on the existing

Introducing additional commercial or community uses by utilising the former agricultural buildings and yard space at Maces Farmyard Buildings immediately west of the Green. Proposals include new purpose-built storage and retail units for the existing Terrace and Gardens business use, flexible community/retail/employment units, and a farm shop and cafe.

Primary access off London Road for the Main Site

A new set of bus stops on London Road and various improvements to the walking and highway infrastructure around the site including a junction improvement

A detailed illustrative masterplan can be found in **Appendix B**.

Figure 4.1 Illustrative Masterplan

5.0
Highway Improvements

5.1 Site Accesses

The Main Site's primary access is to be off the London Road between the two existing laybys and serve about 100 units. The remaining units and the playing field would be served from the existing access road to the west of the proposed development. A simple priority junction is proposed on the London Road with informal pedestrian crossings (dropped kerbs) proposed across the minor arm and the London Road to allow access to the proposed bus stops on either side of the road and the centre of Quendon (see **Figure 13** in **Appendix A**).

Minor improvements to the access arrangement at Maces Farmyard to support operations will also be considered.

5.2 Further Improvements

London Road / Belcham's Lane Junction

To improve safety and visibility, reduce speeds and provide a new gateway to the village, a reconfiguration of the London Road / Belcham's Lane junction is proposed, as a more compact priority junction. A draft sketch of the this can be found in **Figure 14** in **Appendix A**.

New Footways

Figure 12 in **Appendix A** shows the extent of proposed new footways. These include:

- a 2m wide continuation of the footway north of the site on London Road, running southwards on the western side of the road to the Main Site and the new bus stops (either tarmac or pavers);
- a new 2m wide footway (in tarmac or pavers) connecting the southeast corner of the Main Site, across the London Road / Belcham's Lane junction to the existing footway further south, and;
- a new 2m wide footway (tarmac or pavers) on Pegasi's property between the Main Site's north-western corner and the Green, and;
- improvements to the route connecting the above to Maces Farmyard such as resurfacing works and the construction of dropped kerbs.

Speed Limit Changes

It is proposed that speed limits along the site boundary (currently 40 and 50mph) could be reduced as indicated in **Figure 12** in **Appendix A**.

6.0
Trip Generation

6.1 Trip Rates

Trip generation for the proposed development has been estimated using average trip rates from the TRICS database of travel surveys. Sites were selected using the following criteria:

TRICS Categories: 03-A: Residential –Houses Privately Owned

Regions: All England, except London

Location Types: All locations, excluding Town Centres, Edge of Town Centres, Free standing

Number of units: 50-200

Survey Type: Multi-modal

Survey Days: Mon-Fri

Population within 1 Mile: <10,001

Resultant average trip rates for the various residential categories are set out in Table 6.1 below.

Table 6.1 Residential Trip Rates from TRICS

	AM Peak (0800-0900)			Early PM Peak (1500-1600)			PM Peak (1700-1800)			All day (0700-1900)		
Mode	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot
Car Drivers	0.13	0.28	0.41	0.23	0.14	0.37	0.28	0.14	0.42	2.03	2.07	4.09
Car Passengers	0.02	0.15	0.17	0.14	0.05	0.19	0.13	0.05	0.18	0.77	0.78	1.55
Cyclists	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.04	0.04	0.08
Pedestrians	0.04	0.10	0.14	0.12	0.08	0.20	0.05	0.04	0.08	0.58	0.61	1.20
Bus Passengers	0.00	0.03	0.03	0.03	0.01	0.04	0.01	0.00	0.01	0.09	0.10	0.19
Rail Passengers	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.02	0.04
Total People	0.19	0.58	0.77	0.53	0.28	0.81	0.47	0.23	0.70	3.53	3.62	7.14

6.2 Trips Generated

Using the upper estimated development quantum of 110 units, this produces the following trip generation for the site:

Table 6.2 Trips Generated by 110 units

	AM Peak (0800-0900)			Early PM Peak (1500-1600)			PM Peak (1700-1800)			All day (0700-1900)		
Mode	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot	Arr	Dep	Tot
Car Drivers	14	31	45	25	16	41	31	15	46	223	227	450
Car Passengers	2	17	19	15	5	21	14	6	19	84	86	170
Cyclists	0	1	1	1	0	1	0	0	1	5	5	9
Pedestrians	4	11	15	13	8	21	5	4	9	64	67	131
Bus Passengers	0	3	3	3	1	4	1	0	1	10	11	21
Rail Passengers	0	1	1	0	0	0	1	0	1	2	2	4
Total People	21	64	85	58	31	89	52	25	77	388	398	786

Peak hour vehicle trips generated are likely to have the most significant impact on the surrounding highway network. Therefore, the **AM peak and PM peak** vehicular flows will be taken forward for analysis in the Transport Assessment. The modal split of the above trips for the AM + PM peak hours and the daily average are illustrated in Figure 6.1.

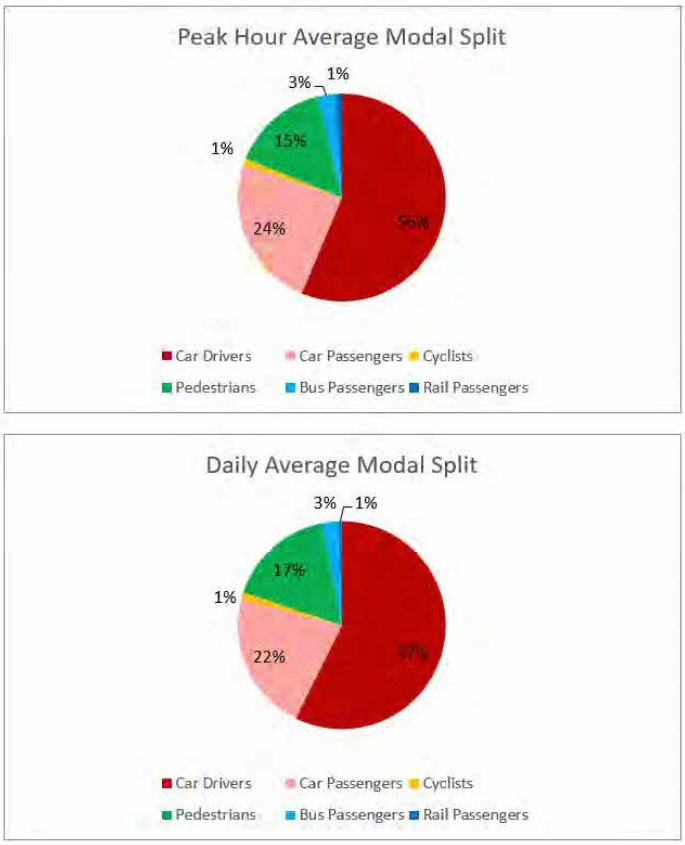


Figure 6.1 AM + PM Peak hour and daily average modal split for the proposed development quantum

When comparing this modal split for the peak hour to that of the travel to work census data (see Chapter 2.2) there are a few noticeable differences. The National Travel Survey suggests only 16% of AM peak hour (0800-0900) trips are for commuting purposes while education escort makes up 26% of trips in that hour[2]. This explains the higher percentage of car passenger and pedestrian trips in the trip generation compared to the census as they are likely to stem from education and education escort trips.

6.3 Trip Distribution and Traffic Impact

For outline planning a full Transport Assessment will be undertaken that could include the following steps:

Establishing existing movement patterns and traffic flows (based on Census travel to work patterns)

Estimate the trip distribution and traffic impact of existing and proposed vehicle trips on the B1383

Assess what transport infrastructure upgrades may be required to mitigate the transport impact of the development (e.g. junction improvements) and how to achieve modal shift

Perform junction modelling for the new site access and the London Road / Belcham's Lane junction

[2] NTS0502: Trip start time by trip purpose

7.0
Next Steps

7.1 Scope of Surveys

For outline planning a number of transport-related surveys will be required. These shall only cover the Main Site off Belcham's Road and Maces Farmyard unless otherwise indicated:

Topographical Survey

Utility Survey

Arboricultural Survey

Traffic Survey (Automatic traffic counts and speed surveys on London Road and Belcham's Lane, manual turning counts at London Road / Belcham's Lane junction)

7.2 Scope of Planning Submittals

The currently assumed transport-related submittals for outline planning are:

Access Parameter Plan

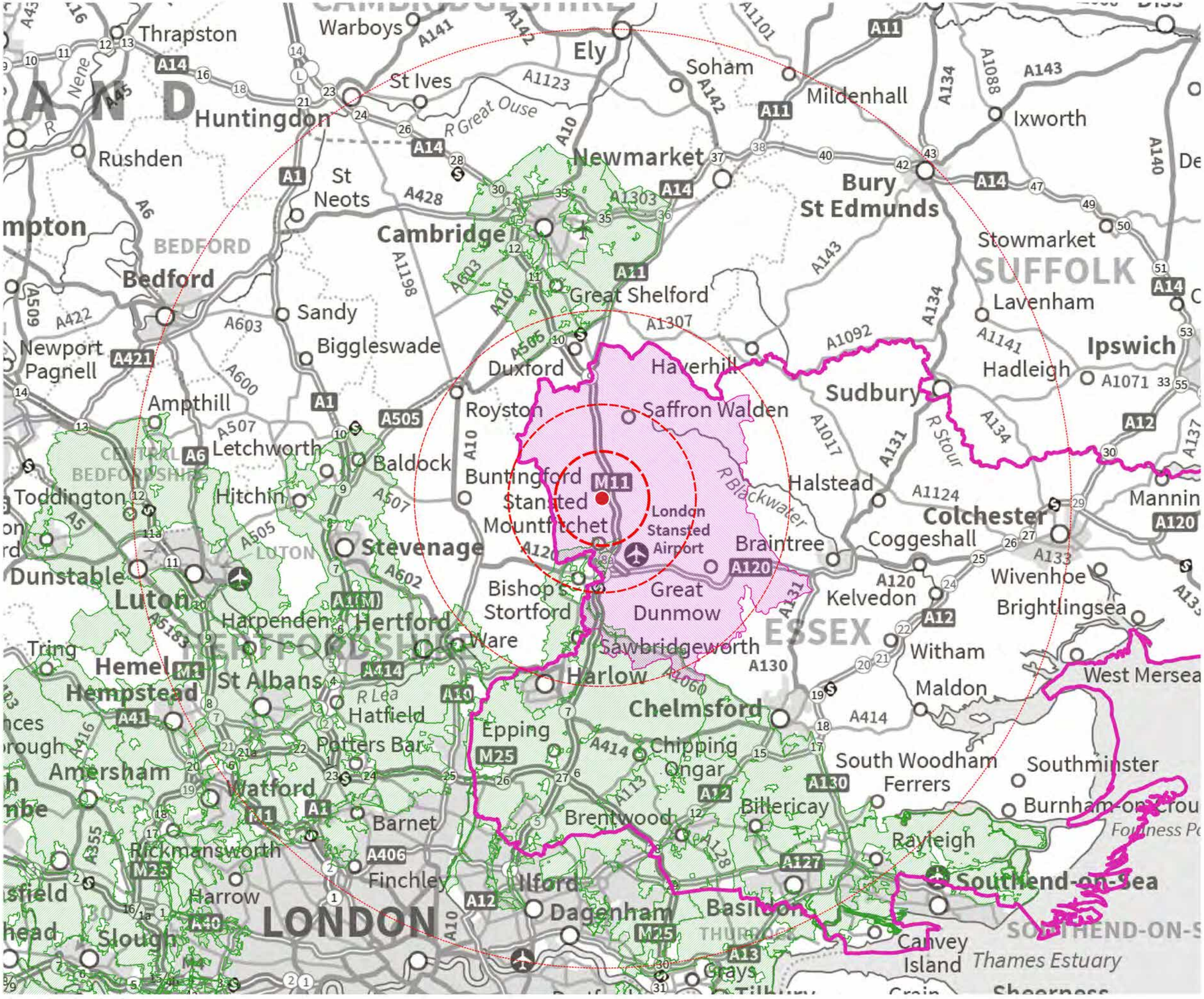
Detailed Access plans (1:500 plans, supported by independent Stage 1 Road Safety Audit) for the following:

- Main Site Access 1 (London Road)
- Main Site Access 2 (Belcham's Lane)
- Maces Farmyard Access (Belcham's Lane)
- London Road / Belcham's Lane Junction

Transport Assessment

Travel Plan

Appendix A
Figures

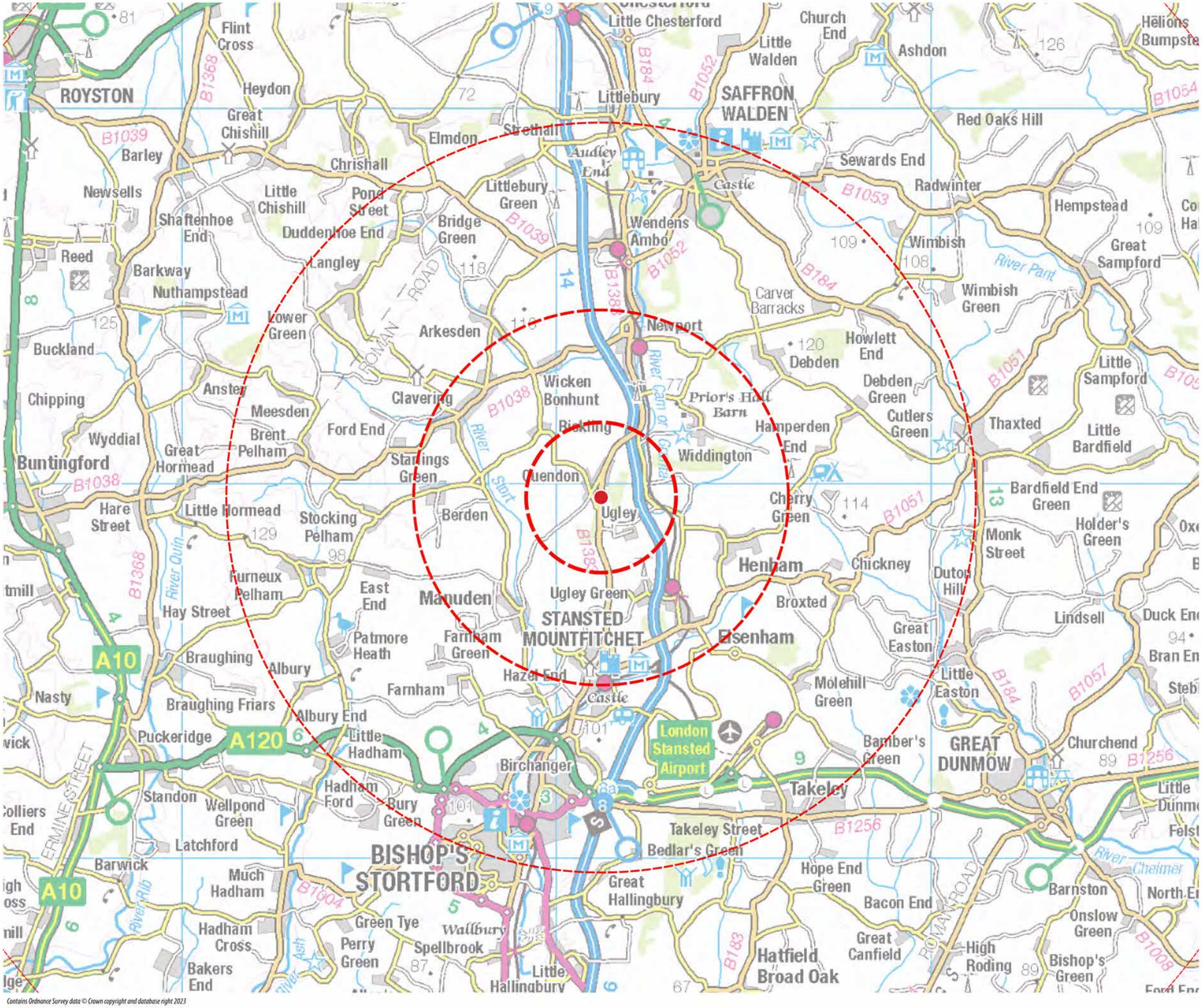


LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 1: STRATEGIC CONTEXT

1797/101/001

APR 2023 | Alan Baxter



N

0 1 2 3 4 5 Km

1:100,000

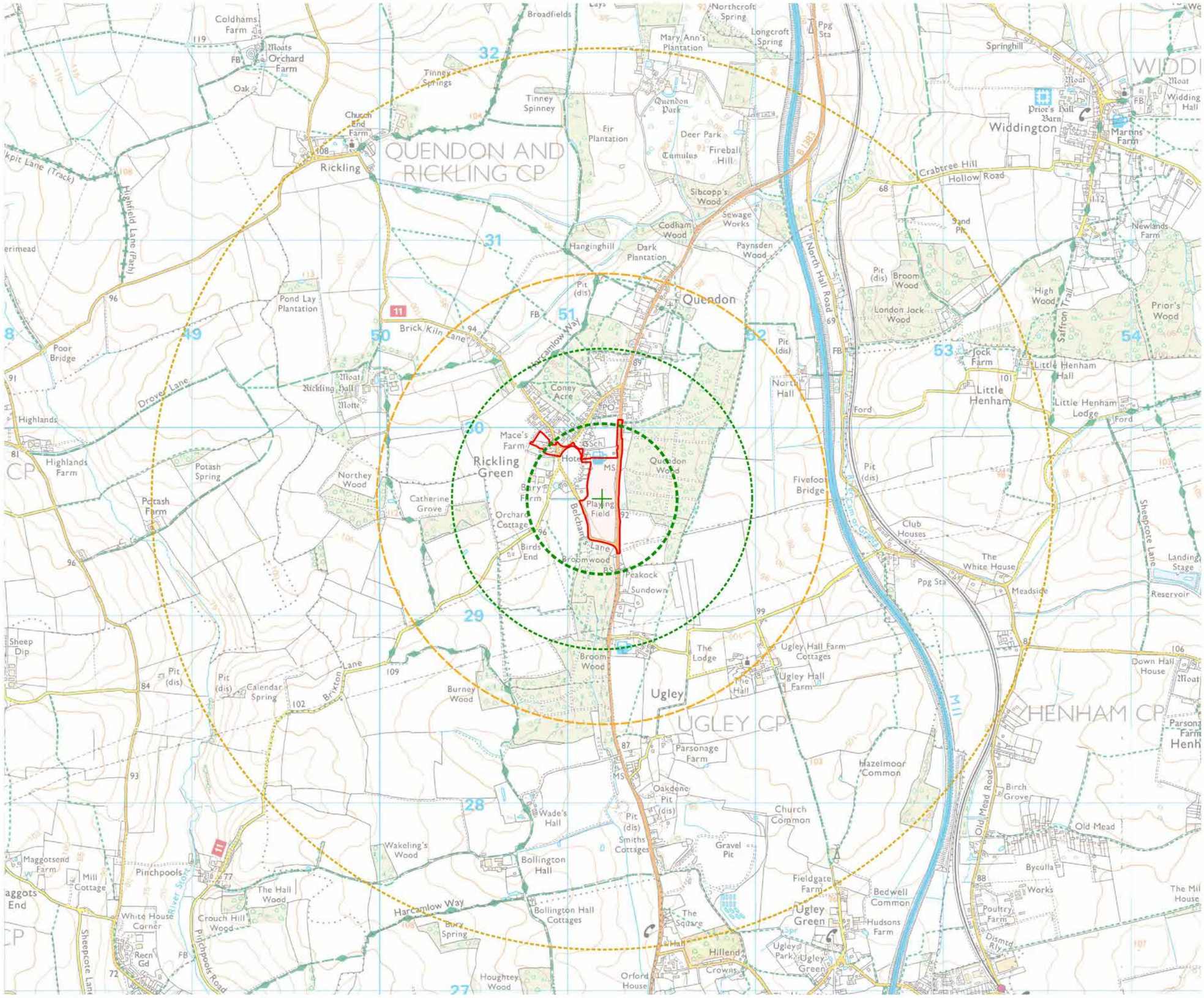
- Site
- 2km
- 5km
- 10km

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 2: DISTRICT CONTEXT

1797/101/002 A

MAY 2023 | Alan Baxter



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N

0 200 400 600 800 1,000 m

1:20,000

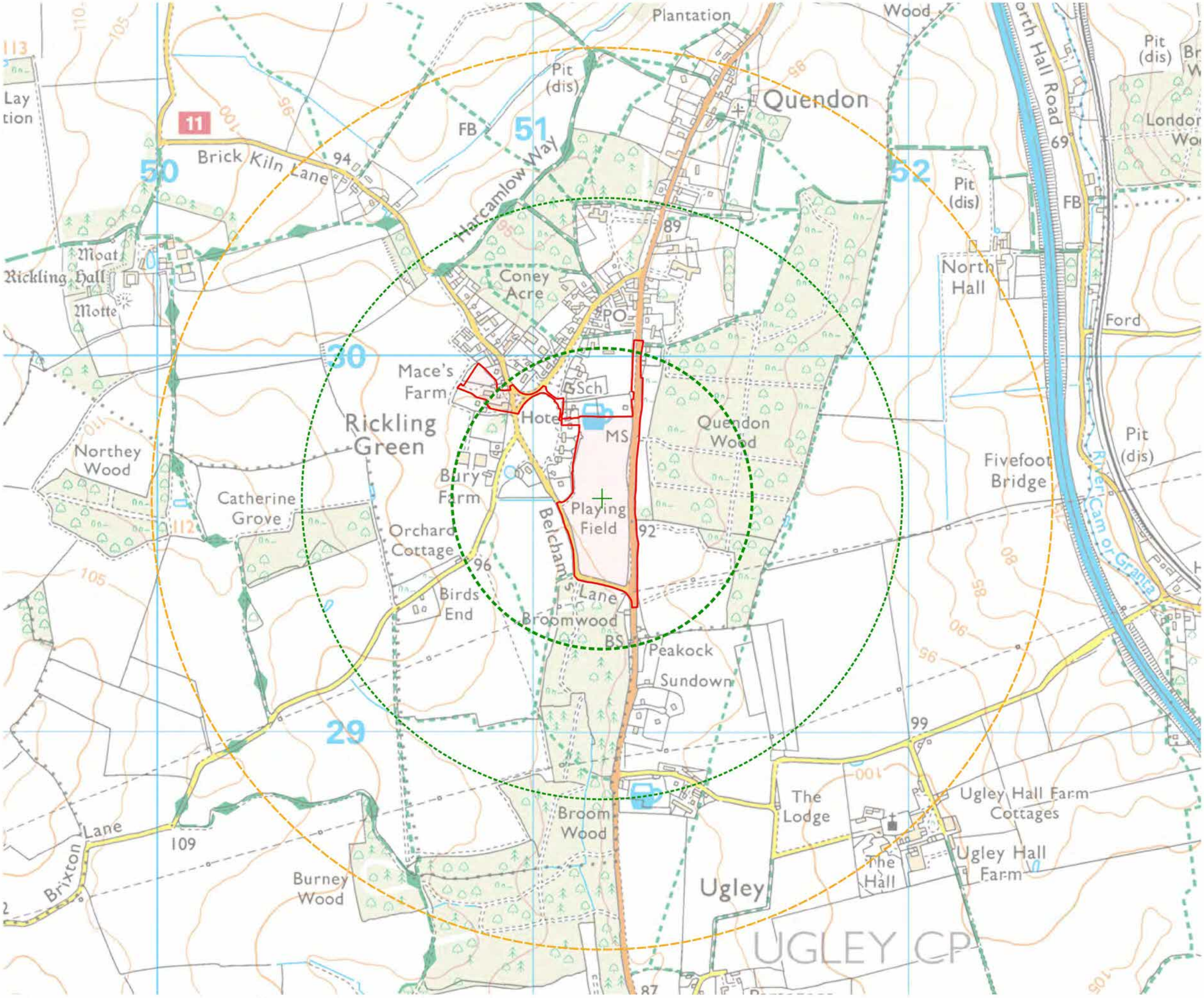
- ABA Red Line v2 copy
- 400m / 5min walk
- 800m / 10min walk
- 1200m / 15min walk / 5min cycle
- 2400 / 30min walk / 10min cycle

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 3: LOCAL CONTEXT

1797/101/003 B

JUNE 2023 | Alan Baxter



LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 4: SITE CONTEXT

1797/101/004 B

JUNE 2023

Alan Baxter

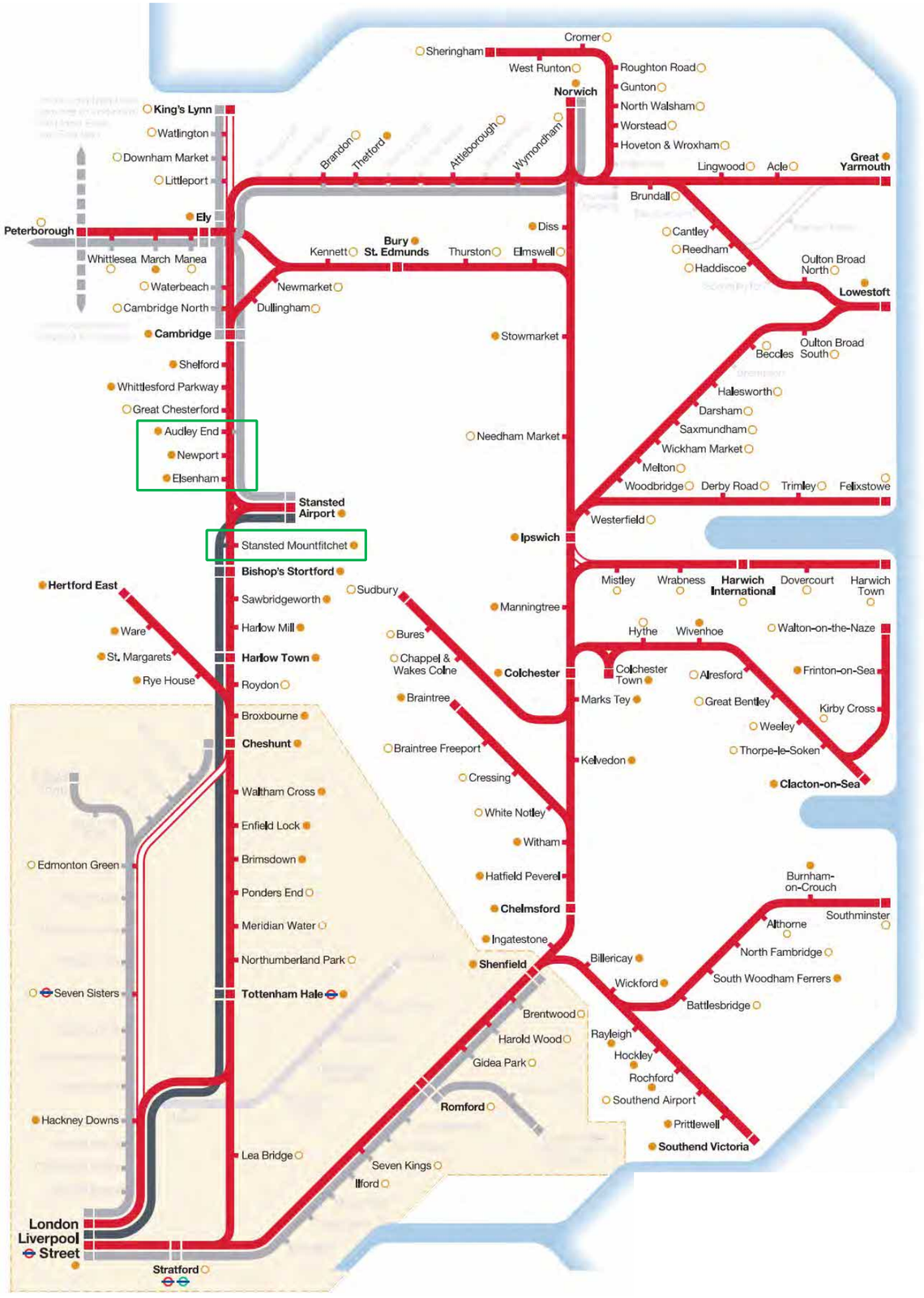
LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 5: RED LINE BOUNDARY

1797/101/005 B

JUNE 2023

Alan Baxter



Greater Anglia route

Greater Anglia limited service route

Greater Anglia Sunday service only

Greater Anglia limited service

Stansted Express route

Other operators route

East Coast route

London Underground interchange

Docklands Light Railway interchange

Airport interchange

Ferry service interchange

Smart Card Season Tickets available for use, collection and purchase at the station ticket office.

Smart Card Season Tickets available for use and collection.

London and Travelcard Area. Travelcards on Smart can be used in this area. For journeys wholly within this area use contactless or Oyster Pay As You Go.

Local Stations

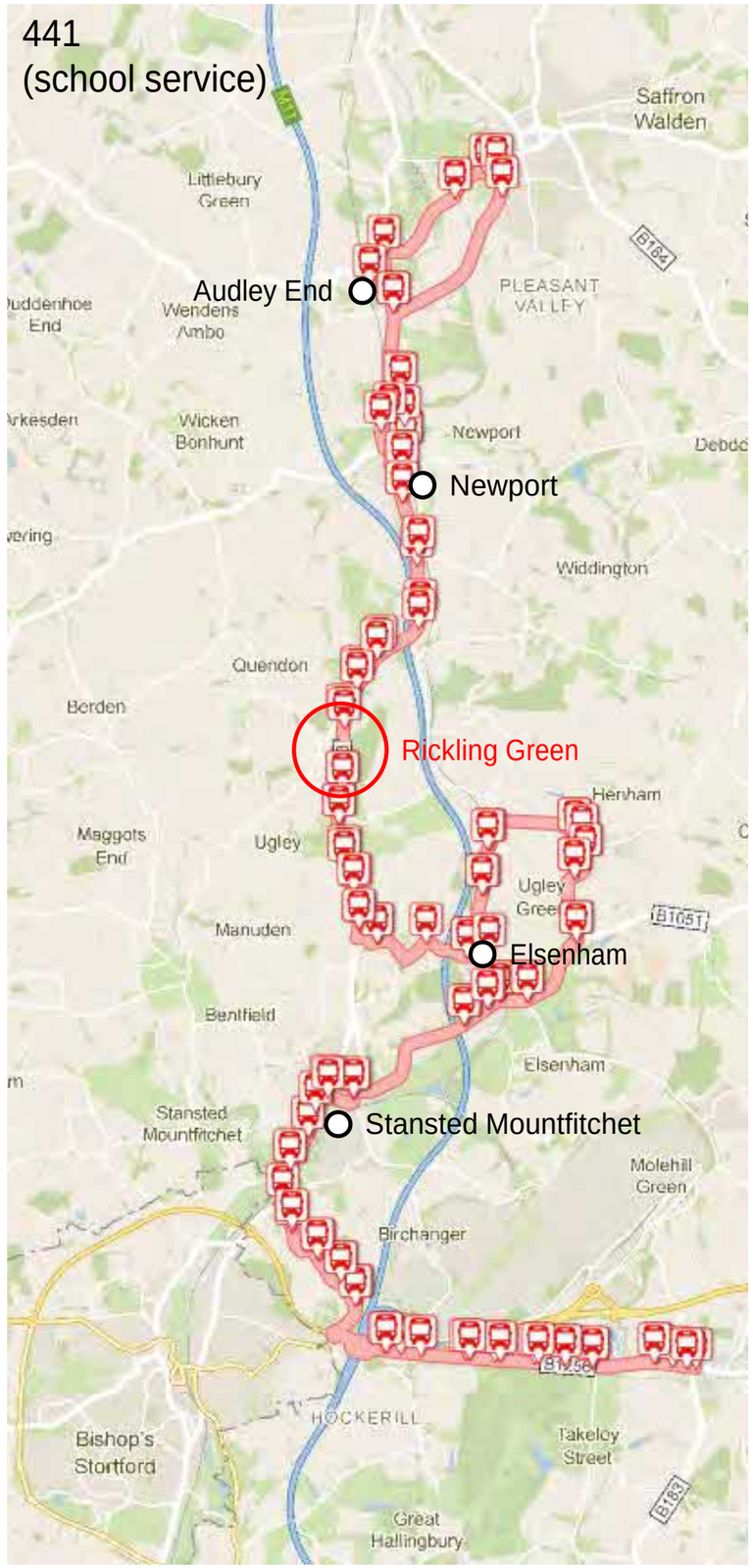
Source: www.greateranglia.co.uk

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 6: RAIL ROUTES

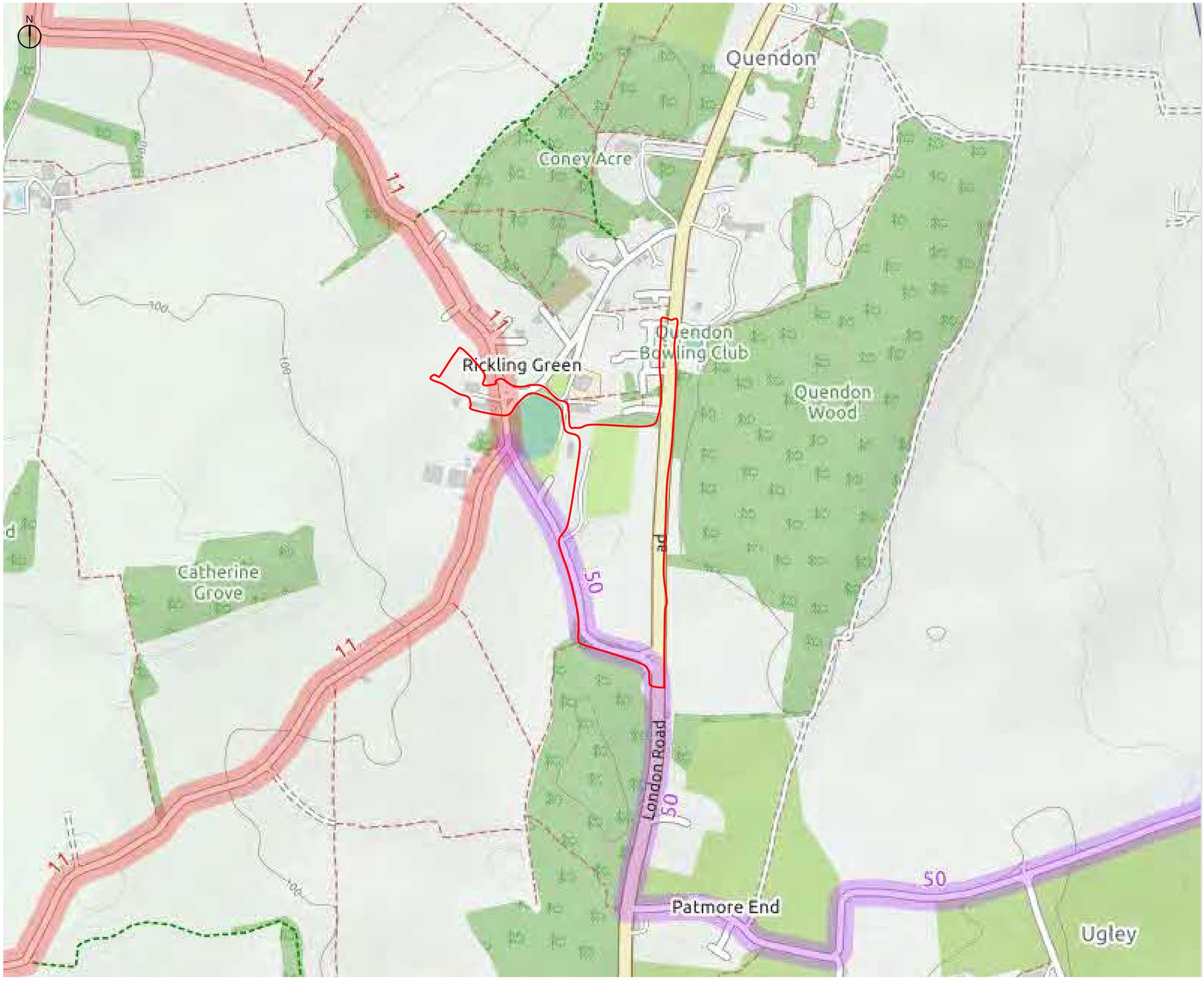
1797/101

MAY 2023 | Alan Baxter



Source: www.essexbus.info

LAND OFF BELCHAM'S LANE RICKLING GREEN	
FIGURE 7: BUS ROUTES	
1797/101	
JUNE 2023	Alan Baxter



National Cycle Route

Regional Cycle Route

Local Cycle Route

National Node Network

Regional Node Network

Local Node Network

Cyclepath

Footpath (no cycling)

Source: opencyclemap.org

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 8: CYCLE ROUTES

1797/101

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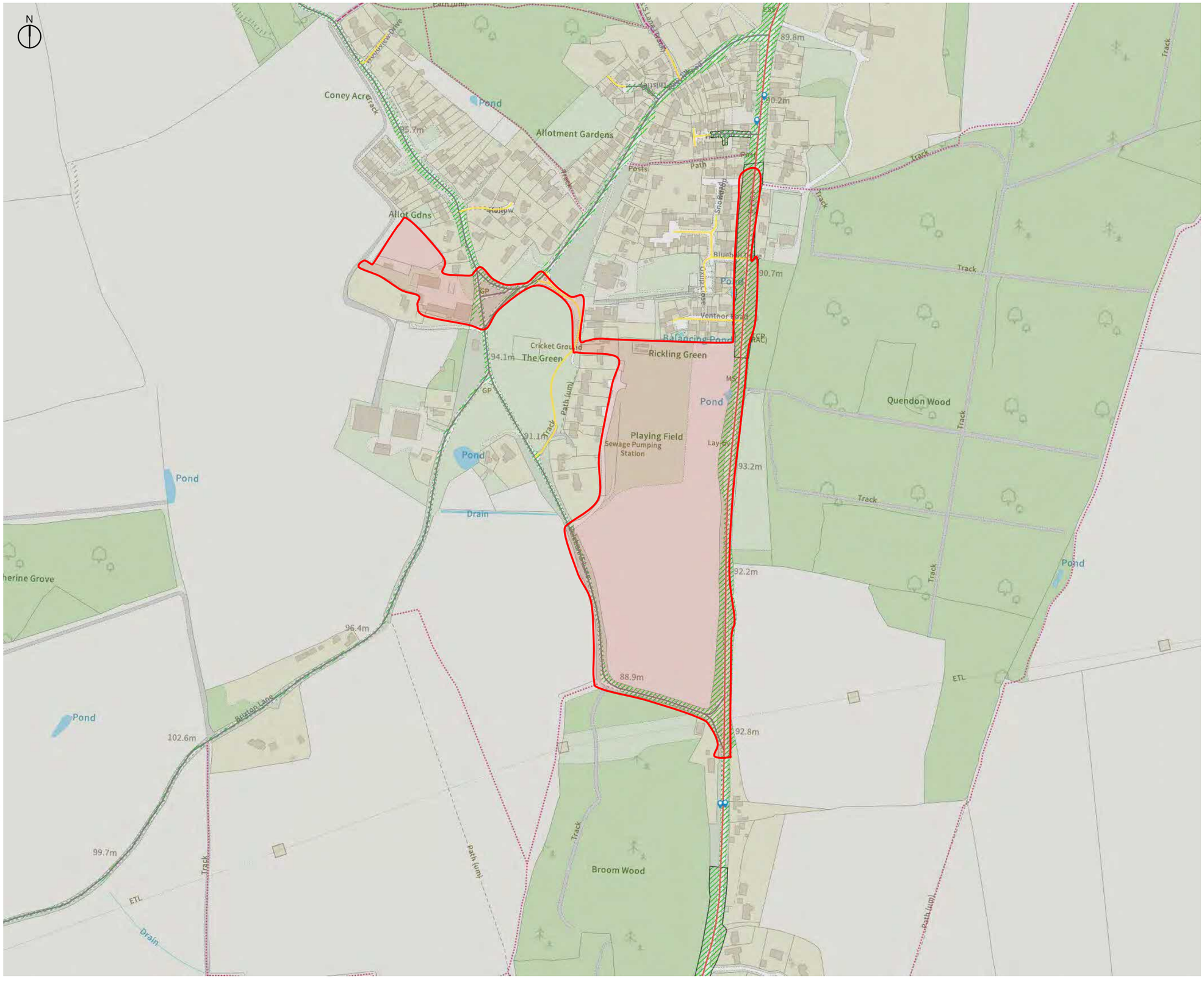

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Bus stops

Highway & Footway network

- PR1 Road
- PR2 Road
- Local Road
- Remote Footway
- Private Road
- Private Remote Footway
- PRoW Footpath
- PRoW Bridleway
- PRoW Byway
- National Highways Road
- DBFO CountyRoute

Highway record

- Maintained / Unconfirmed Extent
- Maintained / Confirmed Extent
- Not Maintained / Unconfirmed Extent
- Not Maintained / Confirmed Extent

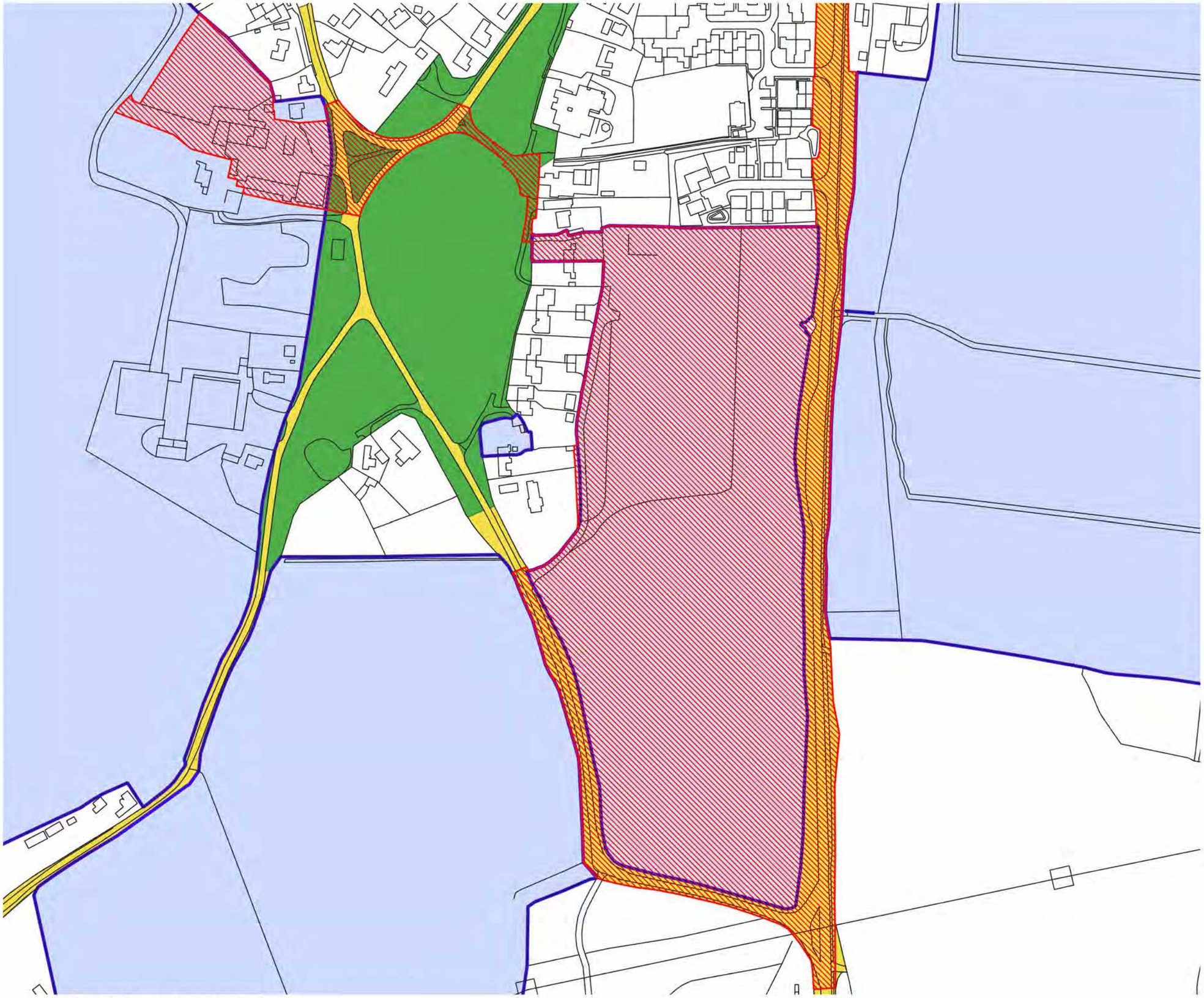
Source: www.essexhighways.org/interactive-maps-and-live-travel-information/highways-information-map

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 9: ADOPTED HIGHWAYS AND PUBLIC RIGHTS OF WAY

1797/101

JUNE 2023 | Alan Baxter



N

0 20 40 60 80 100 m

1:2,500

Red Line Boundary
Pegasi Ltd Land
Common Land*
Highway Boundary*

*Highway boundary and Common Land extent assumed in some areas; full extent to be confirmed.

LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 10: LAND OWNERSHIP

1797/101/010A

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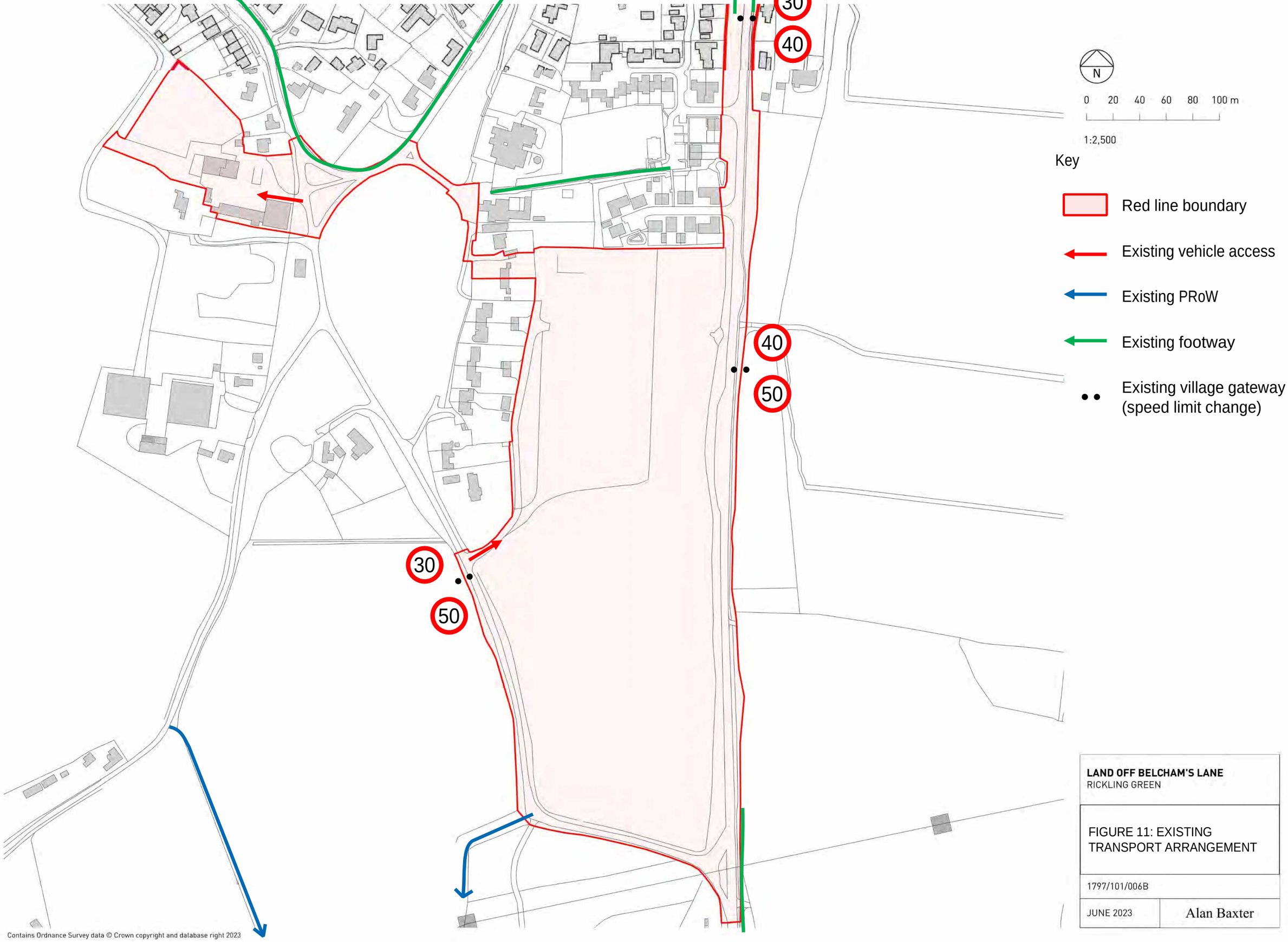


LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 11: EXISTING TRANSPORT ARRANGEMENT

1797/101/006B

JUNE 2023 | Alan Baxter

N

0 20 40 60 80 100 m

1:2,500

Key

- Red line boundary
- Existing vehicle access
- Existing PRoW
- Existing footway
- Proposed vehicle access
- Proposed bus stops (using existing layby)
- Proposed footway (paved)
- Improved pedestrian route
- Proposed village gateway (speed limit change)
- Proposedjunction redesign
- Proposed development parcels

30
40
30
40
40
50

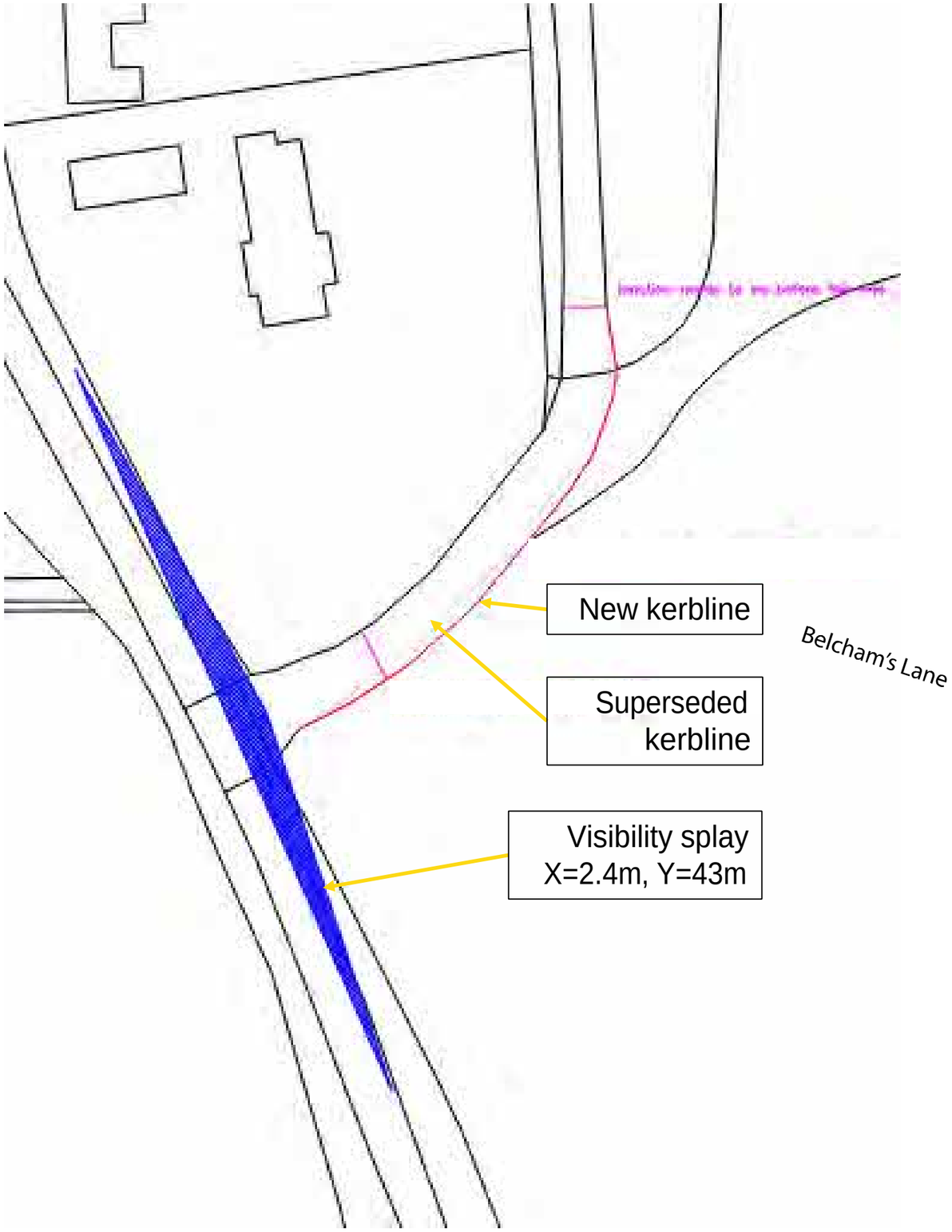
LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 12: PROPOSED TRANSPORT ARRANGEMENT

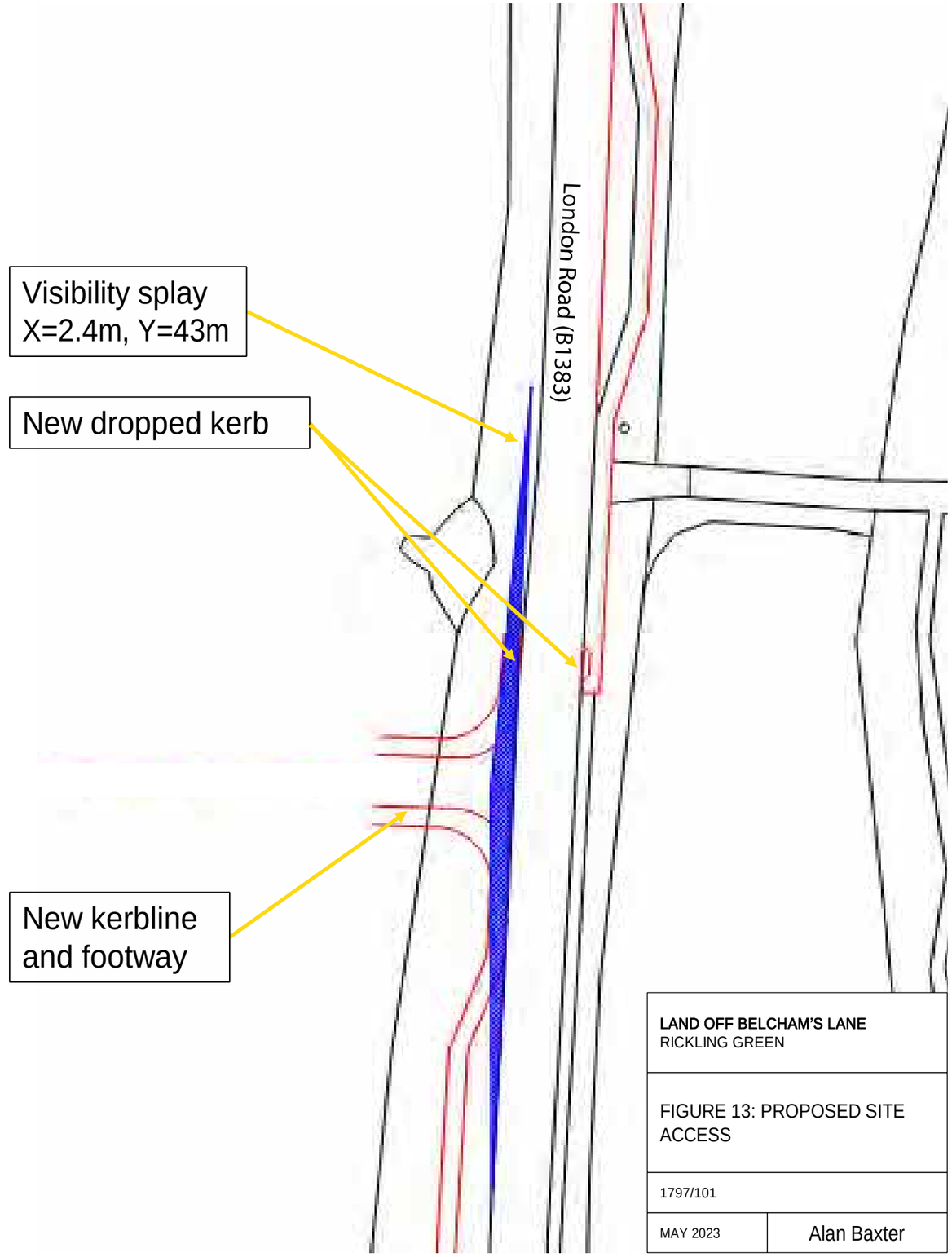
1797/101/006B

JUNE 2023 | Alan Baxter

Belcham's Lane Access



London Road Access



LAND OFF BELCHAM'S LANE
RICKLING GREEN

FIGURE 13: PROPOSED SITE ACCESS

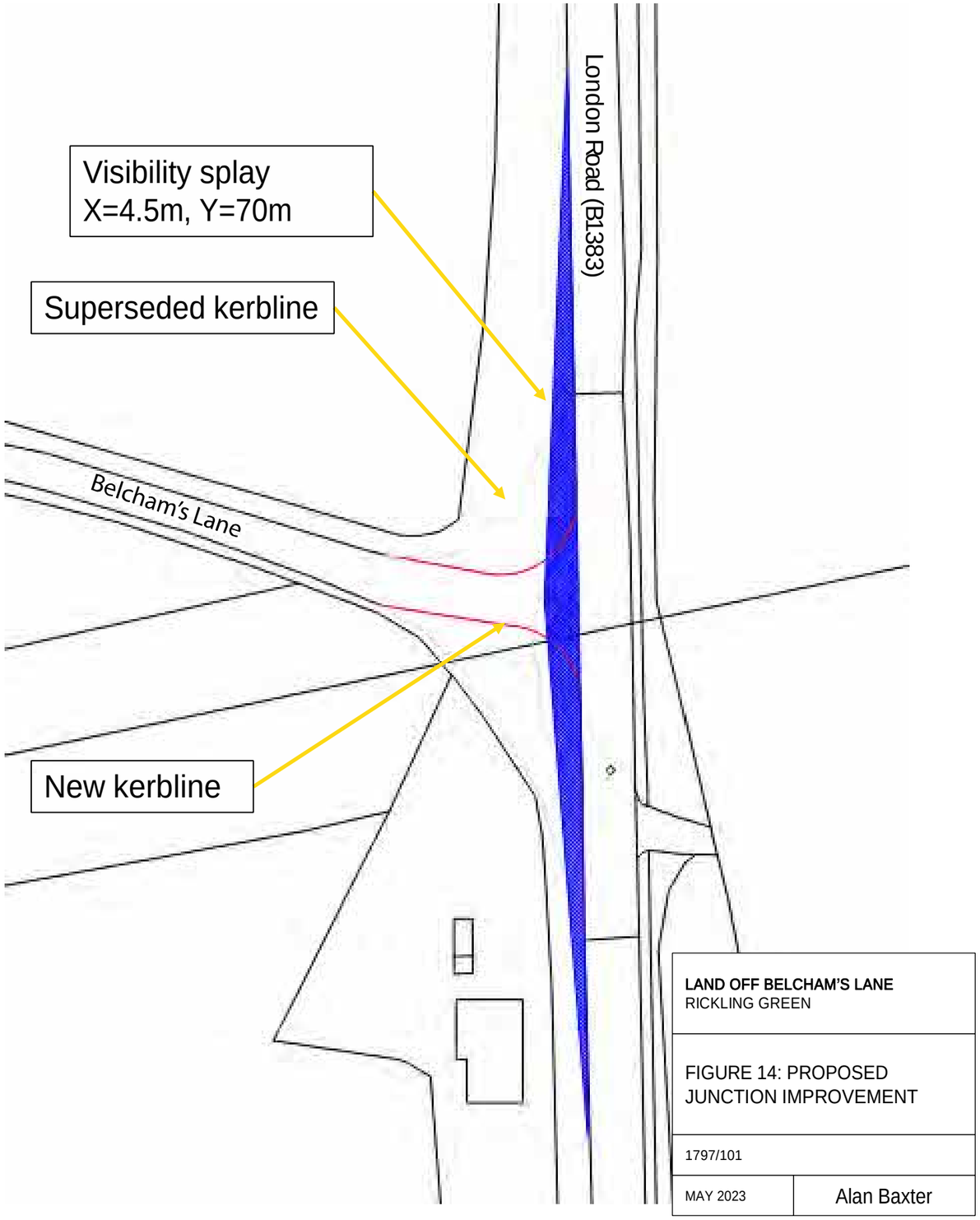
1797/101

MAY 2023 | Alan Baxter

LondonRoad / Belcham’s Road Junction Improvement

Belcham’s Lane looking east

B1383 south of junction, looking north



Appendix B
Illustrative Masterplan

RICKLING GREEN

OVERALL ILLUSTRATIVE MASTERPLAN

1797/102 Rev B	1:4000 @ A3
AUGUST 2023	Alan Baxter

RICKLING GREEN
BELCHAM'S LANE

MAIN SITE MASTERPLAN

1797/102 Rev B	1:2000 @ A3
AUGUST 2023	Alan Baxter

Planning application boundary

Existing building footprint

Retained and renovated Grade II Listed Building

New building Community / retail / employment (approx. GEA 500m²)

New storage barn for Terrace & Gardens (approx. 390m²)

Site access

RICKLING GREEN
MACES FARMYARD

CONCEPT PLAN

1797/102 Rev B	1:2000 @ A3
AUGUST 2023	Alan Baxter

Alan Baxter

Prepared by	SHs
Reviewed by	TWm
Issued	29.08.2023

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APPENDIX 6

PEA, PRA, Maces Farmyard

Preliminary Ecological Appraisal

Land North East of Belchamp Lane, Rickling Green, CB11 3YG

Pegasi Property Management

Status	Issue	Name	Date
Draft	1	George Collier-Smith Msci (Hons), Consultant Ecologist	04/05/2023
Final	2	George Collier-Smith Msci (Hons), Consultant Ecologist	09/05/2023

Arbtech Consultant's Contact Details:

George Collier-Smith
Consultant Ecologist
Tel: 07706 320 940 **Email:** georgecs@arbtech.co.uk
https://arbtech.co.uk

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity –Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

> The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.
>
> The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.
>
> (BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Pegasi Property Management to undertake a Preliminary Ecological Appraisal (PEA) at Land North East of Belchamp Lane, Rickling Green, CB11 3YG (hereafter referred to as "the site"). The survey was required to inform a planning application for a new residential development comprising approximately 120 new dwellings with associated recreational facilities (hereafter referred to as "the proposed development").

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 6 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	There are two statutory sites within 2km of the site, the closest being Quendon Wood SSSI located 50m from the site. The site lies within the impact risk zone for Quendon Wood SSSI and the proposed development type is listed as a possible high risk for this designation. There are 7 non-statutory sites within 2km of the site, the closest being Burney Woods located 50m from the site.	No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to Quendon Wood SSSI and the nature of the proposed development could result in increased recreational pressure to nearby areas.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Natural England will need to be consulted on the potential impacts to Quendon Wood SSSI.
Habitats and flora	The site contains native hedgerows which is listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Further notable habitats are present within 2km. Other habitats within the site are common and widespread and have low ecological value. No protected or notable plant species were recorded during the survey.	The proposed development will result in the loss of the arable land and the redevelopment of the grassland in the northern half of the site. A small section of the eaten hedgerow will be removed to create a new access point. The pond will also be retained. The loss of the small section of hedgerow is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and hedgerows should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: • Replacement hedgerow planting to compensate for the loss of the section of eastern hedgerow. This should comprise native species.

Roosting bats	Both buildings in the north western corner of the site were assessed to provide negligible value to roosting bats. The blackthorn tree along the northern boundary of the site was assessed to provide moderate value to roosting bats owing to the cracks in the bark which extend into the trunk of the tree.	The proposed development could result in the felling of the tree along the northern boundary. This could result in destruction of any bat roosts present and could cause disturbance, death or injury to bats.	A close-up endoscope inspection of any features that could be used by roosting bats will be undertaken to determine the suitability of the features and to establish presence or likely absence of roosting bats. This may require a qualified climbing team or a Mobile Elevated Work Platform (MEWP) to access the features. There is no seasonal constraint to this type of survey. If bat roosts are confirmed in the tree or where features cannot be fully inspected or access to the tree is impeded, bat emergence or re-entry surveys may be required with the use of infra-red cameras as an aid. If bat roosts are confirmed an EPSL application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.
Foraging and commuting bats	Hedgerows and tree lines could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will result in the loss of small areas of the eastern boundary hedgerow but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development.
Badger	No badger activity was recorded on or within 30m of the site and the site has limited value for sett excavation. Due to the rural setting of the site and highly mobile nature of badgers, their future presence on site cannot be discounted.	No works will be undertaken within 30m of a badger sett. Arable land and managed grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.	A precautionary working method will be implemented during construction.

Hedgehog	The hedgerows provide suitable refuge opportunities; with the wider site providing foraging and commuting opportunities. Due to the mobile nature of hedgehogs their presence on site cannot be discounted.	Arable land and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.
Birds	The hedgerows and trees on site provide suitable nesting opportunities.	A single tree along the northern boundary, and a section of hedgerow will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Tree and hedgerow removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the tree and hedgerow should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.

Contents

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Pegasi Property Management to undertake a Preliminary Ecological Appraisal (PEA) at Land North East of Belchamp Lane, Rickling Green, CB11 3YG (hereafter referred to as "the site"). The survey was required to inform a planning application for a new residential development comprising approximately 120 new dwellings with associated recreational facilities (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in Appendix 1.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author's knowledge, by any other consultancy.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference TL 5129 1966 and has an area of approximately 7.0ha comprising a plot of arable land and a playing field. The site is bordered by hedgerows and mature trees. A residential estate is located to the north of the site, whilst the immediate landscape contains arable land and managed grassland. Quendon wood is located to the east and is separated from the site by the B183. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

This report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation. To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a review of the magic.gov.uk database for statutory designated sites within a 2km radius of the site. Landscape value and the presence of notable habitats as well as granted European Protected Species Licence (EPSL) and notable species records held on magic.gov.uk database has also been considered where these are within influencing distance of the site.

Existing biological records including notable species and non-statutory designated sites within a 2km radius were obtained from Essex Field Club.

2.2 Field Survey

The survey was undertaken by George Collier-Smith on 25/04/2023.

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

Ponds on and adjacent to the site were assessed for their suitability to support great crested newts using the *Habitat Suitability Index (HSI) Assessment Methodology* (Oldham et al, 2000).

A visual inspection of the trees on the site was undertaken from ground level using binoculars and, where accessible and safe to do so, an internal inspection of any features which bats could use for roosting was completed using an endoscope, torch and ladders. Trees were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a tree that are correlated with use by bats

Classification	Feature of tree and its context
Moderate to high (Difficult to separate moderate or high value trees from ground level without a close up inspection)	A 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. Trees with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential to be used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators.
Negligible	Unsuitable for use by bats.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape and the ecology and biology of species as currently understood.

The ground level tree assessment was undertaken in summer when foliage was present on the trees and this obscured visibility in places.

Two buildings were located in the north western corner of the site and could not be accessed due to health and safety concerns. Due to their construction and poor condition, this is not considered to be a significant limitation to the survey.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory and non-statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 2 below.

The site lies within the impact risk zone for Quendon Wood SSSI. The proposed development exceeds 50 new residential units and is therefore listed as a possible high risk with regard to this designation.

Table 2: Statutory and non-statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural England and Essex Field Club
Quendon Wood SSSI	50m east	Quendon Wood is an ancient coppice-with-standards woodland supporting an unusually rich and varied flora associated with a range of soil types. The Pedunculate Oak-Hornbeam woodland includes both the rare Birch-Hazel variant and the Ash-Maple variant, developed over Chalky Boulder Clay and glacial gravels
Halls Quarry SSSI	1500m southeast	Halls Quarry provides excellent exposures in Pleistocene glacial gravels, silts and till deposits related to the Anglian glaciation. The gravels are unusually rich in non-durable, local and far travelled material, which indicates that they are of ice-proximal type (i.e. deposited at no great distance from the limits of the Anglian ice sheet). They provide a rare opportunity to observe the types of material carried into the London area by this glaciation, as well as various features of sedimentary origin. This site is extremely important for the study of the Anglian glaciation and its associated deposits
Non-statutory designated sites		
Brom/burney woods LWS	50m south	
Coney Acre LWS	350m north	
Catherine Grove LWS	500m west	
Northey Wood LWS	1000m west	
London Jock Wood LWS	1700m north east	
Paynsden Wood LWS	1700m north east	
Quendon Park LWS	1900m north	

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 3.

Table 3: Weather conditions during the survey

Date:	25/ 04/2023
Temperature	14°C
Humidity	72%
Cloud Cove	20%
Wind	9mph
Rain	None

Habitats and Flora

The following habitats are present within and adjacent to the site:

- Buildings u1b5
- Arable land c1
- Modified grassland, with ruderal vegetation and scattered trees g4 17
- Native hedgerows h2a
- Non-native hedgerow h2b
- Pond r1
- Tree line w1g6

A description and photograph of each habitat is provided in Table 4.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 4: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
Buildings	There are two buildings located in the north-western corner of the site. They could not be assessed due to health and safety concerns but were viewed with binoculars from the erected fencing. Both buildings comprise the same structure; they are single storey timber outbuildings with flat roofs. They are single lined, and both in a poor overall condition. As such, the paint is peeling off the exterior and there are no retained windows and doors. Both of the roofs are fit with bitumen felt, which is frayed along the edges of the roof in numerous places however no suitable crevices or gaps for roosting were noted. There were no cracks or gaps in the exterior timber panelling either. No interior inspection could be undertaken. However, due to the lack of doors and windows the interior will likely be liable to frequent temperature and humidity changes which lowers its suitability for roosting.	
Arable land	Arable land comprises the southern half of the site. At the time of the survey the land was wet, and the crops were at a short length.	

Modified grassland with ruderal vegetation	The grassland directly east of the playing field, and in the north western corner of the site features a slightly longer sward due to a lack of regular management. Species diversity was still noted to be minimal owing to the dominating perennial species. Species identified in the eastern grassland included perennial rye (D) and cats ear (F). Species identified included in the western area of the site included Perennial rye (D), false oat (F), common nettle (F), sorrel (O) and sedge grass (R).	 

Modified grassland (playing field)	A playing field is located centrally in the northern half of the site. It features a retained short sward and limited structural diversity as a result of intensive and frequent management. Species identified included perennial rye (D), red fescue (F), dandelion (F), and daisy (O).	
Native hedgerows	Native hedgerows are present along the eastern boundary of the site, and along the southern half of the western boundary. Both hedgerows feature mature trees, and appear to be in a good overall condition. There are gaps present in the western hedgerow. Species identified in the western hedgerow included birch, hawthorn, sycamore, blackthorn, hazel and oak. Species identified in the eastern hedgerows were birch, hawthorn, blackthorn, holly, oak and sycamore. Both hedgerows were assessed to see if they had roosting value for bats. No trees with roosting features were noted. Both hedgerows comprise native species and therefore represent S41 habitats of principle importance.	

		
Non-native hedgerows	A large cherry laurel hedgerows is located in the north western corner of the site. It is in a good overall condition, and doesn't appear to have any regular management or maintenance.	

Pond	A pond is present along the eastern boundary of the site. At the time of the survey it was dry, and no water was present. The pond is surrounded by the boundary hedgerow, and bramble scrub and ephemeral vegetation in the form of cleavers and nettles are present around the banks. The pond is not connected to any other bodies of water. The pond was subjected to a HSI assessment which is found in table 5.	
Tree lines	Mature tree lines are present along the southern and western boundaries of the site. Both tree lines comprise mature trees that all appear to be in a good structural condition, and no roosting features were noted. The southern tree line consisted of Ash, Oak and Maple. The western tree line comprises sycamore, ash and lime.	

Scattered trees	Two scattered trees are present along the northern boundary of the site; a mature oak tree and a black thorn tree. The oak tree appears to be in a good overall condition and no features were noted. However, the blackthorn tree was seen to have numerous cracks in the bark which extend into the trunk of the tree.	

Fauna

A search of the magic database returned one granted EPSL within 2km of the site. The license is located approximately 15m north of the site, and the species impacted was bats. The license allowed for the impacts upon a breeding site, destruction of a breeding site and destruction of a resting place of common pipistrelles and brown long eared bats.
An assessment of the suitability of the site for protected or notable species is provided in Table 5.

Table 5: Assessment of the suitability of the site for protected or notable species

<table>
<tr><th>Species</th><th>Assessment of suitability</th><th>Biological records data</th></tr>
<tr><td>Amphibians</td><td>There is one pond located on site; its value to support great crested newts is outlined below.
Table 7a: HSI calculation of ponds.
<table>
<tr><th>SI Description</th><th>SI Value P1</th></tr>
<tr><td>Geographic location</td><td>1</td></tr>
<tr><td>Pond Area</td><td>0.2</td></tr>
<tr><td>Pond Permanence</td><td>0.1</td></tr>
<tr><td>Water Quality</td><td>0.33</td></tr>
<tr><td>Shade</td><td>1</td></tr>
<tr><td>Waterfowl Effect</td><td>1</td></tr>
<tr><td>Fish Presence</td><td>1</td></tr>
<tr><td>Pond Density</td><td>0.4</td></tr>
<tr><td>Terrestrial Habitat</td><td>0.33</td></tr>
<tr><td>Macrophyte Cover</td><td>0.3</td></tr>
<tr><td>HSI Score</td><td>0.4</td></tr>
<tr><td>HSI Category</td><td>Poor</td></tr>
</table>
Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). A review of aerial imagery indicates the presence of four ponds within 500m of the site. The closest pond is located approximately 50m to the north of the site and is found within the boundary of a residential plot and therefore was not accessible. The other ponds are located approximately 165m west, 350m north west, and 400m east . All of the ponds are separated from the site by urban and agricultural infrastructure including tarmac roads, buildings, and</td><td>No records indicating the presence of Great crested newts were returned in the data search.</td></tr>
</table>

	extensive managed grassland, which is either grazed or regularly mown resulting in a short sward length and arable land. These landscape features are suboptimal for great crested newts due to a lack of refuge from predation. As a result and given the distance of these ponds from the site, these landscape features are likely to represent a significant barrier to dispersal eliminating connectivity to the site for great crested newts. The hedgerows, and grassland provide limited terrestrial opportunities on site due to the refuge they provide from predation. However, due to the lack of suitable breeding habitat on site and with connectivity the presence of great crested newts on site is considered to be highly unlikely.	
Reptiles	Whilst the hedgerows provide some terrestrial value for reptiles, the site is dominated by arable land and short sward grassland which is considered unsuitable habitat owing to the lack of vegetation and absence of refuge opportunities. Connectivity to more suitable habitats, such as high quality scrub and grassland is poor. This and the dominating suboptimal terrestrial habitat within the site suggest that the presence of reptiles is highly unlikely.	No records were returned indicating the presence of rare and notable reptiles species.
Badgers	No badger activity was recorded on site. Furthermore, no setts were recorded within 30m of the site boundaries. The site provides limited sett building opportunities for badgers due to the flat terrain. The site provides suitable foraging opportunities for badgers, and the nearby woodland located to the east of the site is likely to provide more suitable opportunities for badgers. Due to the rural setting of the site and highly mobile nature of badgers, their future presence cannot be discounted.	No records indicating the presence of badgers were returned in the datasearch.
Bats	No roosting features were noted on either of the buildings located on site. The blackthorn tree located along the northern boundary of the site was assessed to provide moderate value for bats owing to the bark cracks present.	Four records indicating the presence of four different bat species were returned in the datasearch. Species included were Western barbastelle, Common and Soprano pipistrelle and Brown long eared bat.
Hazel Dormouse	The boundary hedgerows were assessed to provide suitable opportunities for dormice. Dormice typically utilise a three dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation; there are no habitats on site which provide this. Furthermore, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright et al. 1994). Woodland of this size is not located on site and is absent in the local landscape. As such, the presence of dormice on site is considered highly unlikely.	No records for dormice were returned.
Hedgehog	The hedgerows and grassland on site provide suitable terrestrial and refuge opportunities for hedgehogs. Due to the rural setting of the site and mobile nature of hedgehogs, their presence on site cannot be discounted.	No records were returned for hedgehogs.

Otter and Water Vole	No suitable riparian habitat present.	No records returned.
Birds	Trees and hedgerows on site are assessed to provide suitable opportunities for nesting birds. Due to the type and extent of habitats recorded, the site is not considered suitable to support a significant assemblage of protected and/or notable bird species.	Numerous records indicating the presence of notable and protected bird species were returned in the datasearch. Species included Skylark, Buzzard, Peregrine and Kestrel.
Invertebrates	Habitats on site are considered suitable to support an invertebrate assemblage that is common and widespread only.	Numerous records indicating the presence of notable and protected invertebrates were returned, such as White-letter hairstreak, Cinnabar moth, Painted lady and Red admiral.

4.0 Conclusions, Impacts and Recommendations

Taking the desk study and field survey results into account, Table 6 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise a new residential development comprising approximately 120 new dwellings with associated recreational facilities.

Table 6: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities[1]
Designated sites	There are two statutory sites within 2km of the site, the closest being Quendon Wood SSSI located 50m from the site. The site lies within the impact risk zone for Quendon Wood SSSI and the proposed development type is listed as a possible high risk for this designation. There are 7 non-statutory sites within 2km of the site, the closest being Burney Woods located 50m from the site.	No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to Quendon Wood SSSI and the nature of the proposed development could result in increased recreational pressure to nearby areas.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Natural England will need to be consulted on the potential impacts to Quendon Wood SSSI.	None.

[1] The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021).

Habitats and flora	The site contains native hedgerows which is listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Further notable habitats are present within 2km. Other habitats within the site are common and widespread and have low ecological value. No protected or notable plant species were recorded during the survey.	The proposed development will result in the loss of the arable land and the redevelopment of the grassland in the northern half of the site. A small section of the eaten hedgerow will be removed to create a new access point. The pond will also be retained. The loss of the small section of hedgerow is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and hedgerows should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: • Replacement hedgerow planting to compensate for the loss of the section of eastern hedgerow. This should comprise native species.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development: • Native tree and shrub planting. Species-specific enhancement opportunities are detailed later in this table.
Amphibians	The pond on site was assessed to have poor suitability to support great crested newts. Owing to the lack of suitable onsite habitat and lack of connectivity to suitable breeding habitat, the presence of great crested newts on site is considered to be unlikely.	No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site.	None.	None.

Reptiles	Owing to the lack of suitable onsite habitats, and lack of connectivity to suitable habitats within close proximity to the site, the presence of reptiles is considered to be highly unlikely.	No impacts are anticipated on reptiles as a result of the proposed development.	None.	None.
Roosting bats	Both buildings in the north western corner of the site were assessed to provide negligible value to roosting bats. The blackthorn tree along the northern boundary of the site was assessed to provide moderate value to roosting bats owing to the cracks in the bark which extend into the trunk of the tree.	The proposed development could result in the felling of the tree along the northern boundary. This could result in destruction of any bat roosts present and could cause disturbance, death or injury to bats.	A close-up endoscope inspection of any features that could be used by roosting bats will be undertaken to determine the suitability of the features and to establish presence or likely absence of roosting bats. This may require a qualified climbing team or a Mobile Elevated Work Platform (MEWP) to access the features. There is no seasonal constraint to this type of survey. If bat roosts are confirmed in the tree or where features cannot be fully inspected or access to the tree is impeded, bat emergence or re-entry surveys may be required with the use of infra-red cameras as an aid. If bat roosts are confirmed an EPSL application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.	To be confirmed upon completion of the surveys.
Foraging and commuting bats	Hedgerows and tree lines could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will result in the loss of small areas of the eastern boundary hedgerow but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. The proposed development will include the use of lighting which could spill on to bat roosting,	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to the boundaries of the site should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • Replacement hedgerow planting. • Planting of native tree and shrub species.

		foraging or commuting habitat and deter bats from using these areas.	• Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	
Badger	No badger activity was recorded on or within 30m of the site and the site has limited value for sett excavation. Due to the rural setting of the site and highly mobile nature	No works will be undertaken within 30m of a badger sett. Arable land and managed grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be	None.

	of badgers, their future presence on site cannot be discounted.		implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.	
Hazel dormouse	No suitable habitat present.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.
Hedgehog	The hedgerows provide suitable refuge opportunities; with the wider site providing foraging and commuting opportunities. Due to the mobile nature of hedgehogs their presence on site cannot be discounted.	Arable land and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Brash piles should be installed along the boundaries. • Install gaps under fencing to provide hedgehog commuting routes.
Otter and Water Vole	No suitable riparian habitat present.	No impacts are anticipated on otters or water vole as a result of the proposed development.	None.	None.
Birds	The hedgerows and trees on site provide suitable nesting opportunities.	A single tree along the northern boundary, and a section of hedgerow will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing	Tree and hedgerow removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the tree and hedgerow should be undertaken immediately,	The installation of a minimum of two bird boxes on new buildings will provide additional nesting habitat for birds e.g.

		to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Invertebrates	Habitats on site are considered suitable to support an invertebrate assemblage that is common and widespread only.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	None.

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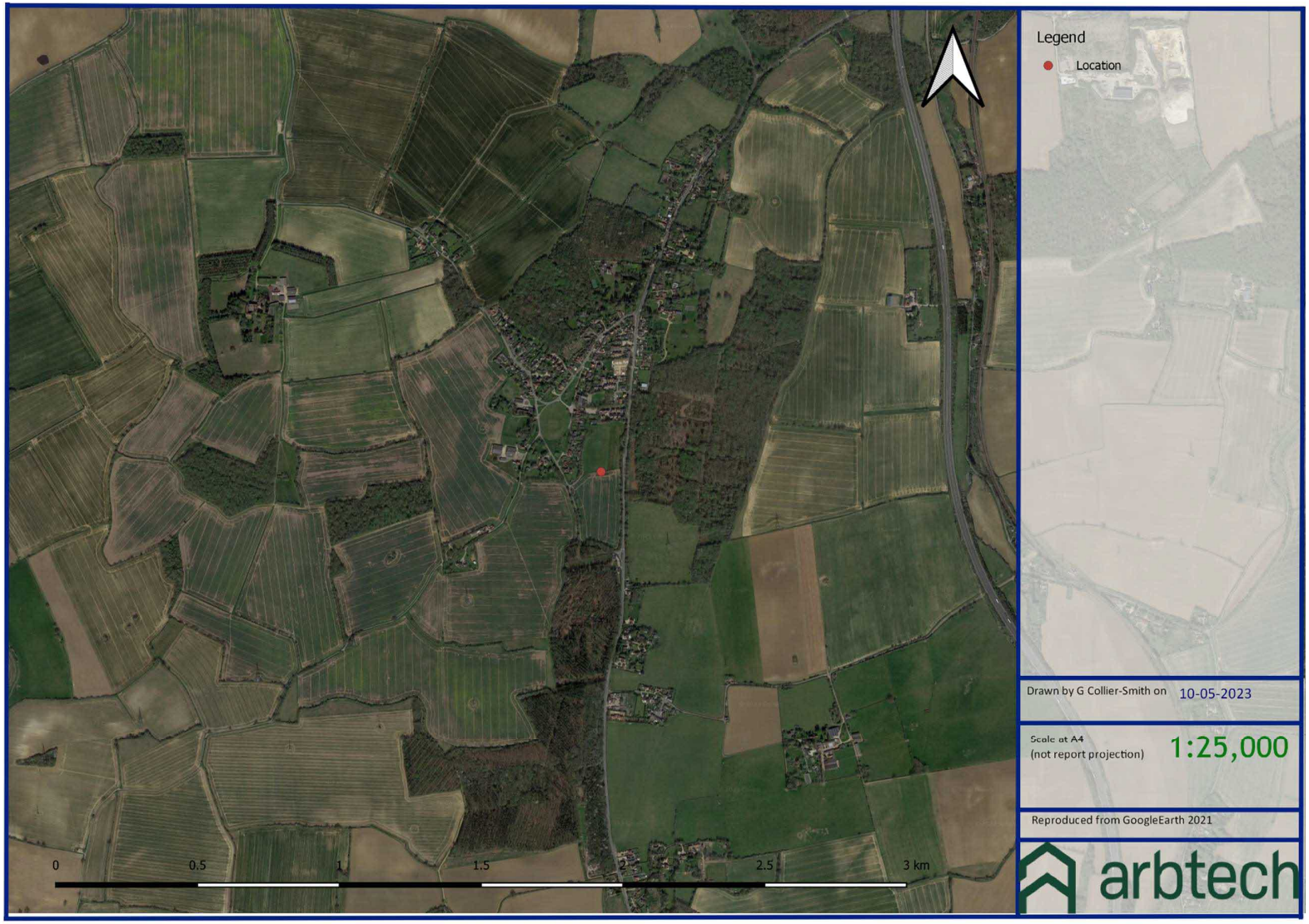
Appendix 1: Proposed Development Plan

Land off Belcham's Lane/London Road site opportunities

Appendix 2: Site Location Plan



Appendix 3: Habitat Survey Plan

Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as "*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres*". However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CRoW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect ‘important’ countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof
- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett

- Sell or offers for sale, possesses or has under his control, a live badger

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural England) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as “Schedule 1” birds. This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*; grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate

- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking
- Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural England) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY

Environment Act 2021

The Environment Act 2021 (EA 2021) received Royal Assent on 9 November 2021 and is expected to become fully mandated within the next couple of years. The Act principally creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England (subject to exemptions which is likely to include householder applications) to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to ‘local populations’ of EPS and not individuals/site populations.

APPENDIX 7

EIA Screening Analysis Checklist

EIA ANALYSIS AND SCREENING PROFORMA

SCREENING CHECKLIST

Questions to be considered		Likely/Unlikely – briefly describe	Is this likely to result in a Significant effect? Yes/No - why?
1	Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc)?	Likely - due to the nature of the project, land use will be changed from open agricultural land to housing.	No - the scheme will be designed and constructed in a manner that will minimise impact on the landscape, making use of soft landscaping, paint colour effects where appropriate. The greenfield Site lies adjacent to the existing settlement boundary and is enclosed on three sides by it. The Farmyard already exists and existing buildings will be replaced by new ones.
2	Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	Likely - natural resources are required for the construction of any development, land, materials, water and energy will all be required in the construction phase. Water and energy in the operational phase.	No - a Construction Environmental Management Plan (CEMP) will be produced to ensure that, where possible, material use will be minimised, materials will be reused and be from sustainable sources where possible. Any future planning application will be accompanied by sustainability and energy assessments (as required) identifying how use of resources will be minimised.
3	Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Unlikely – the use is C3 and E class. Neither any construction materials nor indeed the end product are considered to be harmful to human health.	No.
4	Will the Project produce solid wastes during construction or operation or decommissioning?	Likely - it is inevitable that some waste will be produced.	No – Appropriate construction and operational management plans will be implemented. The applicants will recycle wastes wherever practical and possible.
5	Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	Likely – likely vehicle emissions during construction and operation.	No – neither the traffic pollutants nor housing/community use itself is expected to be significant in air quality terms. The scale of the proposed development and the nature of the uses

Questions to be considered		Likely/Unlikely – briefly describe	Is this likely to result in a Significant effect? Yes/No - why?
			proposed taking into account the site's location are such that the development would not result in any significant effects.
6	Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	Likely - there is expected to be some noise, dust and lighting during construction but no noticeable levels of heat energy, and light and traffic during operation.	No - these aspects will be demonstrated to be acceptable as part of any future detailed designs and planning application. The scale of the proposed development and the nature of the uses proposed taking into account the site's location are such that the development would not result in any significant effects.
7	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Unlikely - due to nature of the use, but it is possible that contamination could take place, particularly during the construction phase.	No - Environmental Management Plans (EMPs) for construction and operation, together with embedded mitigation, will be implemented to avoid these impacts.
8	Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	Unlikely - the site comprises open farmland, a playing field and an existing Farmyard. The site is not within an Air Quality Management Area (AQMA).	No - There will inevitably be some noise and air quality emissions associated with the traffic and construction, but it can be demonstrated that relevant legal standards would not be exceeded.
9	Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Unlikely.	No - risk of accidents will be minimized through compliance with health and safety and environmental legislation and guidance.
10	Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	Likely – open land will be replaced by housing and recreation uses. New community and business uses will be created in the Farmyard. As a result, in social terms, there is likely to be neutrality at worst, betterment at best.	No – Although agricultural land will be lost through the development, a significant positive change will take place to housing and recreation which will benefit the local economy and community.
11	Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	Unlikely – Although the Quendon Wood SSSI and a number of non-designated Local Wildlife Sites are in the vicinity. There could be increased recreational pressure on the PROW around the Wood. The site is also not located within a conservation	No - More details on this are included in the PEA (biodiversity). The application will be submitted with supporting ecological information to enable the Council to determine through appropriate assessment that

Questions to be considered		Likely/Unlikely – briefly describe	Is this likely to result in a Significant effect? Yes/No - why?
		area, although it is adjacent, and there are no statutory or non-statutory protected sites with respect to ecology and biodiversity within the proposed development area.	no significant effects on habitat sites will result from the proposed development.
12	Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	Unlikely - the surrounding land is in agricultural use/woodland but is also adjacent to existing settlement development and transport infrastructure.	No.
13	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	Likely – bats are likely to use the hedgerows, although these will be retained so the development will not directly affect the species. Arable and grassland fields have been identified as ecologically poor.	No - As described in the PEA, there areprotected species at and around the site, which will be protected during construction, and ecological enhancements would form part of the embedded mitigation that would be delivered through the planning application.
14	Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Unlikely – although it is understood there is some surface water flow through the site.	As described in the Opinion Appraisal, embedded mitigation measures will be incorporatedso as to avoid affecting the underlying groundwater and to manage surface water run off/flooding through the Site.
15	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?	Unlikely - the site does not fall in an AONB and is not within a special landscape area.	No - As described in the accompanying landscape information, sensitive design measures, including appropriate building elevation and roof treatments, landscaping and tree planting will be incorporated at the appropriate design stage so as to avoid significant effects.
16	Is the project in a location whereit is likely to be highly visible to many people?	Likely – the Site is contained adjacent to the existing built-up area of the village, but will be visible from existing road and PROW.	No - as above.
17	Are there any routes on or around the location which are used by the public for access to recreation or other facilities, which could be	Likely – the existing playing field on the Site will be relocated further south within the Site. Footpaths and road	No – the proposed improvements to the road infrastructure will increase accessibility.

Questions to be considered		Likely/Unlikely – briefly describe	Is this likely to result in a Significant effect? Yes/No - why?
	affected by the project?	improvements are proposed as part of the Development which improve accessibility for the existing settlement to the playing field.	
18	Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affectedby the project?	Unlikely – various road, junction and footpath improvements are proposed as part of the development.	No - as above
19	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	Likely – a conservation area borders the Site. The Farmyard contains an existing listed building.	No – planting, landscaping around the Site and along its edges will help enhance the setting of the conservation area. The listed building is to be retained and re-used.
20	Is the project located in a previously undeveloped areawhere there will be loss of greenfield land?	Likely - the proposed development will take place on some 8 ha of undeveloped land, although the housing development will only cover some 3.7ha of that.	The loss of approximately 8 ha of undeveloped land when considered in the context of the whole locality will not be significant.
21	Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Likely - the proposed development is adjacent to existing settlement.	No – the proposals include social, community and business use for the benefit of the community.
22	Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?	Unlikely.	No - The immediate surrounding area is not densely populated.
23	Are there any areas on, or around, the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	Unlikely.	No.
24	Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Likely - open land will be lost as a result of the proposed development.	No - Please refer to responses to questions 7, 14 and 20 above.

Questions to be considered		Likely/Unlikely – briefly describe	Is this likely to result in a Significant effect? Yes/No - why?
25	Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	Unlikely.	No - The site is located in Flood Zone 1 meaning a less than 1 in 1000 annual probability of river or sea flooding, and is away from any major water bodies.
26	Are there any plans for future land uses on or around the location which could be affectedby the project?	Unlikely.	No - the mitigation measures and design of the scheme will ensure any potential future developments, determined to be cumulative or not, will not be significantly impacted.
27	Are there any other factors which should be considered, such as consequential development which could lead to environmental effects, or the potential for cumulative impacts with other existing or planned activities in the locality?	Unlikely.	No - with good design and appropriate mitigation it is believed that any negative cumulative impacts will not be significant. It is not thought that potential impacts with respect to ecology, noise, air quality, etc. would overlap and create significant negative effects, especially with the implementation of the proposed and embedded mitigation measures. Any transport analysis and modelling would already include strategic and committed development in the locality within its parameters.